

**[UTILIZATION OF INTERACTIVE BOOK IN JAPANESE LANGUAGE  
TEACHING AND LEARNING]**



**UNIVERSITI TEKNIKAL MALAYSIA MELAKA**

**[UTILIZATION OF INTERACTIVE BOOK IN JAPANESE LANGUAGE  
TEACHING AND LEARNING]**

**NURUSSHAHADAH BINTI TAMBY SULEIMAN**



This report is submitted in partial fulfilment of the requirements for the  
Bachelor of [Computer Science (Interactive Media)] with Honours.

UNIVERSITI TEKNIKAL MALAYSIA MELAKA

FACULTY OF INFORMATION AND COMMUNICATION TECHNOLOGY  
UNIVERSITI TEKNIKAL MALAYSIA MELAKA

2021

## DECLARATION

I hereby declare that this project report entitled  
**[[UTILIZATION OF INTERACTIVE BOOK IN JAPANESE LANGUAGE  
TEACHING AND LEARNING]]**

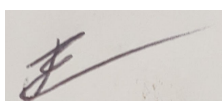
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STUDENT :  Date : 1 September 2021

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I hereby declare that I have read this project report and found  
this project report is sufficient in term of the scope and quality for the award of  
Bachelor of [Computer Science (Multimedia Interactive)] with Honours.

SUPERVISOR :  Date : 1 September 2021

(**TS.DR. FARAH NADIA BINTI AZMAN**)

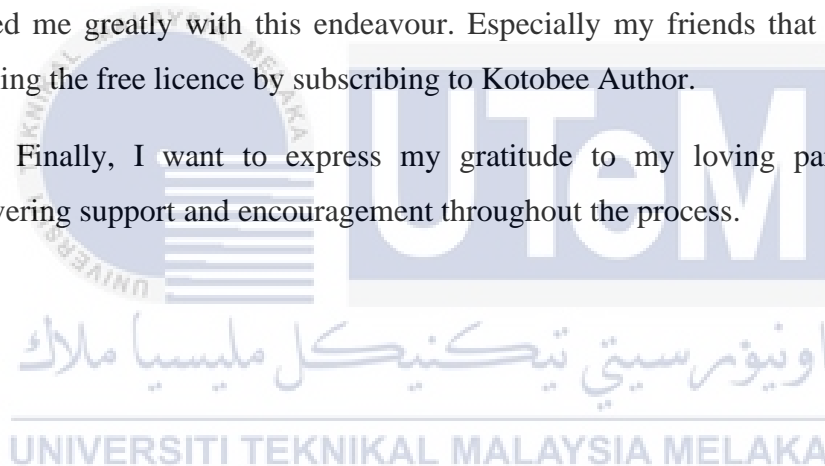
## DEDICATION

I'd like to express my heartfelt gratitude to my supervisor, Ts. Dr. Farah Nadia binti Azman, for her guidance and assistance throughout this final year project. This is my first attempt at creating an interactive book. Despite all our blunders and missteps, we were able to overcome all the challenges. Thank you, a million times, over.

After that, I would like to thank En.Nizam bin Yusof the lecturer of Japanese language in Universiti Teknikal Malaysia Melaka (UTeM) and also one of original book writer for Japanese book “Mari Belajar Bahasa Jepun” for consult and give opinion on my interactive book.

In addition, I'd want to express my gratitude to my classmates and friends who assisted me greatly with this endeavour. Especially my friends that assisted me in obtaining the free licence by subscribing to Kotobee Author.

Finally, I want to express my gratitude to my loving parents for their unwavering support and encouragement throughout the process.



## ACKNOWLEDGEMENTS

I would like to express my sincere thanks and appreciation to my supervisor, Ts. Dr Farah Nadia binti Azman who has given me this bright opportunity to engage in a project which is developing interactive book. She had given me a lot of advice and guidance when carrying out this project. A million thanks to her.

Plus, I might want to offer my thanks to my companions for giving me backing and help during the way toward finishing this venture. At long last, I should express profound gratitude to my folks and my family for their affection, tolerance, unrestricted help, and ceaseless support all through the course.



## ABSTRACT

The name of this project is Utilization of Interactive Book in Japanese Language Teaching and Learning which is proposed by my supervisor, Ts. Dr Farah Nadia binti Azman. This project's main goal is to create an interactive book for learning a third language that will increase students' motivation to learn it. In addition to increasing student motivation, the interactive book's technologies will be examined. The Kotobee Author software was used to develop this interactive book. The reason for choosing this software is because of this software is a cross-platform interactive book which is free for most of the tools. The media and exercise will be added into the interactive book from time to time to increase the entertainment of the interactive book. The interactive book design will refer on the original book “Mari Belajar Bahasa Jepun” which is of the book published by Universiti Teknikal Malaysia Melaka (UTeM) and written by two lecturer En.Mohd Nizam Yusof and En.Anuar Mohamed Kassim who teach Japanese Language. This way, the students can more focus on the daily conversation in Japanese in campus. The user interface will be as clearly understand and will attract users at the same time. The interactive book implemented can let students to learn the daily conversation and learn basic Japanese Language. Students will be able to follow every chapter in the interactive book to learn some basic daily conversation, sentence form and Japanese grammar. Lastly, students will be able to listen the audio of basic conversation in Japanese speaking and do some exercises provided in last part of each chapter.

## ABSTRAK

Nama projek ini adalah Penggunaan Buku Interaktif dalam Pengajaran dan Pembelajaran Bahasa Jepun yang dicadangkan oleh penyelia saya, Ts. Dr Farah Nadia binti Azman. Matlamat utama projek ini adalah untuk membuat buku interaktif untuk mempelajari bahasa ketiga yang akan meningkatkan motivasi pelajar untuk mempelajarinya. Selain meningkatkan motivasi pelajar, teknologi buku interaktif akan dikaji. Perisian Kotobee Author digunakan untuk mengembangkan buku interaktif ini. Sebab memilih perisian ini adalah kerana perisian ini adalah buku interaktif lintas platform yang percuma untuk kebanyakan alat. Media dan latihan akan ditambahkan ke dalam buku interaktif dari semasa ke semasa untuk meningkatkan hiburan buku interaktif. Reka bentuk buku interaktif akan merujuk pada buku asal "Mari Belajar Bahasa Jepun" yang merupakan buku yang diterbitkan oleh Universiti Teknikal Malaysia Melaka (UTeM) dan ditulis oleh dua orang pensyarah En.Mohd Nizam Yusof dan En.Anuar Mohamed Kassim yang mengajar Bahasa Jepun . Dengan cara ini, para pelajar dapat lebih fokus pada perbualan harian dalam bahasa Jepun di kampus. Antara muka pengguna akan difahami dengan jelas dan akan menarik pengguna pada masa yang sama. Buku interaktif yang dilaksanakan dapat membiarkan pelajar mempelajari perbualan harian dan mempelajari asas Bahasa Jepun. Pelajar akan dapat mengikuti setiap bab dalam buku interaktif untuk mempelajari beberapa perbualan harian asas, bentuk ayat dan tatabahasa Jepun. Akhir sekali, pelajar akan dapat mendengar audio perbualan asas dalam bahasa Jepun dan melakukan beberapa latihan yang disediakan di bahagian terakhir setiap bab.

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## CHAPTER 1: INTRODUCTION

### 1.1 Introduction

In Universiti Teknikal Malaysia Melaka (UTeM), Bachelor students are required to take a third language subject before the graduation. There are several languages offered for third language subjects such as Japanese, Korean, German, Arab, and Mandarin. Students will learn this language subject through traditional class or Massive Open Online Course. The problem statement of this project is students have less understanding about the lecturer that has been delivered from the lecture at the end of semester. Some of the students do not know the alphabet of the language. They felt bored during the language class as well as lost the motivation to learn the language. They felt scared about making errors when talking in third language.

The objective of this project is wanting to identify the elements and requirements of Learning Japanese Interactive Book, to develop a Learning Japanese Interactive Book based on the identified elements, and to evaluate the effectiveness of using the interactive book. The expected outcome of this project is learning motivation of student to third language can be increased and student's understanding to third language can be improved.

This project is an interactive book project for a book published by UTeM Press, namely the book "Mari Belajar Bahasa Jepun". This book is used as a medium for learning Japanese in UTeM. This book will be rewritten in digital book form. The purpose of digitalizing this book it to make it more efficient and interesting.

## 1.2 Problem statement(s)

Utilization of interactive book in Japanese language teaching and learning is new platform in learning Japanese. In Universiti Teknikal Malaysia Melaka (UTeM), Bachelor students are required to take a third language subject before the graduation. There are several languages offered for third language subjects such as Japanese, Korean, German, Arab, and Mandarin. Students will learn this language subject through traditional class or Massive Open Online Course. The problem statement of this project is students have less understanding about the lecturer that has been delivered from the lecture at the end of semester. Some of the students do not know the alphabet of the language. They felt bored during the language class as well as lost the motivation to learn the language. They felt scared about making errors when talking in third language.

## 1.3 Objective

There are three objectives for this project:

1. To identify the elements and requirements of Learning Japanese Interactive Book.
2. To develop a Learning Japanese Interactive Book based on the identified elements.
3. To evaluate the effectiveness of using the interactive book in learning Japanese language.

## 1.4 Scope

An interactive book that includes collective and attractive graphical contents to attract the undergraduates which between 18 – 24 years old and let them understand the basic knowledge of third language with limited design resources.

## **1.5 Project Significance**

At the end of the project, the expected outcome of the proposed project development is as follows:

- i. The user will be able to understand and gain their knowledge of Japanese Language from this interactive book
- ii. An interactive book for teaching and learning Japanese Language will completely develop.
- iii. Student will use this interactive book as medium teaching and learning Japanese Language
- iv. Help the learning process become more interesting and fun

## **1.6 Conclusion**

The design and construction of an interactive book for learning Japanese will be undertaken. According to the original book, "Mari Belajar Bahasa Jepun", there are seven chapters in this interactive book. This interactive book is designed to help students learn the basics of the Japanese language, including how to pronounce Japanese words and how to complete various activities. The third language learning motivation of undergraduate students between the ages of 18 and 24 can be increased, as well as their understanding of the third language. In addition, this interactive book will serve as a fun and effective learning tool for Japanese.



## **CHAPTER 2: LITERATURE REVIEW AND PROJECT METHODOLOGY**

### **2.1 Introduction**

This chapter discuss on the literature review and methodology of the project. Literature review is vital to realize no-hit system as a result of it helps to spot downside that occurred in existing system. Besides that, it conjointly helps to identify the simplest approach to achieve the project goal supported the study. Project methodology is assortment of methods, practices, methods, techniques, procedures, and rules that may applied within the process of developing the system. This chapter focuses on the study of interactive book and therefore the methodology to hold out this project.

### **2.2 Interactive Book in Teaching and Learning**

Interactive book in teaching and learning is one of the new inventions to increasing the creativity and student's interest. As we know, for teaching and learning in class, they use traditional method which is using book and whiteboard. This method is quite boring and sometimes unable to attract students' attention nowadays who been exposed to the technological sophistication. There are seven types of interactive book. The types of interactive book are Interactive eBook, Interactive Lookbook, Interactive Story, Interactive Magazine, Interactive Manual (for school), Interactive Recipe Book, and Interactive Guide.

#### **2.2.1 Interactive eBook**

Interactive eBooks are typically created for use with various interactive elements such as quizzes, tests, and video clips. They do not require downloading and can be consumed on any device screen.

This interactive experience allows you to create interactive PDF eBooks that are more than just downloadable static eBooks. It can be used to collect insights about your audience and help improve your lead generation. You can also track them by clicking on their answers or reading their words.

Industry-wise, eBooks are also quite universal, and there are plenty of opportunities in many different industries. However, according to one study, the most popular categories are mystery novels, romance novels, science fiction, and so mostly light fiction. But books with business-related themes and various educational topics are also quite popular. Just imagine for a second how great it would be to have a book full of interactive elements. Your readers would fall in love with this book.

### **2.2.2 Interactive Lookbooks**

Interactive Lookbooks are types of Interactive Flipbooks, where your brand displays products and offers in a very visual and interactive way. The goal is to get your visitors to the website and add the products they like to their shopping cart.

Interactive product images, shoppable videos, shopping quizzes and more are common interactive elements in Lookbooks. You can promote your products using an interactive Lookbooks. This will also increase your sales. It is a great solution for everyone. Happy customers, happy business!

An Interactive Lookbook is very versatile. So, you can use it in any scenario where you are trying to present products and services in a highly visual and interactive environment. However, it is important to note that the popularity of Lookbooks is mainly in the fashion industry.

### **2.2.3 Interactive Story**

An Interactive Story is a form of digital entertainment where the story is not created in advance. The author simply creates the different storylines with different actors in them. Then users can choose based on their own decisions and interactions with the story world. This way, you can increase your audience's attention span, which is getting shorter and shorter. You can include multiple interactive elements to increase your engagement rates, website dwell time, and social shares.

Interactive storytelling is not a new concept. In fact, it's been around for decades. But the technology just wasn't at the stage of development that it could have been in other industries. So, the only industry where it was really present was the video game industry.

Since the technology has evolved a lot since then, companies have now started to pick it up as well, and you shouldn't miss it either. Interactive storytelling is gradually moving from PC and video games to smartphones and even televisions. This creates multiple opportunities for you to promote your brand to your audience and connect with them better than ever before.

#### **2.2.4 Interactive Magazines**

Interactive Magazines are types of Interactive Flipbooks, replacing the old and boring magazines. Instead of passively reading and consuming the content of a magazine, you'll use an interactive magazine to incentivize participation. You do this by asking your audience to interact and actively participate. What a mind-blowing opportunity, right? You can include clickable points that display more information about products, staff, authors, celebrities, interactive images. The possibilities are endless.

You can also embed videos to make interacting with your audience even more engaging. You will see numbers like never before. It will help you increase your engagement rate. Finally, increase your sales by collecting more high-quality leads through a lead form that you can place in your magazine. This will also help you grow your email list.

An Interactive Magazine is suitable for most industries. But normally, consumer magazines enjoy the foremost popularity. It depends on the industry you focus on, but you will find success with an Interactive Magazine once you have a large enough audience.

#### **2.2.5 Interactive Manual (for school)**

Reading and editing a long and tedious manual with tiny letters are making students/readers lose interest. Well, that's all over now. Imagine if it was filled with interactive elements that increased the chances that people would read and follow the rules of those manuals. Sounds awesome, right?

Interactive book can include and mix text, images, and videos with rich interactive elements to make it more attractive and engaging for the reader. They would be great to use in schools for teachers and students. A super long document that is

compelling to read, but at a faster pace. And since it's jazzed up with interactive elements, it would even grab their attention. Plus, it would help them remember the specific rules that need to be followed.

### **2.2.6 Interactive Recipe Book**

Cooking is fun, but it's also tedious and undesirable for some people. Creating an Interactive Recipe Book can help to increase reader interest and even those who hate cooking get a chance to enjoy it to some degree. It just sounds too good to be true. Believe me, though, interactivity increases the level of enjoyment and fun that cooking can give people.

Interactive Recipe Book can include clickable points in combination with text, images and short videos to make it more exciting for your users. This way, you can gather valuable insights about your users and learn about them effectively.

### **2.2.7 Interactive Guides**

The great thing about Interactive Guides is that they are versatile, so they can be adapted to any industry. The guides have come a long way since the first versions came out. Digital transformation has helped them reach a level where you can now use them as Interactive Guides. They run on your website and help your users understand how your products work.

They can help you effectively by getting you more qualified leads, keeping your users on your website, and lowering your support costs. They come with great benefits, and if you find the right tools, it's easy to create them without doing a single bit of coding. Think about it!

### 2.3 Third language in Universiti Teknikal Malaysia Melaka (UTeM)

Third dialect securing is a technique where two or more dialects are used. People who are unable to speak English and who speak minority languages use it. Having the ability to speak a third dialect or a global dialect allows them to find work and enjoy life. According to the Malaysian Instruction Diagram 2015-2025 (Higher Education), understudies in advanced education are encouraged to learn at least one foreign language in addition to Bahasa Malaysian and English fluency. Being able to converse in a third language or a worldwide dialect makes graduates better known in the global business community, opening new ways to build rapport.

At both UiTM and UTeM, the third language is a prerequisite for four-year certification programs. “The UiTM senate has set the third language as broad course for understudies enlisting for three semesters with six credit hours. The opposite side, UTeM senate has set the third language as obligatory course for understudies enlisting for just a single semester with two credit hours. UiTM Academy of Language Studies Dean Associate Professor, Dr Ahmad Mazli Muhammad has referenced that UiTM's central goal is to improve the information and ability of its alumni in all fields. Capability in a third language enhances employability.”

Universiti Teknikal Malaysia Melaka (UTeM) offers worldwide tongues both as degree ventures and elective dialect course. Understudies take the third dialect programs go through six semesters of dialect courses, third dialect as elective subject take one or two of semesters. There are five language option are provided in Universiti Teknikal Malaysia Melaka (UTeM), Arabic, Japanese, Mandarin, German and Korean language. Students are not allowed to take Third Language courses that are in their native language.

Students with no prior knowledge of Arabic, Japanese, Mandarin, German, or Korean are welcome to enrol in any of the courses offered. Oral and written communication skills are taught in this course. It includes listening, speaking, reading, and writing. Arabic, Japanese, Mandarin, German, and Korean grammars are all related to the language used on a daily basis. Reading materials for elementary students are also provided to students.

## 2.4 Project Methodology

Methodology used for this project is Instructional Design (ADDIE). The Addie model is an instructional design methodology used to help organize and streamline the production of your course content. Developed in the 1970's, ADDIE is still the most commonly used model for instructional design. The ADDIE model is a framework for the five phases of a development process. It simplifies the work into a series of steps and provides a streamlined approach for continuous improvement.

Five Phases of ADDIE methodology:

### 1. Analyse

Establish the specifications of the project. This determination should include:

- Identifying the problem, you are solving and pinpointing your target audience.
- Determining objective, goals and desire outcome.
- In addition, specify logistics. Which is consists of project timeline, budget, delivery method, location and project scope.

### 2. Design

Designing project. The design of project should include:

- The structure and length of training session
- Learning objectives for modules

In this phase, create content related exercises and assessments. Design storyboard or prototype in addition to establishing the user interface, UX and Graphics Asset.

### 3. Development

Developing module. In this phase production begins. Training programs are generated by working with teams of programmers. All of technology should be integrated at this point. In addition, deliverables are constructed which includes course guides and assessment materials.

#### 4. Implementation

Training and delivery. In this stage, training are begins. Include all the materials needed and make sure all functions of project are functioning. Instruction are given to the students. In addition, ensure trainer has all materials needed to present the training. Hangout feedback materials for later assessment.

#### 5. Evaluation

Process and training review. In this phase, determine if project training was successful or not. Use assessment of performance and feedback materials to determine if your trainees met the objective and goals that were projected. Utilize finding to assist with improving future project.

### 2.5 Instructional Design

There are three (3) subtopic mention in instructional design topic.

#### 1. Educational Goals

Firstly, the goals of this project are student be able to understand the basic of Japanese Language. Secondly, the Japanese Language Interactive Book used as method learning in UTeM that will help students be more attracted in learning Japanese Language

#### 2. Test Questions

There are nine (9) questions that asked in Google form.

Table 2.1: Questionnaire

Questions	Answers Options
1. Gender	<ul style="list-style-type: none"><li>▪ Male</li><li>▪ Female</li></ul>
2. Age	<ul style="list-style-type: none"><li>▪ 18 – 20</li><li>▪ 21 – 22</li><li>▪ 23 – 24</li><li>▪ 25 – 27</li><li>▪ Others</li></ul>

3. Faculty	<ul style="list-style-type: none"> <li>▪ FKP</li> <li>▪ FTMK</li> <li>▪ FKM</li> <li>▪ FPTT</li> <li>▪ FKEKK</li> <li>▪ FTKMP</li> <li>▪ FKE</li> <li>▪ FTK</li> <li>▪ FTKEE</li> </ul>
4. Year of study	<ul style="list-style-type: none"> <li>▪ First year</li> <li>▪ Second year</li> <li>▪ Third year</li> <li>▪ Final year</li> </ul>
5. Do you prefer which kind of layout for the eBook?	<ul style="list-style-type: none"> <li>▪ Vertical</li> <li>▪ Horizontal</li> </ul>
6. Do you prefer which kind of presentation style for the eBook?	<ul style="list-style-type: none"> <li>▪ Point/Bullet</li> <li>▪ Paragraph/Long sentences</li> </ul>
7. Do you like to have an audio of pronouncing words	<ul style="list-style-type: none"> <li>▪ Yes</li> <li>▪ No</li> </ul>
8. Do you like to have video of how to write Japanese writing?	<ul style="list-style-type: none"> <li>▪ Yes</li> <li>▪ No</li> </ul>
9. Do you agree if Japanese language book “Mari Belajar Bahasa Jepun” are digitalize?	<ul style="list-style-type: none"> <li>▪ Yes</li> <li>▪ No</li> <li>▪ Maybe</li> </ul>

### 3. Metaphor

The theme of this interactive book is every symbolic things of Japan country. The colours choose are blue, white, pink, black and etc.

## 2.6 Project Requirement

There are two subtopics for project requirement which is Software Requirement and Hardware Requirement that will be shown down below.



### 2.6.1 Software Requirement

List software requirement:

- Adobe Photoshop (2020)
- Adobe Illustrator (2020)
- Kotobee Author
- Wondershare Filmora X
- Kotobee Reader
- Microsoft PowerPoint

### 2.6.2 Hardware Requirement

List hardware requirement:

- Laptop
- Mouse
- Smartphone

## 2.7 Conclusion

Briefly put, an interactive book for teaching and learning is an electronic book that includes learning objectives. Interactive books for teaching and learning are designed to strike a balance between the implementation of subject material in a digital format and the ability of students to retain and apply the subject matter to real-world situations, according to a recent study. In an ancient learning technique, students are taught in a large classroom, but each student advances at a different pace. Those who learn more quickly become bored, while those who read ideas more slowly are unable to catch up with them. Each student is able to find out at the end of the course.

## CHAPTER 3: ANALYSIS

### 3.1 Introduction

This chapter further summarizes the result of Chapter 2: Literature Review and Project Methodology. The current scenario analysis is discussed about the problem domain and make sure the project will fulfil the requirement and complete it in the time.

### 3.2 Current Scenario Analysis

The project phases are preceded by a stage of requirement analysis. Problem domain and requirements are the primary focus of the document. During this phase, the goal is to assess the project's completeness and to make any necessary adjustments. It is the goal of this phase to gain a better understanding of both the problem domain and of the user's requirement.

A third language is typically taught in the traditional way of learning. Each student progresses at his or her own pace, which is very different from the way they learn in the classroom. Students who learn more quickly tend to become bored, while those who learn more slowly are more likely to catch up with their peers in the long run.

The third language class is also a source of anxiety for them. What their classmates think of them is a source of anxiety for them. They lose the courage to communicate with others in a third language as time goes on, and they stop trying.

### 3.3 Requirement analysis

Analysis of system requirements and computer code requirements are central to systems engineering and computer code engineering. They involve activities that validate the specifications and criteria for new or changed products or projects, taking into account possible conflicting requirements of the various stakeholders.

For a system or project to be successful, it must be thoroughly studied and documented in a requirement analysis. A new product or application's user expectations are identified through the process of usability testing. Customers'

requirements were identified, the system's viability was evaluated and constraints and schedules were established. Quantifiable, actionable, measurably, testable, and sufficiently detailed for project design, requirements must be. The analysis of requirements is a crucial part of project management.

### 3.3.1 Project Requirement

There are five requirement that needed in this project. The five project requirement are mention down below.

#### 1. Need Analysis

To identify and address issues that are causing or contributing to the level of service or product, one must perform a Need Analysis. In order to analyse and identify the causes of the issues and gaps, it employs a variety of different techniques. These are the various factors that prevent an individual from achieving their desired job performance:

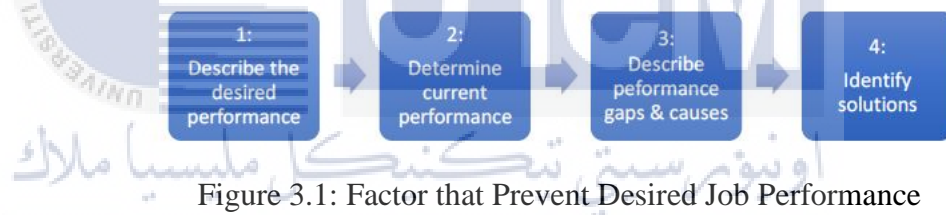


Figure 3.1: Factor that Prevent Desired Job Performance

UNIVERSITI TEKNIKAL MALAYSIA MELAKA

1. What are the performance expectations (desired state)?
2. What is the current state of performance?
3. What are the gaps to performance (Needs) and causes?
4. What are the solutions to bridge the gap?

A need analysis is used when a job performance has been below expectation. It is also used when a new coaching or modification is requested.

Interactive books for learning a third language are possible in this technological age. Everyone can take advantage of the technology's efficiency and power. Students can learn some basic sentences from the interactive book that they can use in school or university.

## 2. User Analysis

With this project, users or learners will have a viable alternative to traditional learning methods by developing an interactive book. Due to the traditional learning method, most students are not motivated to learn a third language. Those who learn more quickly will be bored during the lecture. Students who are slower to pick up on new ideas may find it difficult to keep up with the rest of the class.

## 3. Technical Analysis

The tools that have been used in developing the application are Kotobee Author, Adobe Photoshop (2020), Adobe Illustrator (2020), Wondershare Filmora X, and Kotobee Reader. Kotobee Author is using as the main tool to develop the application. Adobe Photoshop (2020), Adobe Illustrator (2020), and Wondershare Filmora X are used to create the multimedia element for the application. Kotobee Reader is used for to view the .epub file.



Figure 3.2: Adobe Photoshop (2020)



Figure 3.3: Adobe Illustrator (2020)



Figure 3.4: Kotobee Author



Figure 3.5: Wondershare Filmora X

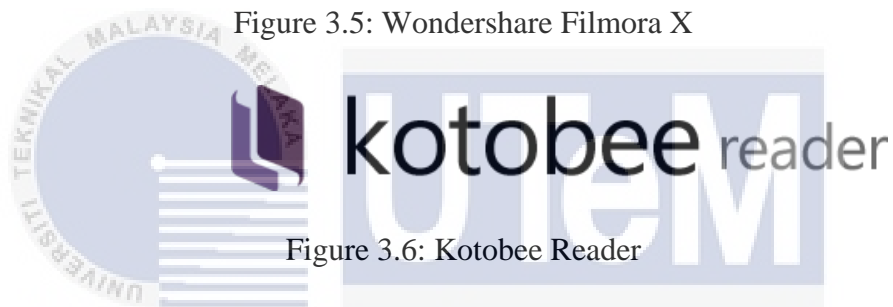


Figure 3.6: Kotobee Reader

#### 4. Resource Analysis

The development of this interactive book are based on “Mari Belajar Bahasa Jepun” book that written by two lecturer of Universiti Teknikal Malaysia Melaka (UTeM), En.Mohd Nizam Yusof and En.Anuar Mohamed Kassim. Publish by UTeM Press.

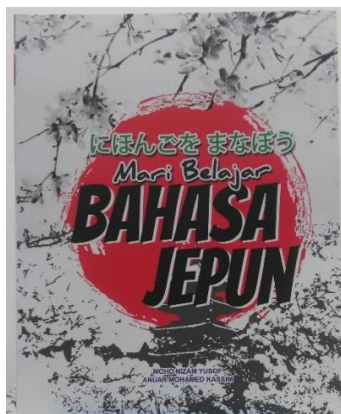


Figure 3.7: Mari Belajar Bahasa Jepun Book

## 5. Requirement Gathering

The google form are used for requirement gathering that asking some questions for data collection. There are 57 UTeM students from various faculty who give their responses. The data collection are shown down below:

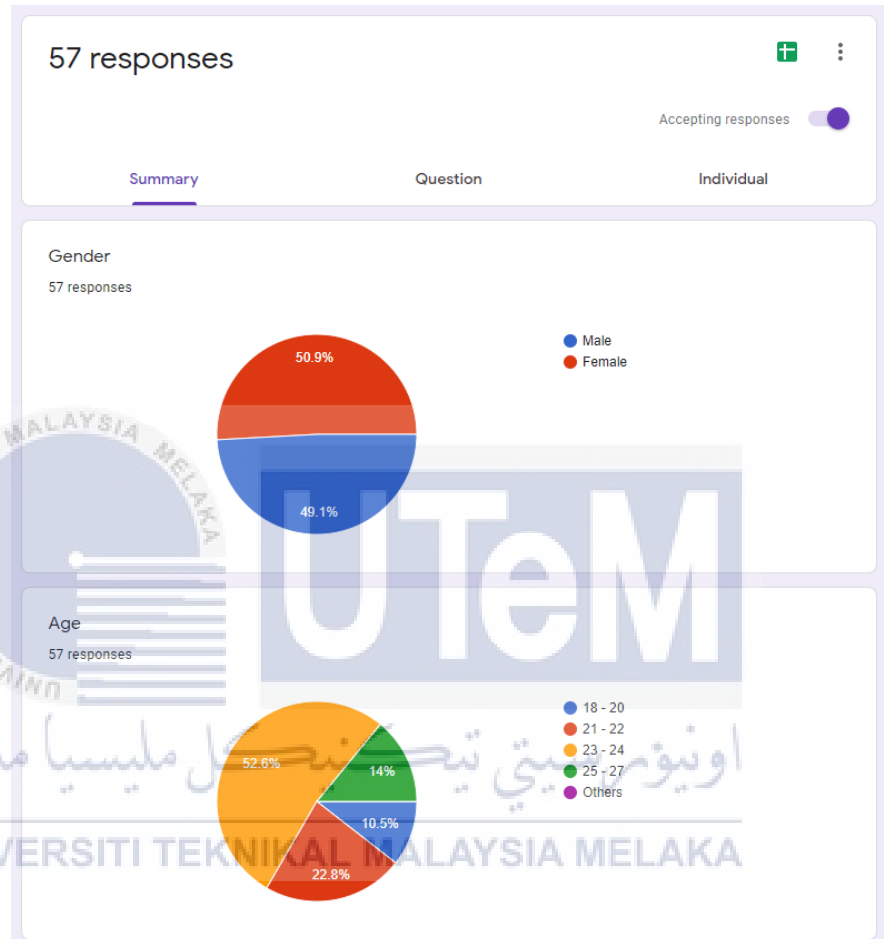


Figure 3.8: Google Form Reponses Result

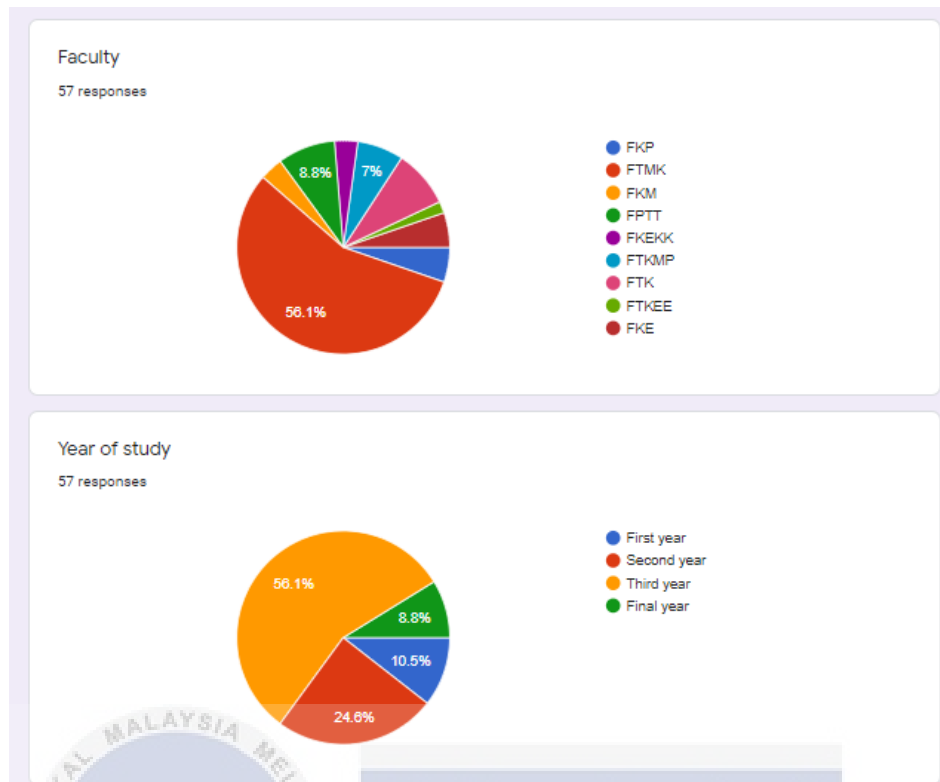


Figure 3.9: Google Form Reponses Result

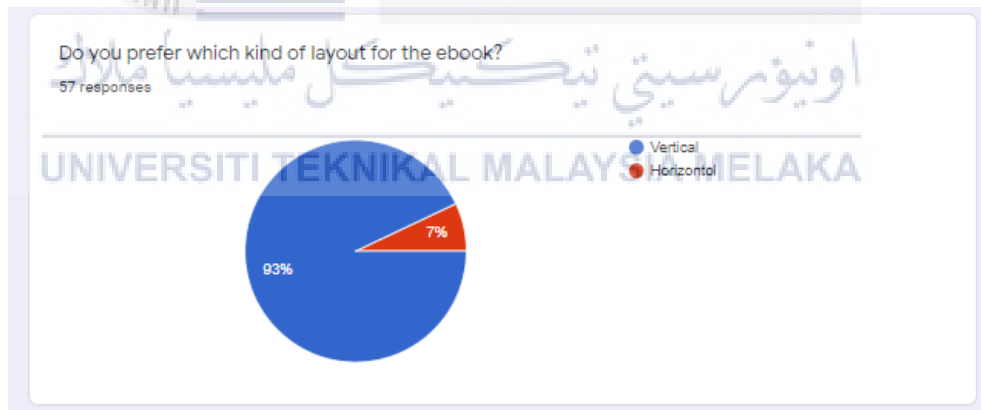


Figure 3.10: Google Form Reponses Result

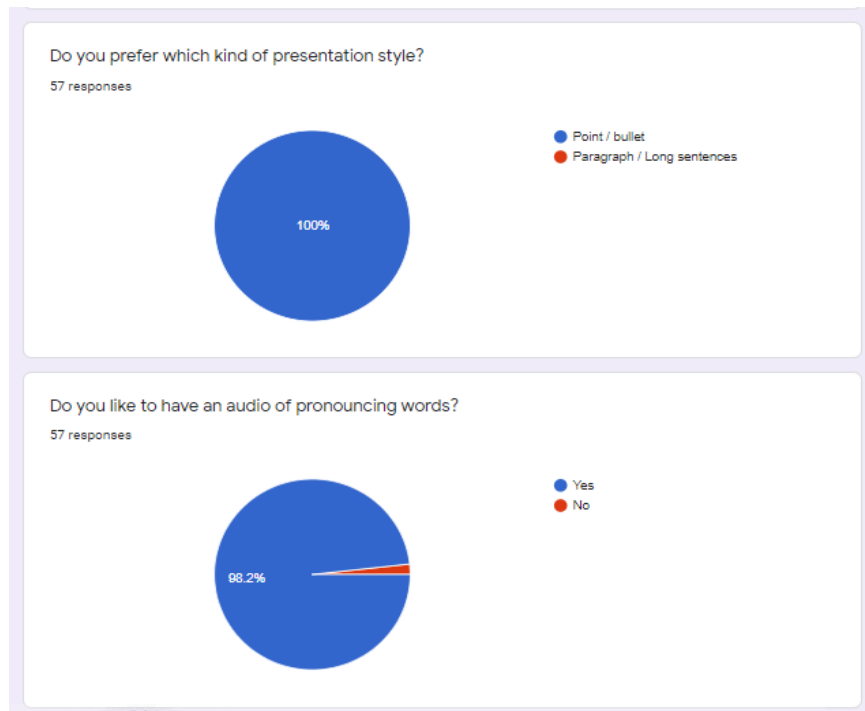


Figure 3.11: Google Form Reponses Result

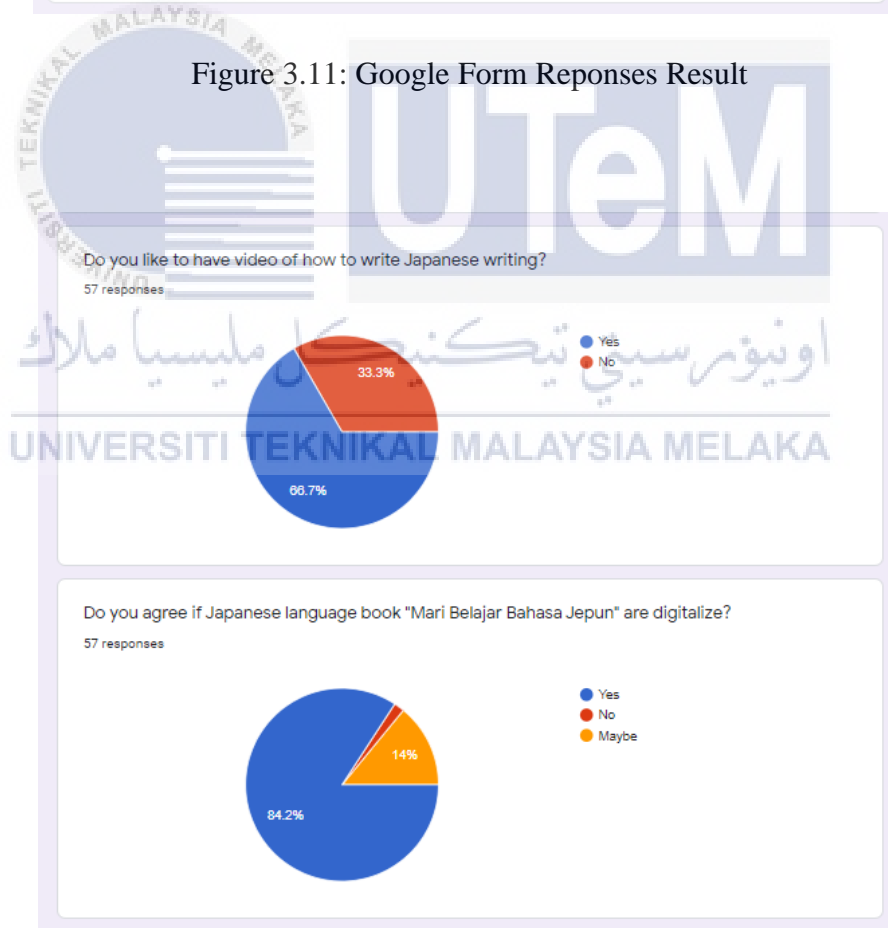


Figure 3.12: Google Form Reponses Result



### **3.3.2 Software Requirement**

Several software is employed to develop the interactive book. The software used should be set before developing the appliance to confirm that it will be with success developed.

Kotobee Author is used as main software in developing interactive book process. This software provided user to build their own interactive book with various features and tools. It can be used in multi-platform such as Android, iOS, Windows, macOS and etc. The benefit of Kotobee Author as interactive book development software is completely free with limited requirement. To get the Basic Package for free, user required to send 3 invitations to anyone thru email or link share on media social. This software also has another package that required to invite different amount of invitation in order to use it as free without any purchasing.

### **3.3.3 Hardware Requirement**

To create this interactive book, the most important hardware requirement is also the one that helps the software requirement. It is impossible to complete the project without the necessary hardware.

The laptop that used in developing the application with the minimum requirements is Omen by HP Laptop 15, Intel(R) Core (TM) i7-7700HQ CPU (2.80GHz 2.81 GHz), and 16GB RAM. This specification will help developing the application without any problem.

### **3.4 Existing Software**

Related products refer a system already existing and used until now. This is example of system:

#### **3.4.1 A Safe Place for Caleb**

Kids, teens, and adults dealing with attachment issues, grief and loss, or early trauma will enjoy this interactive book. This book is an interactive storybook of the interactive storybook variety. Authors: Kathleen A.Chara and Paul J.Chara, Jr. Jessica Kingsley Publishers has granted permission to display these pages.

Individuals of all ages who are dealing with attachment issues will find A Safe Place for Caleb to be a comprehensive and well-illustrated guide. Understanding and addressing attachment disorders in children, adolescents, and adults will be made easier by this book for parents, professionals, and laypeople.

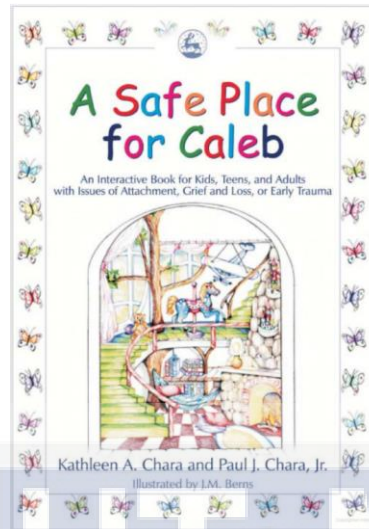


Figure 3.13: A Safe Place for Caleb Cover Book

Table 3.1: A Safe Place for Caleb Research Comparison

Advantages	Disadvantages	Improvement
Can be view in both layout: <ul style="list-style-type: none"> <li>▪ Vertical</li> <li>▪ horizontal</li> </ul>	Illustration and design are in white and black mode.	Make the illustration and design colorful to make it more interesting.
Flowing text and scanned pages.	The price is quite expensive (RM55.78).	-
Can be view with various machine and platform: <ul style="list-style-type: none"> <li>▪ Tablet / iPab</li> <li>▪ Smartphone</li> <li>▪ Web</li> <li>▪ eReader</li> </ul>	-	-

### 3.4.2 Educational Stages and Interactive Learning: From Kindergarten to Workplace Training

This is a book for adults who are interested in learning stages and interactive activities. This book is a manual that can be used interactively. Jia Jiyou, Peking University, China, edited the book. Information Science Reference publishes it in the United States of America (an imprint of IGI Global).

This book is about how the adoption of ICT for personal and business use has encouraged the growth of interactive learning, as well as its application in a number of education and training scenarios. With the help of effective curriculum design, desired learning outcomes are achieved without incurring significant time or financial losses.

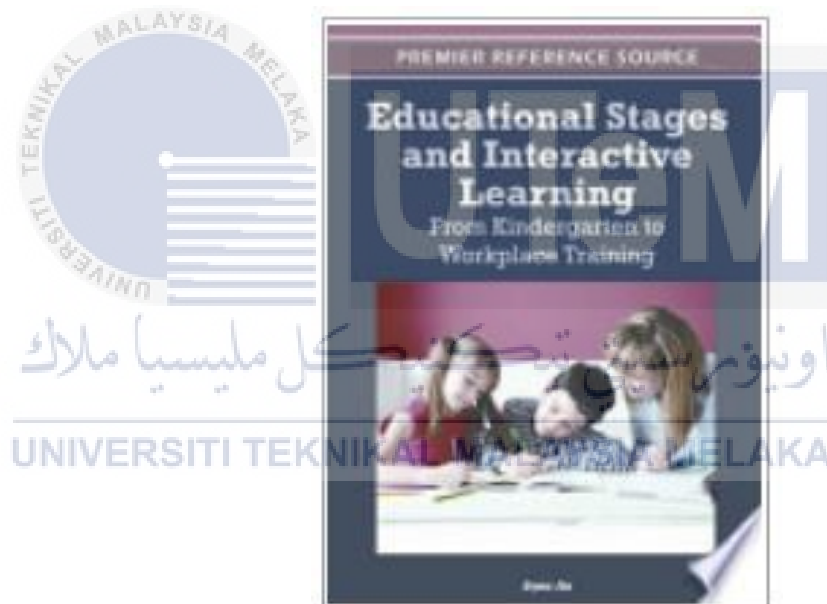


Figure 3.14: Educational Stages and Interactive Learning Cover Book

Table 3.2: Educational Stages and Interactive Learning Research Comparison

Advantages	Disadvantages	Improvement
Having complete chapter that have a bunch of information's.	Lack of interesting item such as images and video.	Add more images and video to help reader more understand and to prevent reader loss interest
Scanned pages.	The note presentation in paragraph and long sentences.	Can use different note presentation to make it easier for reader to know important key/point.
Can be view with more than one machine/platform: <ul style="list-style-type: none"> <li>▪ Web</li> <li>▪ Tablet / iPad</li> </ul>	The price is quite expensive (RM 537.64).	Low the price to make more affordable to client.
-	Don't have any test to identify reader understanding after reading the book.	Add simple quiz to identify reader understanding such as drag and drop quiz or multiple-choice question.

### 3.4.3 Human and Faith

This is a book for adults who are interested in learning about religion and gaining a deeper understanding of human nature and faith in the religion. This is an interactive eBook. Ediz Sözüer penned this article. This website has been adapted with the kind permission of Edizu Sözüer.

This explanation of the 23rd word in Risale-i Nur's Book of Words focuses on the human's high value and the faith's beauty. As a result, it has a great deal of meaning despite its small size.

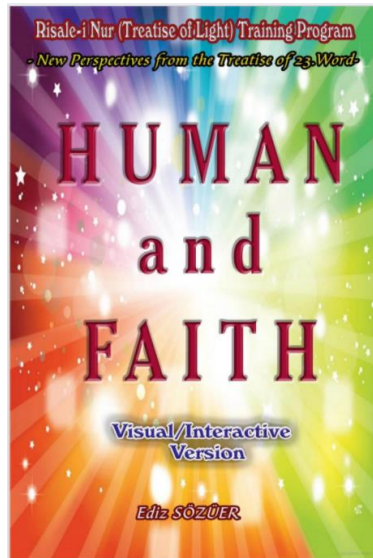


Figure 3.15: Human and Faith Cover Book

Table 3.3: Human and Faith Research Comparison

Advantages	Disadvantages	Improvement
Can be view in both layout: <ul style="list-style-type: none"> <li>▪ Vertical</li> <li>▪ Horizontal</li> </ul>	Lack of visual and no video or illustration.	Add more visual and video to attach reader interest.
Free and scanned pages	Note presentation in paragraph.	Make the note presentation in better way such bullet or point.
Can be view in more than one machine/platform: <ul style="list-style-type: none"> <li>▪ Web</li> <li>▪ Tablet / iPad</li> </ul>	The presentation of the images is disorganized and quite confusing.	Organized images displayed to avoid confusing the reader
Having a bunch of information's for other book compilation.	-	-

### 3.4.4 Interactive Books: Playful Media before Pop-Ups

Designed for adults who are interested in children's literature and culture, this book is interactive. This is an interactive eBook. From The Pennsylvania State University in State College, Pennsylvania, Jacqueline Reid-Walsh wrote the following: These pages are being displayed with the permission of Routledge Publishing.

Research on children's literature, book history, and juvenilia is carried out in conjunction with archive research. She explores the interrelationships between children, interactive media, and historical participatory culture by examining commercially produced and homemade examples... Interactive Books encourages us to think critically about children's media texts, both paper and digital, past and present, by drawing on both Enlightenment thinkers and contemporary digital media theorists.



Figure 3.16: Playful Media before Pop-Ups Cover Book

Table 3.4: Playful Media before Pop-Ups Research Comparison

Advantages	Disadvantages	Improvement
Can be view in both layout : <ul style="list-style-type: none"> <li>▪ Vertical</li> <li>▪ horizontal</li> </ul>	Don't have any visual, illustration, video or images	Add some more pictures or illustrations to make the topic more interesting and help the reader understand the

		content/information more easily.
Flowing text and scanned pages.	Don't have any test to identify reader understanding.	Add simple quiz to identify reader understanding such as drag and drop quiz or multiple-choice question.
Can be view with various machine and platform: <ul style="list-style-type: none"> <li>▪ Tablet / iPab</li> <li>▪ Smartphone</li> <li>▪ Web</li> <li>▪ eReader</li> </ul>	Note presentation in long paragraph.	Organized note in simple presentation like bullet/point.
-	The price is quite expensive (RM 185.14).	-

### 3.4.5 Piggy

Interacting with a lonely little piglet who makes his first friend, this book is perfect for anyone who has experienced the joy of new friendships. This book is an interactive storybook for children. Pages displayed with permission of Bloomsbury Publishing USA, written by Trevor Lai

As the title suggests, Piggy is a voracious reader who doesn't have time to hang out with anyone. But his favourite stories have always been about two friends and the special times they spend together. One day, Piggy sees a girl reading alone in a quiet area of her neighbourhood. And he wonders if they could be best friends? There's no way to get the girl's attention no matter what Piggy does. Will Piggy ever be able to express his true feelings to her?

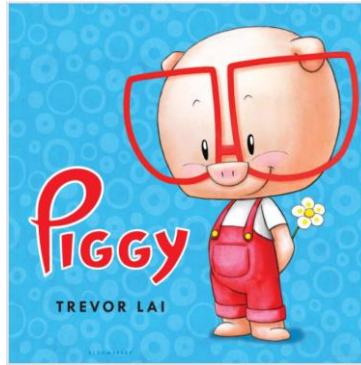


Figure 3.17: Piggy Cover Book

Table 3.5: Piggy Research Comparison

Advantages	Disadvantages	Improvement
Can be view in both layout: <ul style="list-style-type: none"> <li>▪ Vertical</li> <li>▪ Horizontal</li> </ul>	Don't have interactive button for the chapter selection.	Add an interactive button for the chapter selection to make more convenient for reader
Scanned pages	-	-
Can be view in more than one machine/platform: <ul style="list-style-type: none"> <li>▪ Web</li> <li>▪ Tablet / iPad</li> </ul>	-	-
The price is quite affordable and reasonable for kids book (RM 19.82).	-	-
Having beautiful picture with audio that can attach kid's interest.	-	-
Choice of words that are appropriate for the reader	-	-



### 3.4.6 Interactive Learning for Innovation: A Key Driver Within Clusters and Innovation Systems

An interactive book for adults who want to learn about innovation through hands-on experience. This interactive book is a manual. Bjorn T. Asheim, Professor of Economic Geography at Lund University, Sweden, and Mario Davide Parrilli, Associate Professor of Economics at the University of Deusto, Senior Research Fellow at Orchestra Bilbao and San Sebastian, Spain, edited the book. Springer has granted Springer permission to display these pages on the Internet.

This interactive book emphasises the importance of interactive, practice-based learning as a means of promoting more thorough innovation dynamics in regional and national economies. Scandinavian and southern European success stories are examined, and policy lessons are drawn from each one.

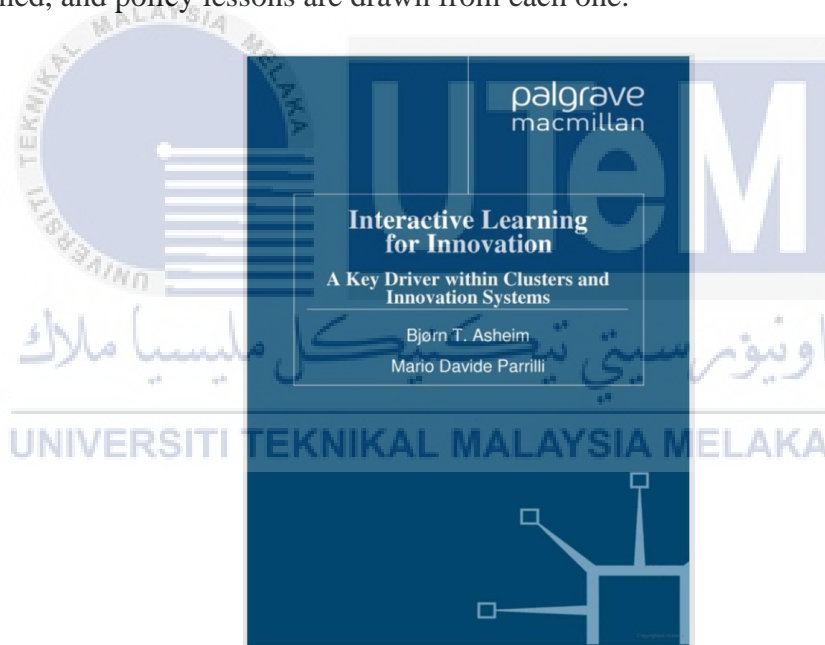


Figure 3.18: Interactive Learning for Innovation Cover Book

Table 3.6: Interactive Learning for Innovation Research Comparison

Advantages	Disadvantages	Improvement
Can be view in both layout: <ul style="list-style-type: none"> <li>▪ Vertical</li> <li>▪ horizontal</li> </ul>	Lack of visual, illustration, video or images	Add some more pictures or illustrations to make the topic more interesting and help the reader understand the

		content/information more easily.
Flowing text and scanned pages.	Don't have any test to identify reader understanding.	Add simple quiz to identify reader understanding such as drag and drop quiz or multiple-choice question.
Can be view with various machine and platform: <ul style="list-style-type: none"> <li>▪ Tablet / iPab</li> <li>▪ Smartphone</li> <li>▪ Web</li> <li>▪ eReader</li> </ul>	Note presentation in long paragraph.	Organized note in simple presentation like bullet/point.
Having an interactive button to view specific chapter/topic.	The price is quite expensive (RM 340.91).	-

### 3.4.7 Interactive Multimedia Learning

A multimedia interactive book for adults and students. This is a manual-style interactive book. A.M. El Saddik penned the text. Springer Science & Business Media has granted Springer Science & Business Media permission to display these pages.

There are a number of concepts introduced in this book that relate to the development and reuse of multimedia content within web-based learning systems. Discussed is the development of a component-based framework, which allows developers to use reusable software components enhanced with metadata to create complete instructional visualisations for a given subject, and to integrate these visualisations into an appropriate learning context.

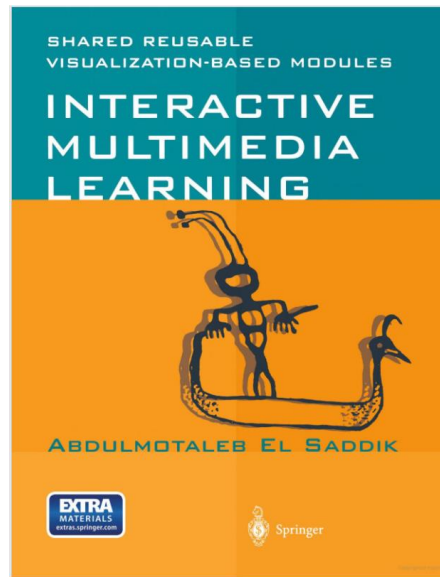


Figure 3.19: Interactive Multimedia Learning Cover Book

Table 3.7: Interactive Multimedia Learning Research Comparison

Advantages	Disadvantages	Improvement
Scanned pages	Lack of visual, illustration, video or images	Add some more pictures or illustrations to make the topic more interesting and help the reader understand the content/information more easily.
Can be view in more than one machine/platform: <ul style="list-style-type: none"> <li>▪ Web</li> <li>▪ Tablet / iPad</li> </ul>	Don't have any test to identify reader understanding.	Add simple quiz to identify reader understanding
Having an interactive button to view specific chapter/topic.	Note presentation in long paragraph.	Organized note in simple presentation like bullet/point.
-	The price is quite expensive (RM 200.61).	-

### 3.5 Project Schedule and Milestones (ADDIE)

There are 5 phases in ADDIE Model and Gantt Chart as project milestones. The five phase and Gantt Chart has been mentioned down below:

#### 1. Analyse

Establish the project's specifications. Some requirements must be identified and decided upon at this stage, such as the problem statement, target audience, objective, goals and desired outcome, as well as the logistics involved. For the project to stay on track, all of these requirements must be met in order to prevent any problems during the project's development process.

Its primary purpose is to identify the problem and explain its implications for the organisation and its users. In addition, it provides a comprehensive view of the process or product in question. The target audience must be determined in order to ensure that the product being developed is suitable and useful for the intended audience. The decisions that guide us throughout the life of our projects are called objectives. First and foremost, they serve as a means of communicating the project's goals.

Specify logistics in addition. This includes the project's timeline and budget as well as the delivery method, location, and scope to ensure that the project stays on budget and is completed on time.

#### 2. Design

It is during the design phase that you evaluate the many possible solutions and narrow down your choices in order to determine the most effective and efficient way to construct the final product. "How" you will build the best solution is answered in the Design Phase.

Design phase products include storyboard, outline and sketch, depending on the subject matter of the project in question.

#### 3. Development

Module development is currently underway. The start of production occurs during this phase of the process. This is where the product development

process begins. At this point, all of the available technology should be integrated into one system. In addition, course guides and assessment materials are created. To aid in the development process, a variety of software tools are employed.

#### 4. Implementation

Training and presentation. Training begins at this stage. Include all necessary materials and verify that the project's functions are working properly. Students are given instruction. The trainer should also be provided with any additional training material that may be needed. Hangout feedback materials for later assessment are stored in a folder on your computer.

#### 5. Evaluation

Process and training review. In this phase, you will determine whether or not the project training was a success. In order to determine whether or not your trainees have met the objectives and goals that were set, use performance assessment and feedback materials. Use your findings to help improve future projects.

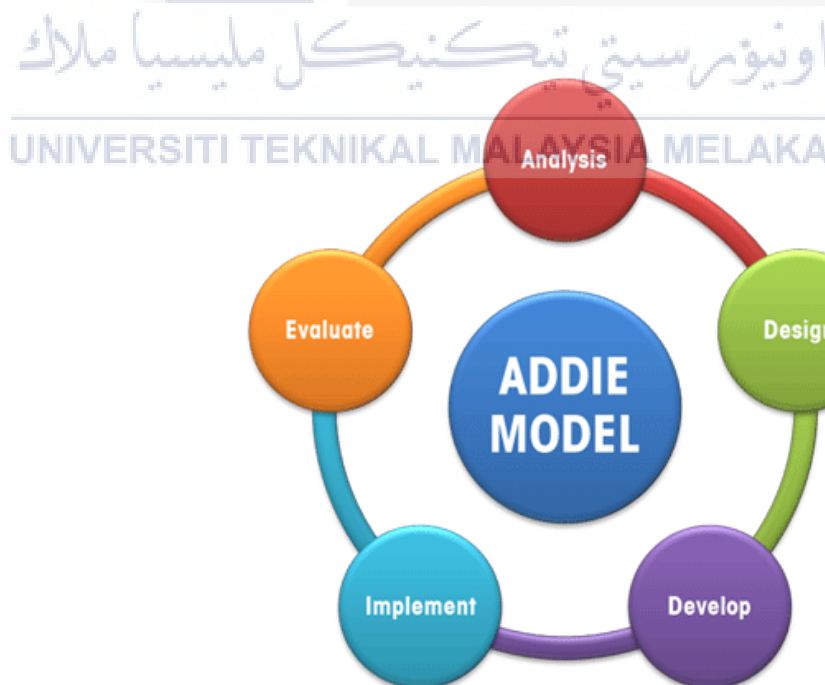


Figure 3.20: ADDIE Model

Table 3.8: Gantt Chart

Task/week	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Discuss proposal with supervisor	■													
Proposal submission and discussion of analysis of problem		■												
Discussion with supervisor the design of solution			■	■										
Implementation (Progress 1)					■	■	■							
Implementation (Progress 2)								■	■	■	■			
Implementation (Progress 3)												■	■	
Final presentation														■
Final report														■

### 3.6 Conclusion

In a nutshell, the project analysis and methodology are essential parts in development of the application. It is disburse to spot the complete demand of this project. Characteristic the necessities is very important in developing the interactive book for teaching and learning. This is as a result of the method of developing this application wants a transparent vision and description on however and what's needed to form that it can be completed on time. Within the next chapter, discussion on the look of the system will be carried out.

## CHAPTER 4: DESIGN

### 4.1 Introduction

This chapter further defines the system design and states out the interactive book and materials for the methods and function used in this project. An interactive book storyboard shown and explained in this chapter as a guideline of the overall actions of the interactive book.

### 4.2 Systems Design

The project is using an interactive book author, Kotobee Author to create. In Kotobee Author an interactive element for “Mari Belajar Bahasa Jepun” will be created. The project will be able to guide user to learn basic Bahasa Jepun using interactive elements. An interactive book of “Mari Belajar Bahasa Jepun” are used to help to attract user attention and gained their knowledge of basic Bahasa Jepun in easy way.

In Kotobee Author there are more than 50 pages of notes with a lot of interactive elements can be created. There are 7 chapter of “Mari Belajar Bahasa Jepun” are covered in the project. There are table of content that will show user of topic and content that covered in the interactive book. There are various interactive elements in every page of the chapter. On content chapter, user can click on the highlighted topic that will bring user to the specific topic they are choosen of. On every chapter, there several pictures are shows as an example for the explanation. There are also have animated video with an information’s explained about the topic such as video of “Ciri – ciri Bahasa Jepun” and “Keterangan Tatabahasa”

There are also have sync audio of conversation in Japanese language. User can click on the play button to hear the conversation that using specific “Bentuk Ayat”. Besides, the interactive book also has scrolling note and interactive function on some word that highlighted. When user click on the word there are pop message will appear with an addition keynote. User also can click on some button or picture and pop image or message will appear. On every chapter there are some exercise “Latihan” contains

various question/answer style such as, multiple choice question – one answer, multiple choice question – more than 1 answer, drag & drop etc. These exercises are used to test user understanding throughout use and interactive and the chapter.

On the last chapter there are, and addition chapter called “Perpustakaan” that contains collections of word “Kosa Kata” and other additional information. The “Kosa Kata” that will help user translate some Japanese word. There are tables of “Kosa Kata” that shows word in Malay word “Bahasa Melayu”, Japanese word “Bahasa Jepun” which is in Japanese writing, and pronunciation of Japanese word in Roman writing style “Sebutan Bahasa Jepun”.

The interactive book is containing an animated picture and different designated background for every chapter with several of symbolic things of Japan country such as, blossom flower, sushi, Fuji Mountain and etc.

### 4.3 Storyboard

There are the storyboard for every each pages in the interactive book. the storyboard also including information function provided in every page of interactive book.

Table 4.1: Cover Page

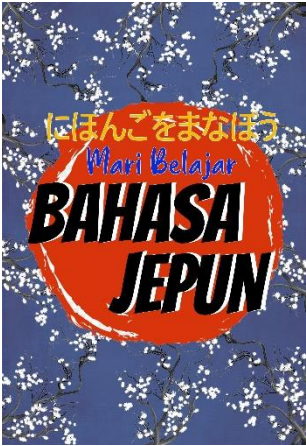
<p><b>Title: Mari Belajar Bahasa Jepun</b> <b>(Cover Page)</b></p>	<p><b>Screen No.1</b></p>	
	<p>Instructions</p> <ul style="list-style-type: none"> <li>- Text</li> <li>- Graphic</li> </ul>	<p>Authoring</p> <ul style="list-style-type: none"> <li>- Swipe</li> <li>- Pinch</li> <li>- Highlight</li> </ul>
	<p>T1: Mari Belajar Bahasa Jepun</p>	



Table 4.2: Kandungan Page


<p><b>Title: Mari Belajar Bahasa Jepun</b> <b>(Kandungan)</b></p>	<p><b>Screen No.2</b></p>	
	<p>Instructions</p> <ul style="list-style-type: none"> <li>- Text</li> <li>- Graphic</li> <li>- Animated background</li> <li>- Sound of Pronunciation</li> </ul>	<p>Authoring</p> <ul style="list-style-type: none"> <li>- Swipe</li> <li>- Pinch</li> <li>- Highlight</li> </ul>
	<p>T1: Title of the chapter</p>	

Table 4.3: Kandungan Bab 1 Page


<p><b>Title: Mari Belajar Bahasa Jepun</b> <b>(Kandungan Bab 1)</b></p>	<p><b>Screen No.3</b></p>	
	<p>Instructions</p> <ul style="list-style-type: none"> <li>- Text</li> <li>- Graphic</li> <li>- Linked Text</li> </ul>	<p>Authoring</p> <ul style="list-style-type: none"> <li>- Swipe</li> <li>- Pinch</li> <li>- Highlight</li> </ul>
	<p>T1: Index T2: List of the content title Linked Text: Text highlighted linked to specific page</p>	

Table 4.4: Kandungan Bab 2 Page


<p><b>Title: Mari Belajar Bahasa Jepun</b> <b>(Kandungan Bab 2)</b></p>	<p><b>Screen No.4</b></p>	
	<p>Instructions</p> <ul style="list-style-type: none"> <li>- Text</li> <li>- Graphic</li> <li>- Linked Text</li> </ul>	<p>Authoring</p> <ul style="list-style-type: none"> <li>- Swipe</li> <li>- Pinch</li> <li>- Highlight</li> </ul>
	<p>T1: Index</p> <p>T2: List of the content title</p> <p>Linked Text: Text highlighted linked to specific page</p>	

Table 4.5: Kandungan Bab 3 Page


<p><b>Title: Mari Belajar Bahasa Jepun</b> <b>(Kandungan Bab 3)</b></p>	<p><b>Screen No.5</b></p>	
	<p>Instructions</p> <ul style="list-style-type: none"> <li>- Text</li> <li>- Graphic</li> <li>- Linked Text</li> </ul>	<p>Authoring</p> <ul style="list-style-type: none"> <li>- Swipe</li> <li>- Pinch</li> <li>- Highlight</li> </ul>
	<p>T1: Index</p> <p>T2: List of the content title</p> <p>Linked Text: Text highlighted linked to specific page</p>	

Table 4.6: Kandungan Bab 4 Page


<p><b>Title: Mari Belajar Bahasa Jepun</b> <b>(Kandungan Bab 4)</b></p>	<p><b>Screen No.6</b></p>	
	<p>Instructions</p> <ul style="list-style-type: none"> <li>- Text</li> <li>- Graphic</li> <li>- Linked Text</li> </ul>	<p>Authoring</p> <ul style="list-style-type: none"> <li>- Swipe</li> <li>- Pinch</li> <li>- Highlight</li> </ul>
	<p>T1: Index</p> <p>T2: List of the content title</p> <p>Linked Text: Text highlighted linked to specific page</p>	

Table 4.7: Kandungan Bab 5 Page


<p><b>Title: Mari Belajar Bahasa Jepun</b> <b>(Kandungan Bab 5)</b></p>	<p><b>Screen No.7</b></p>	
	<p>Instructions</p> <ul style="list-style-type: none"> <li>- Text</li> <li>- Graphic</li> <li>- Linked Text</li> </ul>	<p>Authoring</p> <ul style="list-style-type: none"> <li>- Swipe</li> <li>- Pinch</li> <li>- Highlight</li> </ul>
	<p>T1: Index</p> <p>T2: List of the content title</p> <p>Linked Text: Text highlighted linked to specific page</p>	

Table 4.8: Kandungan Bab 6 Page


<p><b>Title: Mari Belajar Bahasa Jepun</b> <b>(Kandungan Bab 6)</b></p>	<p><b>Screen No.8</b></p>	
	<p>Instructions</p> <ul style="list-style-type: none"> <li>- Text</li> <li>- Graphic</li> <li>- Linked Text</li> </ul>	<p>Authoring</p> <ul style="list-style-type: none"> <li>- Swipe</li> <li>- Pinch</li> <li>- Highlight</li> </ul>
	<p>T1: Index</p> <p>T2: List of the content title</p> <p>Linked Text: Text highlighted linked to specific page</p>	

Table 4.9: Kandungan Bab 6 Page

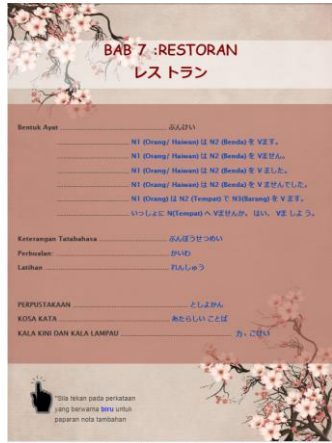
<p><b>Title: Mari Belajar Bahasa Jepun</b> <b>(Kandungan Bab 7)</b></p>	<p><b>Screen No.9</b></p>	
	<p>Instructions</p> <ul style="list-style-type: none"> <li>- Text</li> <li>- Graphic</li> <li>- Linked Text</li> </ul>	<p>Authoring</p> <ul style="list-style-type: none"> <li>- Swipe</li> <li>- Pinch</li> <li>- Highlight</li> </ul>
	<p>T1: Index</p> <p>T2: List of the content title</p> <p>Linked Text: Text highlighted linked to specific page</p>	

Table 4.10: Bab 1 Page


<p><b>Title: Mari Belajar Bahasa Jepun</b> <b>(Bab 1: Pengenalan Bahasa Jepun)</b></p>	<p><b>Screen No.10</b></p>	
	<p>Instructions</p> <ul style="list-style-type: none"> <li>- Text</li> <li>- Graphic</li> <li>- Animated background</li> <li>- Sound of Pronunciation</li> </ul>	<p>Authoring</p> <ul style="list-style-type: none"> <li>- Swipe</li> <li>- Highlight</li> </ul>
	<p>T1: Title of the chapter</p>	

Table 4.11: Latar belakang Bahasa Jepun Page

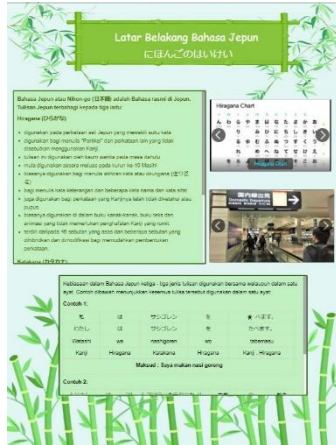
<p><b>Title: Mari Belajar Bahasa Jepun</b> <b>(Latar Belakang Bahasa Jepun)</b></p>	<p><b>Screen No.11</b></p>	
	<p>Instructions</p> <ul style="list-style-type: none"> <li>- Text</li> <li>- Graphic</li> <li>- Image</li> </ul>	<p>Authoring</p> <ul style="list-style-type: none"> <li>- Swipe</li> <li>- Pinch</li> <li>- Highlight</li> <li>- Scrolling</li> </ul>
	<p>T1: Latar belakang Bahasa Jepun</p>	

Table 4.12: Ciri – Ciri Bahasa Jepun Page


<p><b>Title: Mari Belajar Bahasa Jepun</b> (Ciri – Ciri Bahasa Jepun)</p>	<p><b>Screen No.12</b></p>	
	<p>Instructions</p> <ul style="list-style-type: none"> <li>- Text</li> <li>- Graphic</li> <li>- Video</li> </ul>	<p>Authoring</p> <ul style="list-style-type: none"> <li>- Swipe</li> <li>- Pinch</li> <li>- Highlight</li> <li>- Wiggle</li> </ul>
	<p>T1: Ciri – Ciri Bahasa Jepun T2: List of topic Video: Ciri – Ciri Bahasa Jepun</p>	

Table 4.13: Ucapan Harian, Ucapan di Kelas, Nombor Page


<p><b>Title: Mari Belajar Bahasa Jepun</b> (Ucapan Harian, Ucapan di Kelas, Nombor)</p>	<p><b>Screen No.13</b></p>	
	<p>Instructions</p> <ul style="list-style-type: none"> <li>- Text</li> <li>- Graphic</li> </ul>	<p>Authoring</p> <ul style="list-style-type: none"> <li>- Swipe</li> <li>- Highlight</li> <li>- Scrolling</li> </ul>
	<p>T1: Ucapan Harian T2: Ucapan di Kelas T3: Nombor</p>	

Table 4.14: Latihan Page


<p><b>Title: Mari Belajar Bahasa Jepun</b> <b>(Latihan)</b></p>	<p><b>Screen No.14</b></p>	
	<p>Instructions</p> <ul style="list-style-type: none"> <li>- Text</li> <li>- Graphic</li> <li>- Questions</li> </ul>	<p>Authoring</p> <ul style="list-style-type: none"> <li>- Swipe</li> <li>- Pinch</li> <li>- Highlight</li> <li>- Write</li> </ul>
	<p>T1: Latihan T2: List of Questions</p>	

Table 4.15: Bab 2 Page


<p><b>Title: Mari Belajar Bahasa Jepun</b> <b>(Bab 2: Pengenalan Diri)</b></p>	<p><b>Screen No.15</b></p>	
	<p>Instructions</p> <ul style="list-style-type: none"> <li>- Text</li> <li>- Graphic</li> <li>- Animated background</li> <li>- Sound of Pronunciation</li> </ul>	<p>Authoring</p> <ul style="list-style-type: none"> <li>- Swipe</li> <li>- Highlight</li> </ul>
	<p>T1: Title of the chapter</p>	



Table 4.16: Bentuk Ayat Page


<p><b>Title: Mari Belajar Bahasa Jepun</b> <b>(Bentuk Ayat)</b></p>	<p><b>Screen No.16</b></p>	
	<p>Instructions</p> <ul style="list-style-type: none"> <li>- Text</li> <li>- Graphic</li> <li>- Pop message</li> </ul>	<p>Authoring</p> <ul style="list-style-type: none"> <li>- Swipe</li> <li>- Pinch</li> <li>- Highlight</li> </ul>
	<p>T1: Bentuk Ayat T2: Bentuk Ayat 1 T3: Bentuk Ayat 2 T4: Bentuk Ayat 3</p> <p>Pop up message: Additional note</p>	

Table 4.17: Bentuk Ayat Page


<p><b>Title: Mari Belajar Bahasa Jepun</b> <b>(Bentuk Ayat)</b></p>	<p><b>Screen No.17</b></p>	
	<p>Instructions</p> <ul style="list-style-type: none"> <li>- Text</li> <li>- Graphic</li> <li>- Pop message</li> </ul>	<p>Authoring</p> <ul style="list-style-type: none"> <li>- Swipe</li> <li>- Pinch</li> <li>- Highlight</li> </ul>
	<p>T1: Bentuk Ayat T2: Bentuk Ayat 1 T3: Bentuk Ayat 2 T4: Bentuk Ayat 3</p> <p>Pop up message: Additional note</p>	



Table 4.18: Bentuk Ayat Page


<p><b>Title: Mari Belajar Bahasa Jepun (Bentuk Ayat)</b></p>	<p><b>Screen No.18</b></p>	
	<p>Instructions</p> <ul style="list-style-type: none"> <li>- Text</li> <li>- Graphic</li> <li>- Pop up message</li> </ul>	<p>Authoring</p> <ul style="list-style-type: none"> <li>- Swipe</li> <li>- Pinch</li> <li>- Highlight</li> </ul>
	<p>T1: Bentuk Ayat T2: Bentuk Ayat 1 T3: Bentuk Ayat 2 T4: Bentuk Ayat 3</p> <p>Pop up message: Additional note</p>	

Table 4.19: Keterangan Tatabahasa Page


<p><b>Title: Mari Belajar Bahasa Jepun (Keterangan Tatabahasa)</b></p>	<p><b>Screen No.19</b></p>	
	<p>Instructions</p> <ul style="list-style-type: none"> <li>- Text</li> <li>- Graphic</li> <li>- Video</li> </ul>	<p>Authoring</p> <ul style="list-style-type: none"> <li>- Swipe</li> <li>- Pinch</li> <li>- Highlight</li> <li>- Wiggle</li> </ul>
	<p>T1: Keterangan Tatabahasa T2: List of topic Video: Keterangan Tatabahasa</p>	

Table 4.20: Perbualan Page


<p><b>Title: Mari Belajar Bahasa Jepun</b> <b>(Perbualan)</b></p>	<p><b>Screen No.20</b></p>	
	<p>Instructions</p> <ul style="list-style-type: none"> <li>- Text</li> <li>- Graphic</li> <li>- Audio Sync</li> </ul>	<p>Authoring</p> <ul style="list-style-type: none"> <li>- Swipe</li> <li>- Pinch</li> <li>- Highlight</li> </ul>
	<p>T1: Perbualan</p> <p>Audio Sync: The audio syncing with text</p>	

Table 4.21: Latihan Page

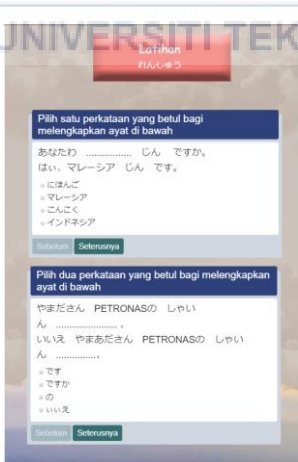
<p><b>Title: Mari Belajar Bahasa Jepun</b> <b>(Latihan)</b></p>	<p><b>Screen No.21</b></p>	
	<p>Instructions</p> <ul style="list-style-type: none"> <li>- Text</li> <li>- Graphic</li> <li>- Questions</li> </ul>	<p>Authoring</p> <ul style="list-style-type: none"> <li>- Swipe</li> <li>- Pinch</li> <li>- Highlight</li> </ul>
	<p>T1: Latihan</p> <p>T2: List of Questions</p>	

Table 4.22: Bab 3 Page


<p><b>Title: Mari Belajar Bahasa Jepun</b> <b>(Bab 3: Menunjukkan Masa)</b></p>	<p><b>Screen No.22</b></p>	
	<p>Instructions</p> <ul style="list-style-type: none"> <li>- Text</li> <li>- Graphic</li> <li>- Animated background</li> <li>- Sound of Pronunciation</li> </ul>	<p>Authoring</p> <ul style="list-style-type: none"> <li>- Swipe</li> <li>- Highlight</li> </ul>
	<p>T1: Bab 3 Menunjukkan Masa</p>	

Table 4.23: Bentuk Ayat Page


<p><b>Title: Mari Belajar Bahasa Jepun</b> <b>(Bentuk Ayat)</b></p>	<p><b>Screen No.23</b></p>	
	<p>Instructions</p> <ul style="list-style-type: none"> <li>- Text</li> <li>- Graphic</li> <li>- Pop up message</li> </ul>	<p>Authoring</p> <ul style="list-style-type: none"> <li>- Swipe</li> <li>- Pinch</li> <li>- Highlight</li> <li>- Scrolling</li> </ul>
	<p>T1: Bentuk Ayat T2: Bentuk Ayat 1 T3: Bentuk Ayat 2 Pop up message: Additional note</p>	

Table 4.24: Bentuk Ayat Page


<p><b>Title: Mari Belajar Bahasa Jepun</b> <b>(Bentuk Ayat)</b></p>	<p><b>Screen No.24</b></p>	
	<p>Instructions</p> <ul style="list-style-type: none"> <li>- Text</li> <li>- Graphic</li> <li>- Pop up message</li> </ul>	<p>Authoring</p> <ul style="list-style-type: none"> <li>- Swipe</li> <li>- Pinch</li> <li>- Highlight</li> <li>- Scrolling</li> </ul>
	<p>T2: Bentuk Ayat 3 T3: Bentuk Ayat 4 Pop up message: Additional note</p>	

Table 4.25:Keterangan Tatabahasa Page


<p><b>Title: Mari Belajar Bahasa Jepun</b> <b>(Keterangan Tatabahasa)</b></p>	<p><b>Screen No.25</b></p>	
	<p>Instructions</p> <ul style="list-style-type: none"> <li>- Text</li> <li>- Graphic</li> <li>- Video</li> </ul>	<p>Authoring</p> <ul style="list-style-type: none"> <li>- Swipe</li> <li>- Pinch</li> <li>- Highlight</li> <li>- Wiggle</li> </ul>
	<p>T1: Keterangan Tatabahasa T2: List of topic Video: Keterangan Tatabahasa</p>	

Table 4.26: Perbualan Page


<p><b>Title: Mari Belajar Bahasa Jepun</b> <b>(Perbualan)</b></p>	<p><b>Screen No.26</b></p>	
	<p>Instructions</p> <ul style="list-style-type: none"> <li>- Text</li> <li>- Graphic</li> <li>- Audio Sync</li> </ul>	<p>Authoring</p> <ul style="list-style-type: none"> <li>- Swipe</li> <li>- Pinch</li> <li>- Highlight</li> </ul>
	<p>T1: Perbualan</p> <p>Audio Sync: The audio syncing with text</p>	

Table 4.27: Latihan Page


<p><b>Title: Mari Belajar Bahasa Jepun</b> <b>(Latihan)</b></p>	<p><b>Screen No.27</b></p>	
	<p>Instructions</p> <ul style="list-style-type: none"> <li>- Text</li> <li>- Graphic</li> <li>- Questions</li> </ul>	<p>Authoring</p> <ul style="list-style-type: none"> <li>- Swipe</li> <li>- Pinch</li> <li>- Highlight</li> <li>- Write</li> </ul>
	<p>T1: Latihan</p> <p>T2: List of Questions</p>	

Table 4.28: Bab 4 Page

<p><b>Title: Mari Belajar Bahasa Jepun</b> <b>(Bab 4: Menunjukkan Tempat)</b></p>	<p><b>Screen No.28</b></p>	
	<p>Instructions</p> <ul style="list-style-type: none"> <li>- Text</li> <li>- Graphic</li> <li>- Animated background</li> <li>- Sound of Pronunciation</li> </ul>	<p>Authoring</p> <ul style="list-style-type: none"> <li>- Swipe</li> <li>- Highlight</li> </ul>
	<p>T1: Bab 4 Menunjukkan Tempat</p>	

Table 4.29: Bentuk Ayat Page


<p><b>Title: Mari Belajar Bahasa Jepun</b> <b>(Bentuk Ayat)</b></p>	<p><b>Screen No.29</b></p>	
	<p>Instructions</p> <ul style="list-style-type: none"> <li>- Text</li> <li>- Graphic</li> <li>- Pop up message</li> </ul>	<p>Authoring</p> <ul style="list-style-type: none"> <li>- Swipe</li> <li>- Pinch</li> <li>- Highlight</li> <li>- Scrolling</li> </ul>
	<p>T1: Bentuk Ayat T2: Bentuk Ayat 1 T3: Bentuk Ayat 2 T4: Bentuk Ayat 3 Pop up message: Additional note</p>	

Table 4.30: Bentuk Ayat Page


<p><b>Title: Mari Belajar Bahasa Jepun</b> <b>(Bentuk Ayat)</b></p>	<p><b>Screen No.30</b></p>	
	<p>Instructions</p> <ul style="list-style-type: none"> <li>- Text</li> <li>- Graphic</li> <li>- Pop up message</li> </ul>	<p>Authoring</p> <ul style="list-style-type: none"> <li>- Swipe</li> <li>- Pinch</li> <li>- Highlight</li> <li>- Scrolling</li> </ul>
	<p>T1: Bentuk Ayat 4 T2: Bentuk Ayat 5 T3: Bentuk Ayat 6</p> <p>Pop up message: Additional note</p>	

Table 4.31: Bentuk Ayat Page

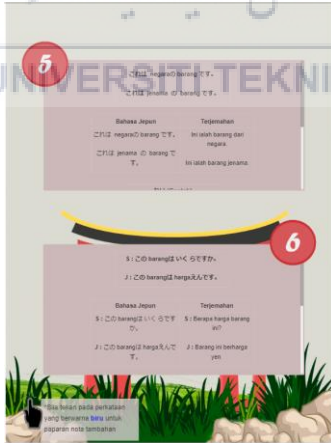
<p><b>Title: Mari Belajar Bahasa Jepun</b> <b>(Bentuk Ayat)</b></p>	<p><b>Screen No.31</b></p>	
	<p>Instructions</p> <ul style="list-style-type: none"> <li>- Text</li> <li>- Graphic</li> <li>- Pop up message</li> </ul>	<p>Authoring</p> <ul style="list-style-type: none"> <li>- Swipe</li> <li>- Pinch</li> <li>- Highlight</li> <li>- Scrolling</li> </ul>
	<p>T1: Bentuk Ayat 4 T2: Bentuk Ayat 5 T3: Bentuk Ayat 6</p> <p>Pop up message: Additional note</p>	



Table 4.32: Pengiraan Page


<p><b>Title: Mari Belajar Bahasa Jepun</b> <b>(Pengiraan)</b></p>	<p><b>Screen No.32</b></p>	
	<p>Instructions</p> <ul style="list-style-type: none"> <li>- Text</li> <li>- Graphic</li> <li>- Pop up image</li> </ul>	<p>Authoring</p> <ul style="list-style-type: none"> <li>- Swipe</li> <li>- Pinch</li> <li>- Highlight</li> </ul>
	<p>T1: Pengiraan T2: Ratus T3: Ribu T4: Puluh Ribu</p> <p>Pop up image: Additional note</p>	

Table 4.33: Mata Wang Page

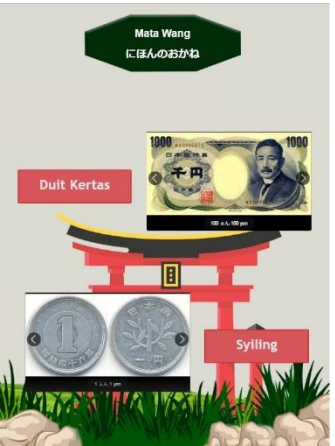
<p><b>Title: Mari Belajar Bahasa Jepun</b> <b>(Mata Wang)</b></p>	<p><b>Screen No.33</b></p>	
	<p>Instructions</p> <ul style="list-style-type: none"> <li>- Text</li> <li>- Graphic</li> <li>- Gallery</li> </ul>	<p>Authoring</p> <ul style="list-style-type: none"> <li>- Swipe</li> <li>- Pinch</li> <li>- Highlight</li> </ul>
	<p>T1: Mata Wang T2: Duit Kertas T3: Syiling</p> <p>Gallery: Additional picture</p>	



Table 4.34: Keterangan Tatabahasa Page


<p><b>Title: Mari Belajar Bahasa Jepun</b> (Keterangn Tatabahasa)</p>	<p><b>Screen No.34</b></p>	
	<p>Instructions</p> <ul style="list-style-type: none"> <li>- Text</li> <li>- Graphic</li> <li>- Video</li> </ul>	<p>Authoring</p> <ul style="list-style-type: none"> <li>- Swipe</li> <li>- Pinch</li> <li>- Highlight</li> <li>- Wiggle</li> </ul>
	<p>T1: Keterangan Tatabahasa</p> <p>T2: List of topic</p> <p>Video: Keterangan Tatabahasa</p>	

Table 4.35: Perbualan Page


<p><b>Title: Mari Belajar Bahasa Jepun</b> (Perbualan)</p>	<p><b>Screen No.35</b></p>	
	<p>Instructions</p> <ul style="list-style-type: none"> <li>- Text</li> <li>- Graphic</li> <li>- Audio Sync</li> </ul>	<p>Authoring</p> <ul style="list-style-type: none"> <li>- Swipe</li> <li>- Pinch</li> <li>- Highlight</li> </ul>
	<p>T1: Perbualan</p> <p>Audio Sync: The audio syncing with text</p>	

Table 4.36: Latihan Page


<p><b>Title: Mari Belajar Bahasa Jepun</b> <b>(Latihan)</b></p>	<p><b>Screen No.36</b></p>	
	<p>Instructions</p> <ul style="list-style-type: none"> <li>- Text</li> <li>- Graphic</li> <li>- Questions</li> </ul>	<p>Authoring</p> <ul style="list-style-type: none"> <li>- Swipe</li> <li>- Pinch</li> <li>- Highlight</li> </ul>
	<p>T1: Latihan T2: List of Questions</p>	

Table 4.37: Bab 5 Page

<p><b>Title: Mari Belajar Bahasa Jepun</b> <b>(Bab 5: Menunjukkan Masa)</b></p>	<p><b>Screen No.37</b></p>	
	<p>Instructions</p> <ul style="list-style-type: none"> <li>- Text</li> <li>- Graphic</li> <li>- Animated background</li> <li>- Sound of Pronunciation</li> </ul>	<p>Authoring</p> <ul style="list-style-type: none"> <li>- Swipe</li> <li>- Highlight</li> </ul>
	<p>T1: Bab 5 Manunjukkan Masa</p>	

Table 4.38: Masa Page

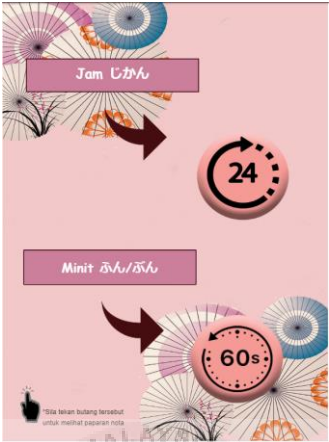
<p><b>Title: Mari Belajar Bahasa Jepun</b> <b>(Masa)</b></p>	<p><b>Screen No.38</b></p>	
	<p>Instructions</p> <ul style="list-style-type: none"> <li>- Text</li> <li>- Graphic</li> <li>- Pop up image</li> </ul>	<p>Authoring</p> <ul style="list-style-type: none"> <li>- Swipe</li> <li>- Pinch</li> <li>- Highlight</li> </ul>
	<p>T2: Jam T3:Minit Pop up image: Additional note</p>	

Table 4.39: Bentuk Ayat Page


<p><b>Title: Mari Belajar Bahasa Jepun</b> <b>(Bentuk Ayat)</b></p>	<p><b>Screen No.39</b></p>	
	<p>Instructions</p> <ul style="list-style-type: none"> <li>- Text</li> <li>- Graphic</li> <li>- Pop up message</li> </ul>	<p>Authoring</p> <ul style="list-style-type: none"> <li>- Swipe</li> <li>- Pinch</li> <li>- Highlight</li> <li>- Scrolling</li> </ul>
	<p>T1: Bentuk Ayat T2: Bentuk Ayat 1 T3: Bentuk Ayat 2 Pop up message: Additional note</p>	

Table 4.40: Bentuk Ayat Page


<p><b>Title: Mari Belajar Bahasa Jepun</b> <b>(Bentuk Ayat)</b></p>	<p><b>Screen No.40</b></p>	
	<p>Instructions</p> <ul style="list-style-type: none"> <li>- Text</li> <li>- Graphic</li> <li>- Pop up message</li> </ul>	<p>Authoring</p> <ul style="list-style-type: none"> <li>- Swipe</li> <li>- Pinch</li> <li>- Highlight</li> <li>- Scrolling</li> </ul>
	<p>T1: Bentuk Ayat 3 T2: Bentuk Ayat 4 Pop up message: Additional note</p>	

Table 4.41: Hari Page


<p><b>Title: Mari Belajar Bahasa Jepun</b> <b>(Hari)</b></p>	<p><b>Screen No.41</b></p>	
	<p>Instructions</p> <ul style="list-style-type: none"> <li>- Text</li> <li>- Graphic</li> <li>- Audio Sync</li> </ul>	<p>Authoring</p> <ul style="list-style-type: none"> <li>- Swipe</li> <li>- Pinch</li> <li>- Highlight</li> </ul>
	<p>T1: Hari Audio Sync: The audio syncing with text</p>	

Table 4.42: Keterangan Tatabahasa Page


<p><b>Title: Mari Belajar Bahasa Jepun</b> <b>(Keterangan Tatabahasa)</b></p>	<p><b>Screen No.42</b></p>	
	<p>Instructions</p> <ul style="list-style-type: none"> <li>- Text</li> <li>- Graphic</li> <li>- Video</li> </ul>	<p>Authoring</p> <ul style="list-style-type: none"> <li>- Swipe</li> <li>- Pinch</li> <li>- Highlight</li> <li>- Wiggle</li> </ul>
	<p>T1: Keterangan Tatabahasa T2: List of topics Video: Keterangan Tatabahasa</p>	

Table 4.43: Perbualan Page


<p><b>Title: Mari Belajar Bahasa Jepun</b> <b>(Perbualan)</b></p>	<p><b>Screen No.43</b></p>	
	<p>Instructions</p> <ul style="list-style-type: none"> <li>- Text</li> <li>- Graphic</li> <li>- Audio Sync</li> </ul>	<p>Authoring</p> <ul style="list-style-type: none"> <li>- Swipe</li> <li>- Pinch</li> <li>- Highlight</li> </ul>
	<p>T1: Perbualan Audio Sync: The audio syncing with text</p>	

Table 4.44: Latihan Page

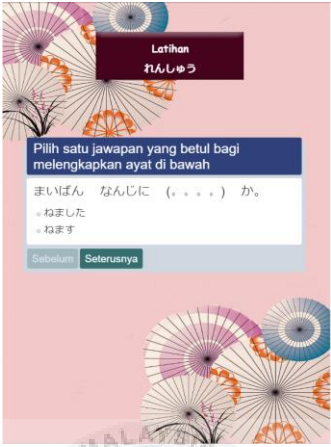
<p><b>Title: Mari Belajar Bahasa Jepun</b> <b>(Latihan)</b></p>	<p><b>Screen No.44</b></p>	
	<p>Instructions</p> <ul style="list-style-type: none"> <li>- Text</li> <li>- Graphic</li> <li>- Questions</li> </ul>	<p>Authoring</p> <ul style="list-style-type: none"> <li>- Swipe</li> <li>- Pinch</li> <li>- Highlight</li> </ul>
	<p>T1: Latihan T2: List of Questions</p>	

Table 4.45: Bab 6 Page


<p><b>Title: Mari Belajar Bahasa Jepun</b> <b>(Bab 6: Menunjukkan Perjalanan)</b></p>	<p><b>Screen No.45</b></p>	
	<p>Instructions</p> <ul style="list-style-type: none"> <li>- Text</li> <li>- Graphic</li> <li>- Animated background</li> <li>- Sound of Pronunciation</li> </ul>	<p>Authoring</p> <ul style="list-style-type: none"> <li>- Swipe</li> <li>- Highlight</li> </ul>
	<p>T1: Bab 6 Menunjukkan Perjalanan</p>	

Table 4.46: Bentuk Ayat Page

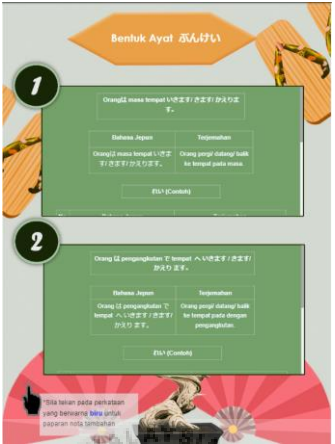
<p><b>Title: Mari Belajar Bahasa Jepun</b> <b>(Bentuk Ayat)</b></p>	<p><b>Screen No.46</b></p>	
	<p>Instructions</p> <ul style="list-style-type: none"> <li>- Text</li> <li>- Graphic</li> <li>- Pop up message</li> </ul>	<p>Authoring</p> <ul style="list-style-type: none"> <li>- Swipe</li> <li>- Pinch</li> <li>- Highlight</li> <li>- Scrolling</li> </ul>
	<p>T1: Bentuk Ayat T2: Bentuk Ayat 5 T3: Bentuk Ayat 6 Pop up message: Additional note</p>	

Table 4.47: Bentuk Ayat Page

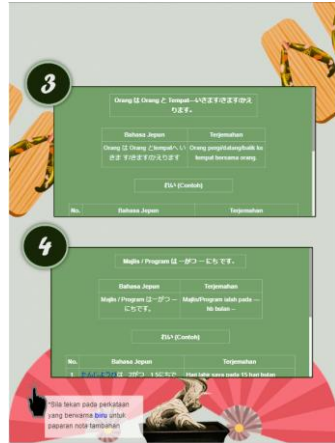
<p><b>Title: Mari Belajar Bahasa Jepun</b> <b>(Bentuk Ayat)</b></p>	<p><b>Screen No.47</b></p>	
	<p>Instructions</p> <ul style="list-style-type: none"> <li>- Text</li> <li>- Graphic</li> <li>- Pop up message</li> </ul>	<p>Authoring</p> <ul style="list-style-type: none"> <li>- Swipe</li> <li>- Pinch</li> <li>- Highlight</li> <li>- Scrolling</li> </ul>
	<p>T1: Bentuk Ayat 3 T2: Bentuk Ayat 5 Pop up message: Additional note</p>	



Table 4.48: Keterangan Tatabahasa Page

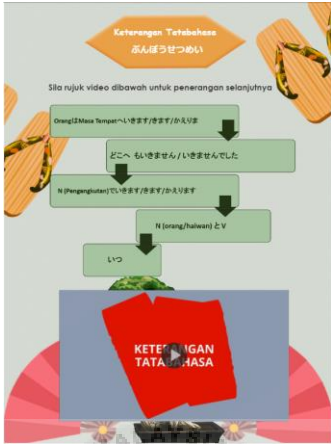
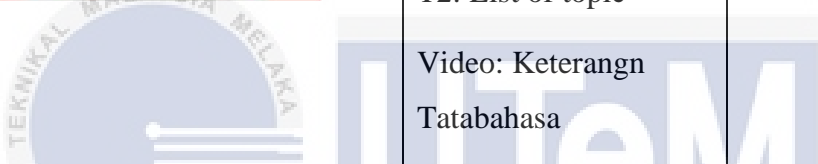
<p><b>Title: Mari Belajar Bahasa Jepun</b> (Keterangan Tatabahasa)</p>	<p><b>Screen No.48</b></p>	
	<p>Instructions</p> <ul style="list-style-type: none"> <li>- Text</li> <li>- Graphic</li> <li>- Video</li> </ul>	<p>Authoring</p> <ul style="list-style-type: none"> <li>- Swipe</li> <li>- Pinch</li> <li>- Highlight</li> <li>- Wiggle</li> </ul>
	<p>T1: Keterangan Tatabahasa</p> <p>T2: List of topic</p> <p>Video: Keterangan Tatabahasa</p>	

Table 4.49: Perbualan Page



<p><b>Title: Mari Belajar Bahasa Jepun</b> (Perbualan)</p>	<p><b>Screen No.49</b></p>	
	<p>Instructions</p> <ul style="list-style-type: none"> <li>- Text</li> <li>- Graphic</li> <li>- Audio Sync</li> </ul>	<p>Authoring</p> <ul style="list-style-type: none"> <li>- Swipe</li> <li>- Pinch</li> <li>- Highlight</li> </ul>
	<p>T1: Perbualan</p> <p>Audio Sync: The audio syncing with text</p>	



Table 4.50: Latihan Page


<p><b>Title: Mari Belajar Bahasa Jepun</b> <b>(Latihan)</b></p>	<p><b>Screen No.50</b></p>	
	<p>Instructions</p> <ul style="list-style-type: none"> <li>- Text</li> <li>- Graphic</li> <li>- Questions</li> </ul>	<p>Authoring</p> <ul style="list-style-type: none"> <li>- Swipe</li> <li>- Pinch</li> <li>- Highlight</li> <li>- Write</li> </ul>
	<p>T1: Latihan T2: List of Questions</p>	

Table 4.51: Bab 7 Page


<p><b>Title: Mari Belajar Bahasa Jepun</b> <b>(Bab 7: Restoran)</b></p>	<p><b>Screen No.51</b></p>	
	<p>Instructions</p> <ul style="list-style-type: none"> <li>- Text</li> <li>- Graphic</li> <li>- Animated background</li> <li>- Sound of Pronunciation</li> </ul>	<p>Authoring</p> <ul style="list-style-type: none"> <li>- Swipe</li> <li>- Highlight</li> </ul>
	<p>T1: Bab 7 Restoran</p>	

Table 4.52: Bentuk Ayat Page


<p><b>Title: Mari Belajar Bahasa Jepun</b> <b>(Bentuk Ayat)</b></p>	<p><b>Screen No.52</b></p>	
	<p>Instructions</p> <ul style="list-style-type: none"> <li>- Text</li> <li>- Graphic</li> <li>- Pop up message</li> </ul>	<p>Authoring</p> <ul style="list-style-type: none"> <li>- Swipe</li> <li>- Pinch</li> <li>- Highlight</li> <li>- Scrolling</li> </ul>
	<p>T1: Bentuk Ayat T2: Bentuk Ayat 1 T3: Bentuk Ayat 2 T3: Bentuk Ayat 3 Pop up message: Additional note</p>	

Table 4.53: Bentuk Ayat Page


<p><b>Title: Mari Belajar Bahasa Jepun</b> <b>(Bentuk Ayat)</b></p>	<p><b>Screen No.53</b></p>	
	<p>Instructions</p> <ul style="list-style-type: none"> <li>- Text</li> <li>- Graphic</li> <li>- Pop up message</li> </ul>	<p>Authoring</p> <ul style="list-style-type: none"> <li>- Swipe</li> <li>- Pinch</li> <li>- Highlight</li> <li>- Scrolling</li> </ul>
	<p>T1: Bentuk Ayat 4 T2: Bentuk Ayat 5 T3: Bentuk Ayat 6 Pop up message: Additional note</p>	

Table 4.54: Bentuk Ayat Page


<p><b>Title: Mari Belajar Bahasa Jepun (Bentuk Ayat)</b></p>	<p><b>Screen No.54</b></p>	
	<p>Instructions</p> <ul style="list-style-type: none"> <li>- Text</li> <li>- Graphic</li> <li>- Pop up message</li> </ul>	<p>Authoring</p> <ul style="list-style-type: none"> <li>- Swipe</li> <li>- Pinch</li> <li>- Highlight</li> <li>- Scrolling</li> </ul>
	<p>T1: Bentuk Ayat 4 T2: Bentuk Ayat 5 T3: Bentuk Ayat 6</p> <p>Pop up message: Additional note</p>	

Table 4.55: Keterangan Tatabahasa Page


<p><b>Title: Mari Belajar Bahasa Jepun (Keterangan Tatabahasa)</b></p>	<p><b>Screen No.55</b></p>	
	<p>Instructions</p> <ul style="list-style-type: none"> <li>- Text</li> <li>- Graphic</li> <li>- Video</li> </ul>	<p>Authoring</p> <ul style="list-style-type: none"> <li>- Swipe</li> <li>- Pinch</li> <li>- Highlight</li> <li>- Wiggle</li> </ul>
	<p>T1: Keterangan Tatabahasa T2: List of topic</p> <p>Video: Keterangan Tatabahasa</p>	

Table 4.56: Perbualan Page


<p><b>Title: Mari Belajar Bahasa Jepun</b> <b>(Perbualan)</b></p>	<p><b>Screen No.56</b></p>	
	<p><b>Instructions</b></p> <ul style="list-style-type: none"> <li>- Text</li> <li>- Graphic</li> <li>- Audio Sync</li> </ul>	<p><b>Authoring</b></p> <ul style="list-style-type: none"> <li>- Swipe</li> <li>- Pinch</li> <li>- Highlight</li> </ul>
	<p><b>T1: Perbualan</b></p> <p><b>Audio Sync: The audio syncing with text</b></p>	

Table 4.57: Latihan Page


<p><b>Title: Mari Belajar Bahasa Jepun</b> <b>(Latihan)</b></p>	<p><b>Screen No.57</b></p>	
	<p><b>Instructions</b></p> <ul style="list-style-type: none"> <li>- Text</li> <li>- Graphic</li> <li>- Questions</li> </ul>	<p><b>Authoring</b></p> <ul style="list-style-type: none"> <li>- Swipe</li> <li>- Pinch</li> <li>- Highlight</li> </ul>
	<p><b>T1: Latihan</b></p> <p><b>T2: List of Questions</b></p>	

Table 4.58: Perpustakaan Page


<p><b>Title: Mari Belajar Bahasa Jepun</b> <b>(Perpustakaan)</b></p>	<p><b>Screen No.58</b></p>	
	<p>Instructions</p> <ul style="list-style-type: none"> <li>- Text</li> <li>- Graphic</li> <li>- Animated background</li> <li>- Sound of Pronunciation</li> </ul>	<p>Authoring</p> <ul style="list-style-type: none"> <li>- Swipe</li> <li>- Highlight</li> </ul>
	<p>T1: Perpustakaan</p>	

Table 4.59: Kosa Kata Page


<p><b>Title: Mari Belajar Bahasa Jepun</b> <b>(Kosa Kata)</b></p>	<p><b>Screen No.59</b></p>	
	<p>Instructions</p> <ul style="list-style-type: none"> <li>- Text</li> <li>- Graphic</li> </ul>	<p>Authoring</p> <ul style="list-style-type: none"> <li>- Swipe</li> <li>- Highlight</li> </ul>
	<p>T1: Kosa Kata T2: List of kosa kata</p>	

Table 4.60: Kosa Kata Page


<p><b>Title: Mari Belajar Bahasa Jepun</b> <b>(Kosa Kata)</b></p>	<p><b>Screen No.60</b></p>	
	<p>Instructions</p> <ul style="list-style-type: none"> <li>- Text</li> <li>- Graphic</li> </ul>	<p>Authoring</p> <ul style="list-style-type: none"> <li>- Swipe</li> <li>- Highlight</li> </ul>
	<p>T1: Kosa Kata T2: List of kosa kata</p>	

Table 4.61: Kala Kini Kala Lampau Page


<p><b>Title: Mari Belajar Bahasa Jepun</b> <b>(Kala Kini dan Kala Lampau)</b></p>	<p><b>Screen No.61</b></p>	
	<p>Instructions</p> <ul style="list-style-type: none"> <li>- Text</li> <li>- Graphic</li> </ul>	<p>Authoring</p> <ul style="list-style-type: none"> <li>- Swipe</li> <li>- Highlight</li> </ul>
	<p>T1: Kala Kini dan Kala Lampau T2: List of Kala Kini dan Kala Lampau</p>	

Table 4.62: Kala Kini Kala Lampau Page



<p><b>Title: Mari Belajar Bahasa Jepun</b> <b>(Kala Kini dan Kala Lampau)</b></p>	<p><b>Screen No.62</b></p>	
	<p>Instructions</p> <ul style="list-style-type: none"> <li>- Text</li> <li>- Graphic</li> </ul>	<p>Authoring</p> <ul style="list-style-type: none"> <li>- Swipe</li> <li>- Highlight</li> </ul>
	<p>T1: Kala Kini dan Kala Lampau</p> <p>T2: List of Kala Kini dan Kala Lampau</p>	

Table 4.63: Pengakuan Page

<p><b>Title: Mari Belajar Bahasa Jepun</b> <b>(Pengakuan)</b></p>	<p><b>Screen No.63</b></p>	
	<p>Instructions</p> <ul style="list-style-type: none"> <li>- Text</li> <li>- Graphic</li> </ul>	<p>Authoring</p> <ul style="list-style-type: none"> <li>- Swipe</li> <li>- Highlight</li> </ul>
	<p>T1: Pengakuan</p> <p>T2: List of original book writer</p> <p>T3: Supervisor name</p> <p>T4: Book writer</p>	

#### 4.4 Conclusion

This chapter has explained the application's overall design. Additionally, this chapter provides information on the planning and flow of the interactive functions. On the other hand, it also introduced the interactive book's content and storyboard. This chapter introduces the interactive elements that appear on every page and have a variety of functions and purposes. The project's execution is covered in the next chapter.





## CHAPTER 5: IMPLEMENTATION

### 5.1 Introduction

This chapter will describe and illustrate the project's development and integration. Only after the look has been finalised can the implementation phase begin. At this level, the application will be created and installed in steps. The application's inputs and outputs will be clarified.

### 5.2 Media Creation

Explaining flow of media creation that needed for the project of interactive book.

#### a. Production of Texts

Firstly, the types of text are most uses in this project is Bahasa Melayu and Japanese texts which is Hiragana, Katakana, Ganji and Roman. Secondly, for font handling, the project are uses most of 90% of font offered in Kotobee Author. Kotobee Author only offered only several of font style and not allowed to added custom font style. Thirdly, for texts formats, are depends on every topic, pages, and elements. Lastly, Japanese keyboard is downloded to generate Japanese word

#### b. Production of Graphics

There are several of type's uses in graphics production. Some of the image are in .png and jpeg type. For the title of chapter pages, are use .gif as animated background image. The images of background, title, topic title and etc. was edited by Adobe Photoshop CC, Adobe Illustrator CC, Microsoft PowerPoint and online free .gif generator.

#### c. Production of Audio

In this project there are a lot of audios are uses. The audio use for video background music and sound effect and the audio of voice translator. For the audio for background music and sound effect, firstly was edited using Audacity for cutting, part and sound arrangement, and then edit it again for certain part in Wondershare Filmora which is combining with sound effect. For the audio

of conversation translator, all of it are generate with free online voice generator and. All the audios are compressing in mp3 file.

#### **d. Production of Video**

In the producing of the video there several way and technique are uses. Firstly, all the videos are creating by Biteable free video maker for the animated part. All of the videos will be edited again in Wondershare Filmora to add the background sound, sound effect and text. The videos are containing lots of text effect and transition. All the videos are compressing in mp4 file.

### **5.3 Media Integration**

There are various media needed to complete the whole interactive book. For background image, all of the picture sources are from Google and some of other website. The background is use arrangement combination of picture that already edited the size, texture, colour adjustment and design.

Most of the notes are written directly in Kotobee Author and some of it especially Japanese text are scanned from image to text using Microsoft Office application.

For the animated background image, all the element and picture are uses from the background image but then the position of some element of the background will rearrange the position a little bit for at least five different pictures. After that, all the five pictures will be uploaded to free online .gif generator.

The audio of voice audio sync translators is generating by text to speech online generator. All the audio voice are edited on the voice setting such as voice pitch, voice sound etc.

The audio for video background music and sound effect uses for the video are from youtube, free website background music. All of audio were edited using audacity. There are some parts were cutting off. After that the audio for background music was edited again in Wondershare Filmora to combine it with sound effect and the video.

The videos are creating and edited by two tools. Firstly, the videos are created using Biteable online video maker for the animated character, notes, and video design.

After that the video was edited again with Wondershare Filmora to added transition, audio which the background music with sound effect that already edited and added some more notes.

After all the media completely edited, all of it were added in Kotobee Author. For the audio sync in conversation part and another part, audio voice was uploaded with text then edited the audio to sync with the text display.


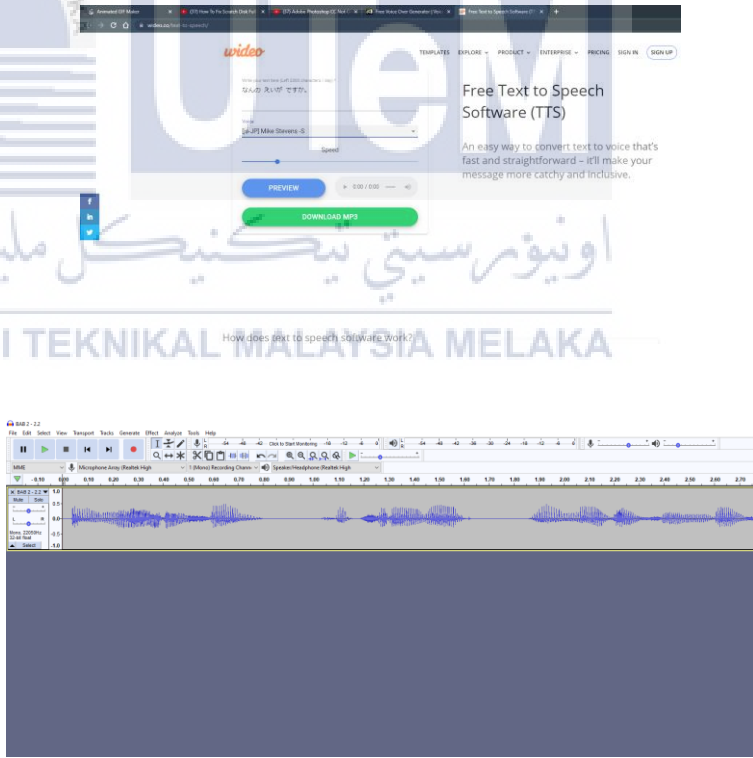
#### **5.4 Product configuration management**

Product configuration management is where the whole setup should have been done to the item to accomplish wanted result. It likewise included adaptation control and clarification about design condition arrangement

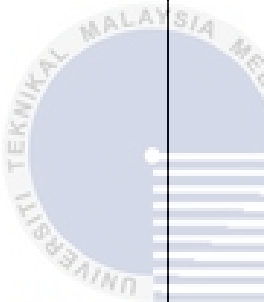
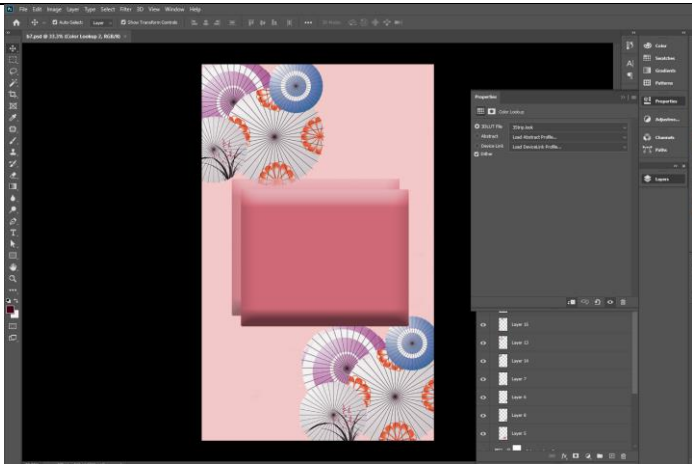
##### **5.4.1 Configuration environment Setup**

The setting necessary in the programme used to build and manufacture the substance is clarified by the configuration environment setup. To create an Interactive Book material, numerous software programmes such as Adobe Illustrator and Adobe Photoshop, Kotobee Author, Audacity, Wondershare Filmora and Microsoft PowerPoint were used to create all the content for this project. Before beginning any development or activity, a few designs should be prepared. This arrangement is necessary to ensure that the final product is true to form and functions properly. The setup settings of this project is shown in Table 5.1: Configuration Environment Setup

Table 5.1: Configuration Environment Setup

Application Software	Setting
<p>Wondershare Filmora</p>	
<p>Audacity</p>	

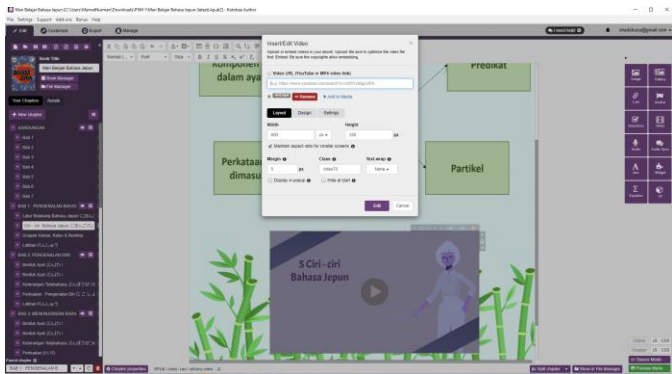
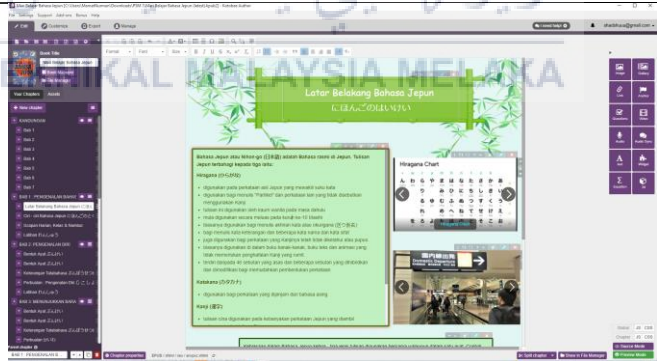
Adobe Photoshop



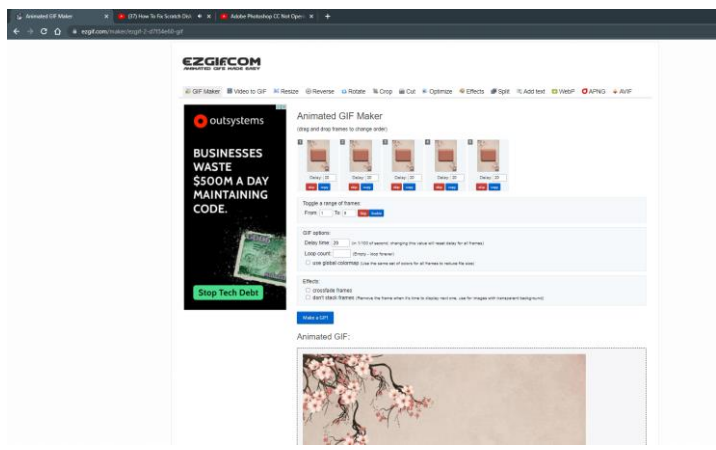
اونيورسي تيكنيكل مليسيا ملاك

UNIVERSITI TEKNIKAL MALAYSIA MELAKA

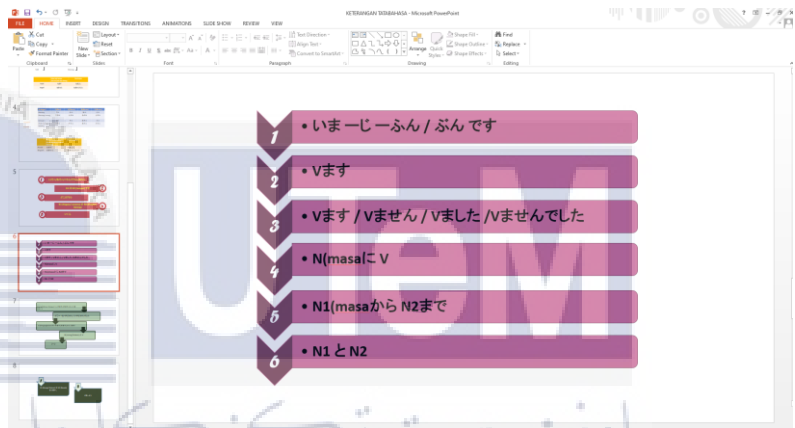
Kotobee Author



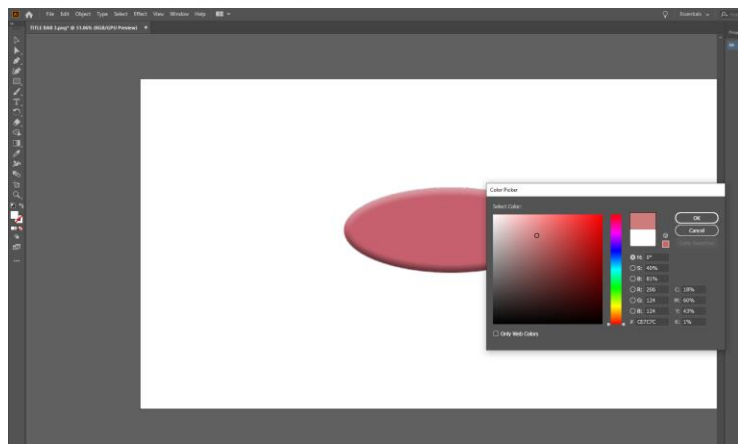
Gif online generator



Microsoft PowerPoint



Adobe Illustrator



## 5.5 Implementation Status

Each page covered by this project will have its development progress determined by its implementation status. Table 1 shows the status of the full implementation of the interactive book. Table 2 shows the status of the partial implementation. 5.2 Process and description of Implementation.

Table 5.2: Process and description of Implementation.

Content	Description	Duration	Status
Table of Content	Content that involves are linked pages and background design.	2 days	complete
Chapter 1	Content that involves are notes, image, animates image, video, background design and exercise	2 days	complete
Chapter 2	Content that involves are notes, image, animates image, video, background design, audio, pop message, and exercise	3 days	complete
Chapter 3	Content that involves are notes, image, animates image, video, background design, audio, pop message, and exercise	3 days	complete
Chapter 4	Content that involves are notes, image, animates image, video, background design, audio, pop message, and exercise	3 days	complete
Chapter 5	Content that involves are notes, image, animates image, video, background design, audio, pop message, and exercise	3 days	complete
Chapter 6	Content that involves are notes, image, animates image, video, background design, audio, pop message, and exercise	3 days	complete

Chapter 7	Content that involves are notes, image, animates image, video, background design, audio, pop message, and exercise	3 days	complete
Library (Kosa Kata)	Content that involves are notes and background design.	1 day	complete

## 5.6 Conclusion

In the conclusion, Kotobee Author, Kotobee Reader, Adobe Illustrator CC, Adobe Photoshop CC, Wondershare Filmora, and Audacity are the development tools required to complete this project. Most of these programmes are available for free download and use on the internet. On their official website, these programmes can be downloaded for free! It was created with the assistance of Kotobee Authors. For the interactive's multimedia element, Adobe Illustrator CC, Adobe Photoshop CC, Wondershare Filmora, and Audacity were used as design resources.



## CHAPTER 6: TESTING

### 6.1 Introduction

In accordance with Chapter 5, the implementation phase will organise this project. Based on the guidelines from Chapter 5, this chapter will focus on project research. The purpose of creating a test plan is to figure out which features will be tested. It is critical to conduct this research and evaluation in order to examine and evaluate the actual outcomes and ensure that they meet the Chapter 1 goal.

This chapter also covers test management, which includes the test customer, test setup, test strategy, and test policy, to collect and analyse individual data. The research method should be effective in terms of saving time and resources. Alpha and beta testing are the two types of studies that must be carried out. Two different types of customers will inspect the programme. Finally, the alpha test will be run by a multimedia expert, while the beta test will be run by the project's target client. Because growing technology might attract recognition strategy, it is necessary to make appropriate use of digital mobile devices such as smartphones.

### 6.2 Test Plan

There are four parts to a test programme: evaluating the user interface, setting up the evaluation, checking the schedule, and studying the technique. An outline of the test trial may be found in the study plan as well as a comprehensive explanation of how the test was designed. Specifications, qualities, and test environments are described as well as goals to be reached and further experiments to be conducted. The product's developer and designer must pick which tests to run for the product to be successful. Reporting and listing of product testing criteria is required, as well as which product will be examined, when testing will take place and who will be conducting it.

For the testing to be done properly, the test environment and location need to be setup. Testing should be guided by test technique. Because their comments will be extremely beneficial for improving and upgrading the project, choosing a consumer to test it is crucial.

### 6.2.1 Test User

In each level of the testing process, a test user specifies who is involved. Users of this programme are divided into three groups: subject matter experts, multimedia experts, and the intended audience for the application (UTeM students). As part of the Alpha testing, two lecturers from Universiti Teknikal Malaysia Melaka (UTeM), Faculty of Information and Communication Technology will serve as multimedia experts, as well as a Japanese language lecturer from Universiti Teknikal Malaysia Melaka (UTeM) and a Malaysian citizen who is currently working as Senior Researcher at Japan as a subject matter expert. For beta testing, random Universiti Teknikal Malaysia Melaka (UTeM) students from various faculties are randomly selected to test the application. To test the application, 30 people are chosen.

Table 6.1: Test User

Tester Group	Responsibilities	Persons
Universiti Teknikal Malaysia Melaka (UTeM) lecturers from Faculty of Information and Communication Technology	<ul style="list-style-type: none"> <li>- Tests the usability of the application</li> <li>- Tests the user friendliness</li> <li>- Tests application performance</li> <li>- Multimedia expert</li> </ul>	<ul style="list-style-type: none"> <li>- Prof. Madya Ts. Dr. Hjh. Norasiken Bakar</li> <li>- PM Dr. Mohd Hafiz bin Zakaria</li> </ul>
Japanese Language lecturer from Universiti Teknikal Malaysia Melaka (UTeM)	<ul style="list-style-type: none"> <li>- Alpha testing</li> <li>- Tests the application's content and functionalities</li> <li>- Functional test</li> <li>- Subject matter expert</li> </ul>	<ul style="list-style-type: none"> <li>- Mohd Nizam bin Yusof</li> </ul>
Senior Researcher at Japan	<ul style="list-style-type: none"> <li>- Alpha testing</li> </ul>	<ul style="list-style-type: none"> <li>- Azrul Rabbani Fitri bin Nawi</li> </ul>

	<ul style="list-style-type: none"> <li>- Tests the application's content and functionalities</li> <li>- Functional test</li> <li>- Subject matter expert</li> </ul>	
Universiti Teknikal Malaysia Melaka (UTeM) students	<ul style="list-style-type: none"> <li>- User acceptance test to assess application performance</li> </ul>	<ul style="list-style-type: none"> <li>- Universiti Teknikal Malaysia Melaka (UTeM) students from various faculty</li> </ul>

### 6.2.2 Test Environment

The test was carried out online with various way such as thru WhatsApp's, Microsoft Teams meeting and email. For the alpha testing, there are 4 people divided by two group. Two people for subject matter expert and two people for multimedia expert are using the application in different way. For subject matter expert Mohd Nizam bin Yusof and Azrul Rabbani Fitri bin Naw, the tests are conducted thru email and WhatsApp's. The link of epub file, video demo and google form are given thru email and WhatsApp's. The users are downloading .epub file and open it using laptop with Kotobee Reader software. For multimedia expert the test PM Dr. Mohd Hafiz bin Zakaria, the test is conducted thru WhatsApp's. The link of video demo and google form are given thru WhatsApp's. The users are watching thru video demo and answering the survey given. For multimedia expert Prof. Madya Ts. Dr. Hjh. Norasiken Bakar, the test is conducted by Microsoft Teams meeting. The application is directly present during the online meeting and the user is answering the survey given after the meeting done. For beta testing, there are 30 Universiti Teknikal Malaysia Melaka (UTeM) students receive the link of epub file, video demo and google form are given thru WhatsApp's. The messages are spreading thru WhatsApp's. Table below shows the hardware and software requirements for the testing:

Table 6.2: Hardware and Software

HARDWARE	
Various model of smartphone	To open the interactive book file
Various model of laptop	To open the interactive book file
SOFTWARE	
The file of interactive book in .epub formatted	To run the test

### 6.2.3 Test Schedule

Dates and responsibilities for test processes and tasks. During this section, the timetable clarifies the tests and their reviews, comments, and approval. User Acceptance Testing and Functional Testing are two of the types of tests performed during this stage.

Table 6.3: Test Schedule

Test	Description	Dates
User Acceptance Testing	- Satisfaction of users with the application	10 <sup>th</sup> – 20 <sup>th</sup> August 2021
Functional Testing	- Success rate of user needs	23 <sup>rd</sup> - 27 <sup>th</sup> August 2021

### 6.3 Test Strategy

A research plan is a set of guidelines that defines the nature of the research and how the testing process will be carried out. Included in this review are factors such as test objectives and testing techniques, as well as project time and energy requirements. The research environment is also considered in this evaluation.

This will ensure that the implementation testing will be effective and efficient. Alpha testing and beta testing are two types of tests that occur at distinct phases of the research process in this technique.

### **6.3.1 Alpha Testing**

Before the final product is launched, it is subjected to alpha testing to identify any potential problems. As a result of this test, you may be sure that the product performs as intended. It's at this point that the developer can make changes and improvements. This test is administered by a multimedia professional who is familiar with and knows the technology well enough.

#### **i. Functionality Testing**

Tests on the functioning will be conducted by a multimedia expert and subject matter expert. They will test the usability-focused implementation, including the project interface, interactivity, layout, multimedia features, and agreement on content. Finding out which error or problem to fix first is the goal before moving on to the next level. Upon receiving the application, the specialist will review it and answer a questionnaire from the developer.

#### **ii. User Acceptance Testing**

During User Acceptance Testing, a project's target user will be asked to evaluate the application's usability and ability to grasp it. The .epub file of the interactive book should be provided to the respondents, who will need to open it with Kotobee Reader programme or application. To complete the testing, they'll need to fill out a questionnaire about the project's efficiency and quality.

### **6.3.2 Beta Testing**

True target users undertake beta testing in a live environment where it will be introduced when fully operational. A beta test is undertaken to gather feedback from actual customers to lessen the risk of product loss and to improve the product's general consistency. As a result, this is the final verification before delivering the actual item to the consumer.

Table 6.4: Testing Details

	Alpha Testing	Beta Testing
Testing Type	Functionality Testing	User Acceptance testing
Data Collection	Online Meeting (application presentation) and survey form (google form)	Observation and survey form (google form)
Number of Testers	4	30

## 6.4 Implementation

### 6.4.1 Test Description

A test description is a set of guidelines for test preparation, as well as test processes and procedures, that must be followed to execute qualification testing on an application or to ensure that the system under test satisfies all requirements and performs flawlessly. This section contains details on how testing is carried out, the evidence utilised during training, and the study's findings.

#### i. Alpha Testing

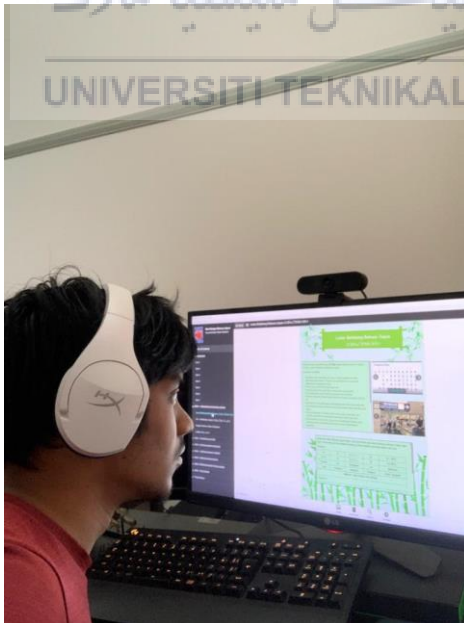


Figure 6.1: Alpha Testing

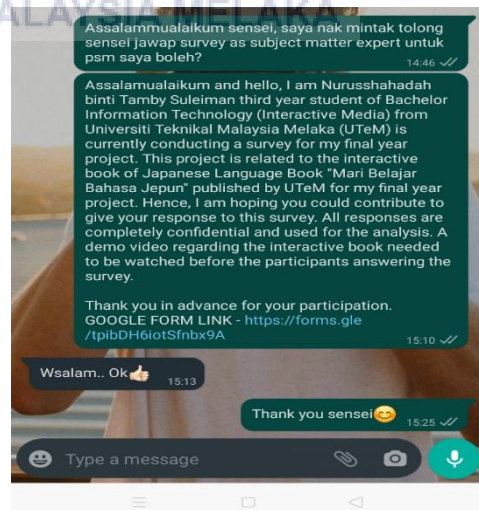


Figure 6.2: Alpha Testing

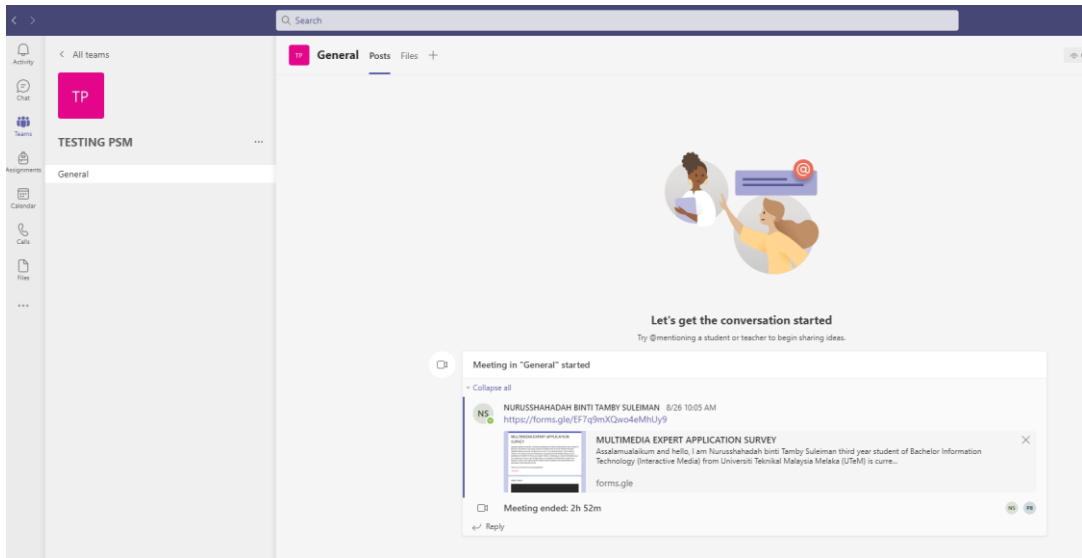


Figure 6.3: Alpha Testing

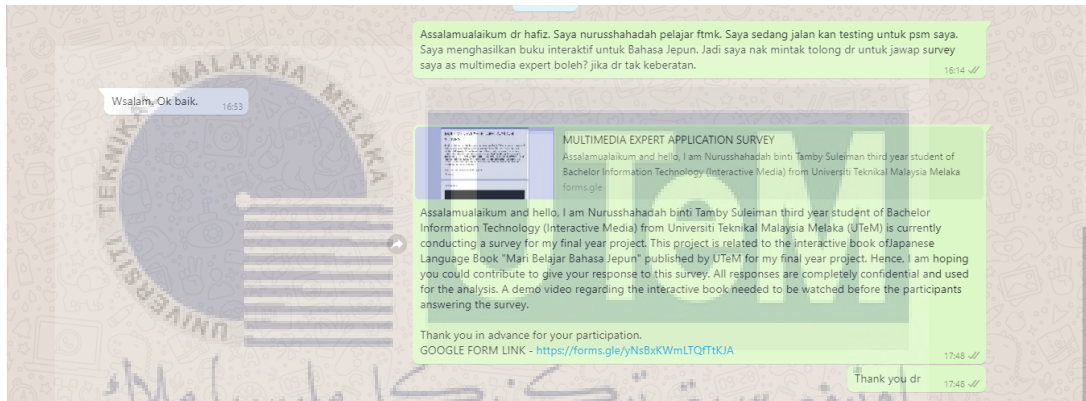


Figure 6.4: Alpha Testing



Figure 6.5: Alpha Testing



ii. Beta Testing

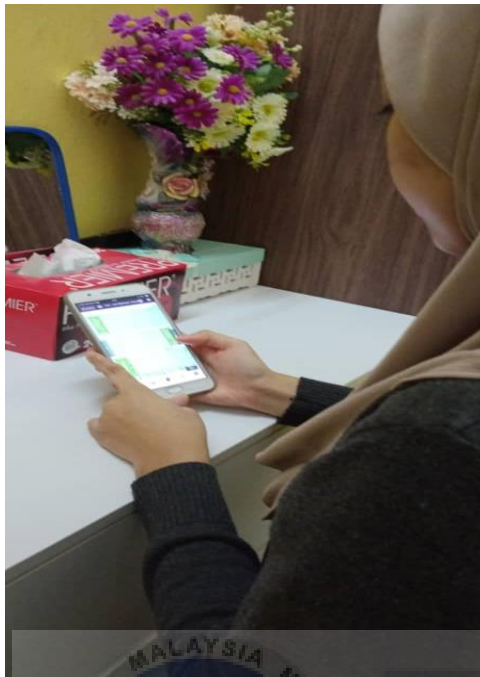


Figure 6.6: Beta Testing

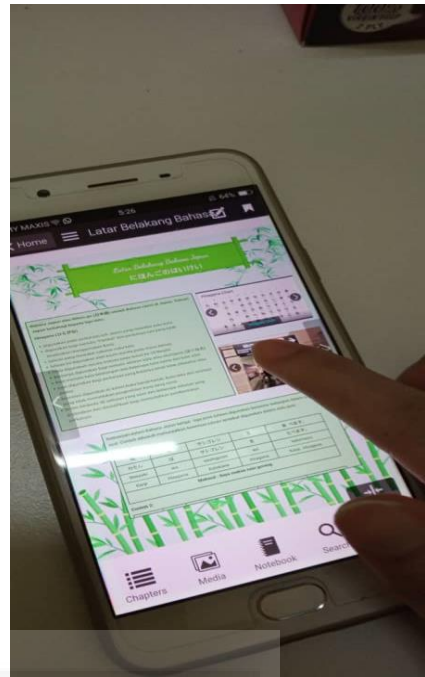


Figure 6.7: Beta Testing

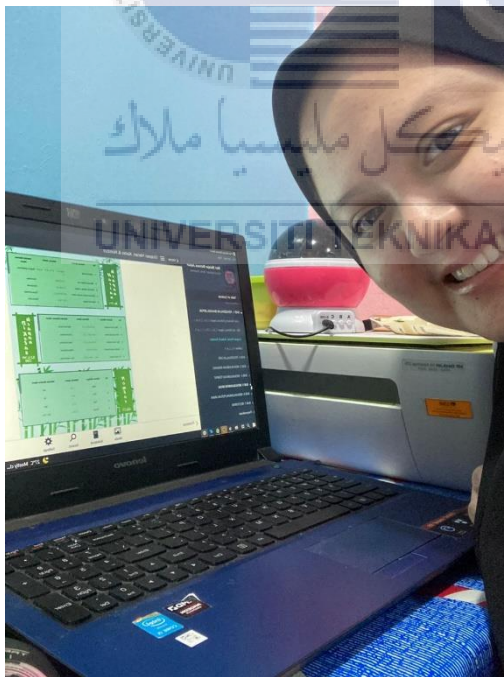


Figure 6.9: Beta Testing

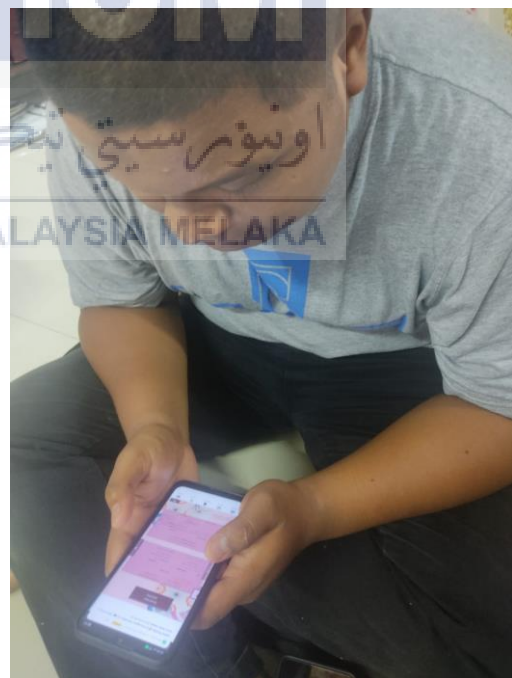


Figure 6.8: Beta Testing



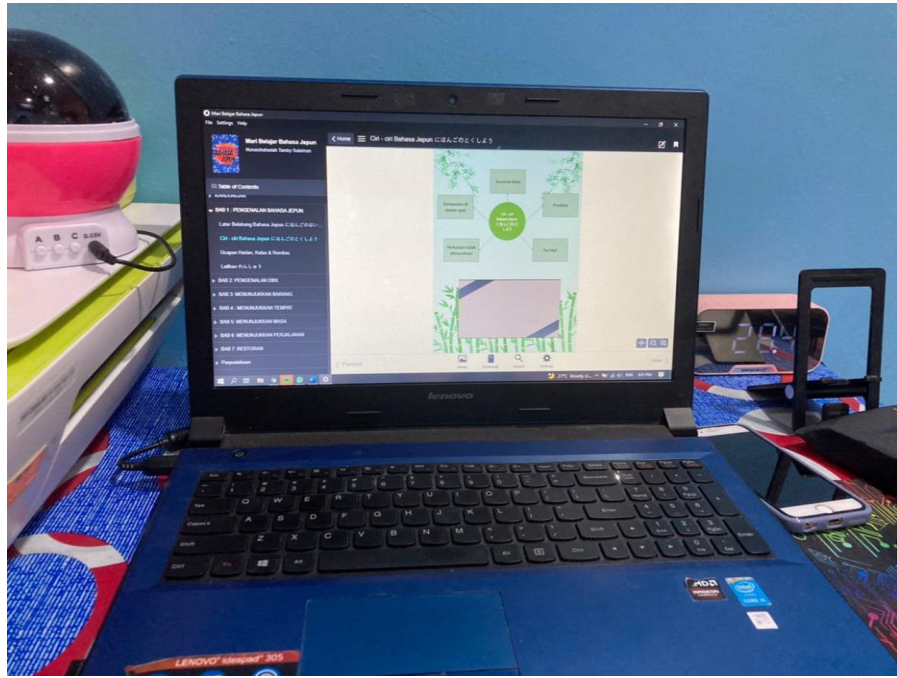


Figure 6.10: Beta Testing



Figure 6.11: Beta Testing



Figure 6.12: Beta Testing



Figure 6.13: Beta Testing



Figure 6.14: Beta Testing



Figure 6.15: Beta Testing



Figure 6.18: Beta Testing



Figure 6.17: Beta Testing

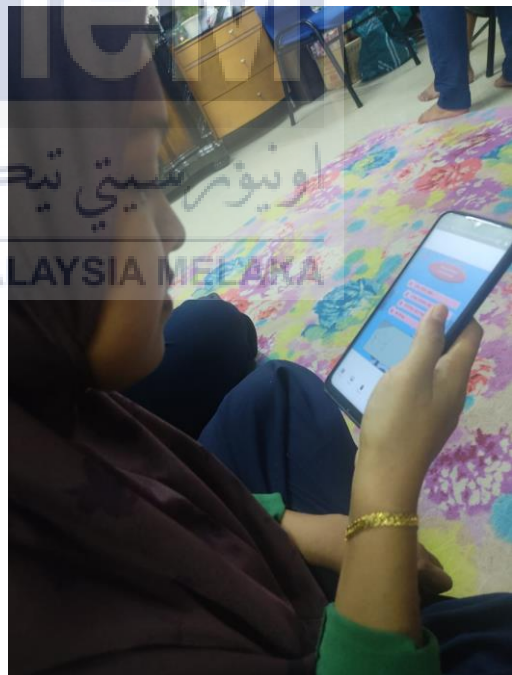


Figure 6.16: Beta Testing



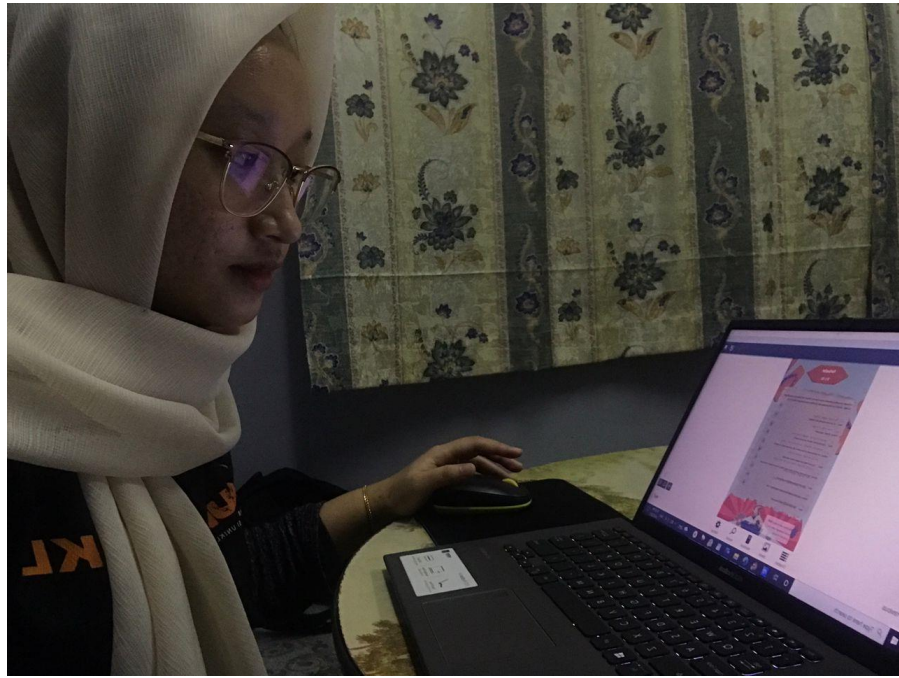


Figure 6.19: Beta Testing



Figure 6.21: Beta Testing



Figure 6.20: Beta Testing

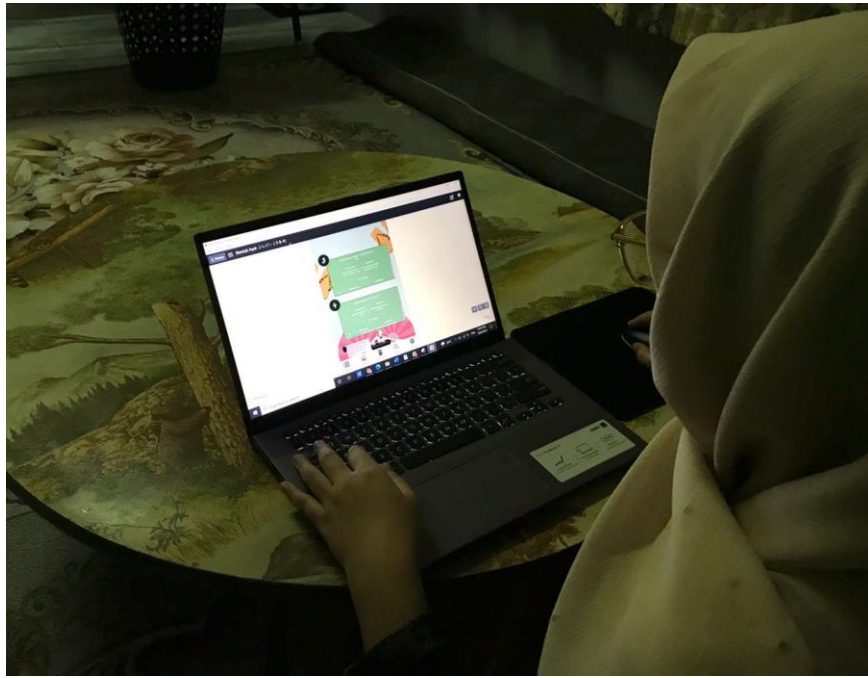


Figure 6.22: Beta Testing

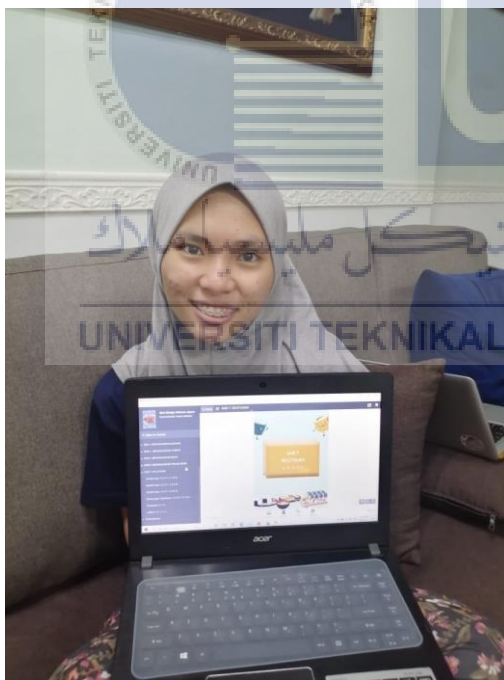


Figure 6.24: Beta Testing



Figure 6.23: Beta Testing



Figure 6.28: Beta Testing

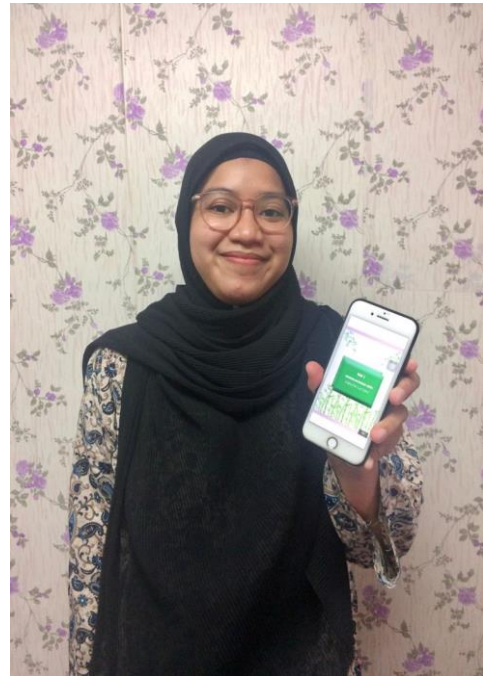


Figure 6.25: Beta Testing



Figure 6.26: Beta Testing



Figure 6.27: Beta Testing



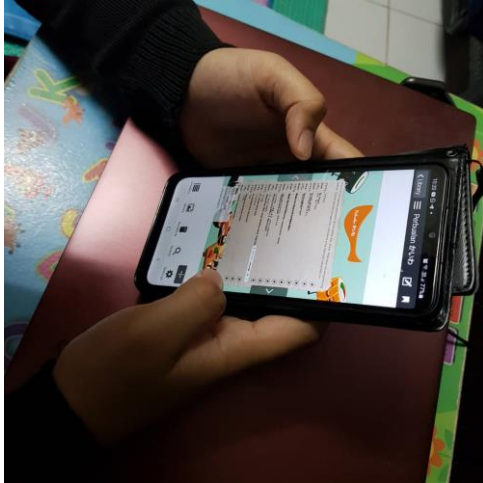


Figure 6.33: Beta Testing

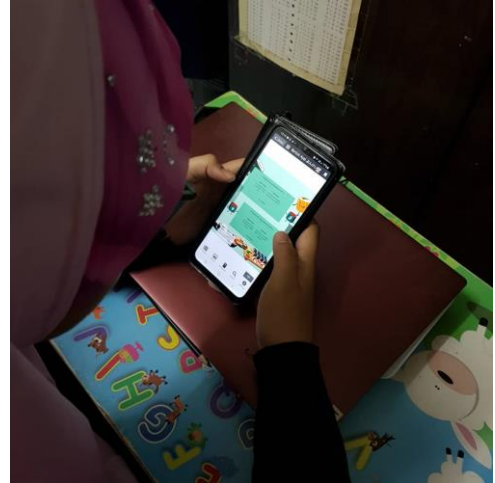


Figure 6.32: Beta Testing

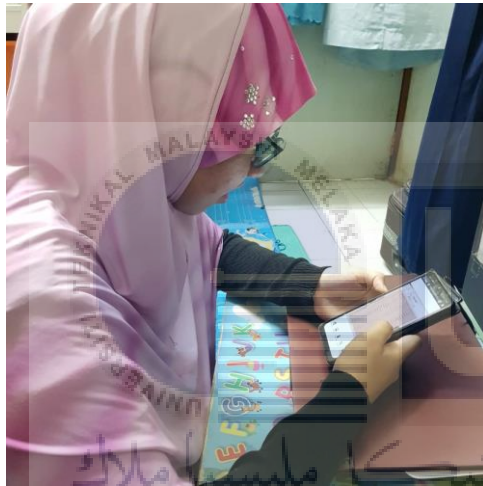


Figure 6.29: Beta Testing

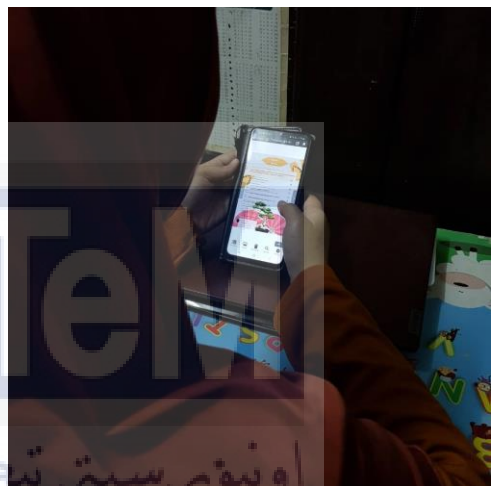


Figure 6.31: Beta Testing

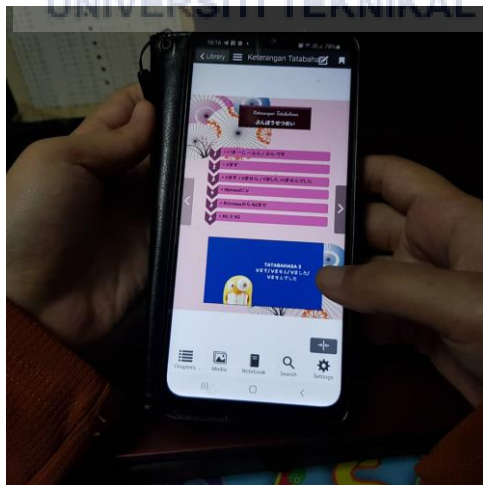


Figure 6.34: Beta Testing

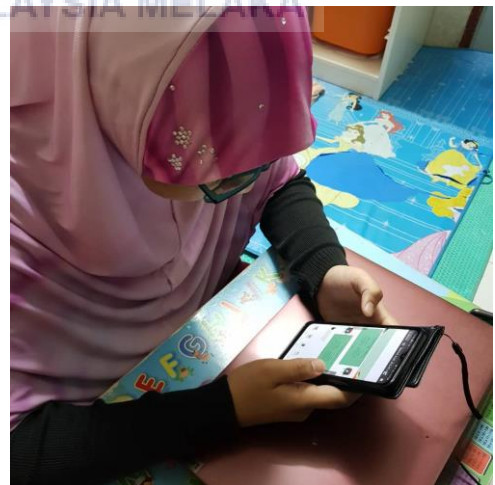


Figure 6.30: Beta Testing

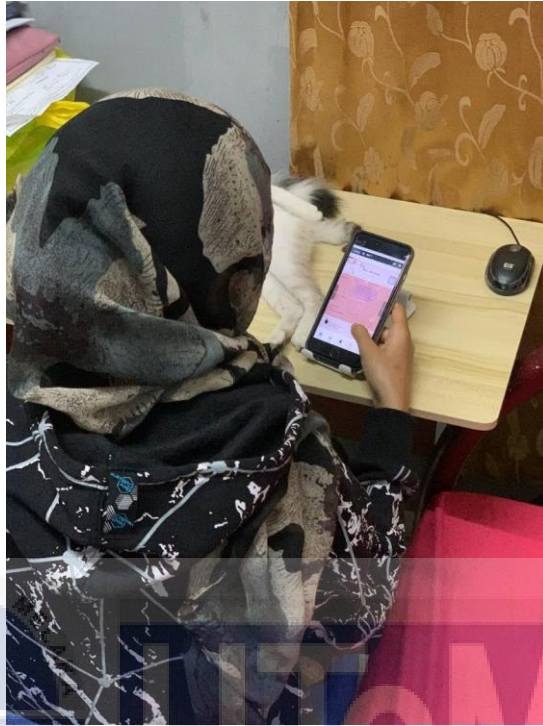


Figure 6.35: Beta Testing



Figure 6.36: Beta Testing



Figure 6.37: Beta Testing





Figure 6.39: Beta Testing



Figure 6.38: Beta Testing



Figure 6.40: Beta Testing

#### 6.4.2 Test Data

After the survey form's deadline has passed, the results and responses will be analysed and recorded. The produced results and responses are documented and analysed for the final evaluation process. To establish whether the project accomplishes its aims and solves the problems described in Chapter 1, alpha and beta testing are done. A table is created to show clearly how respondents responded to the survey's questions. Answers to questions are graded on a satisfaction scale. The results of the alpha testing are shown in the following table:

**i. Multimedia Expert**

Total there are 2 expert, one male and one female.

Name  
2 responses

Prof. Madya Ts. Dr. Hj. Norasiken Bakar

PM Dr. Mohd Hafiz bin Zakaria

Figure 6.41: Result of Multimedia Expert Name in Alpha Testing

Both expert who did the alpha testing were from Faculty Information and Communication Technology (FTMK)

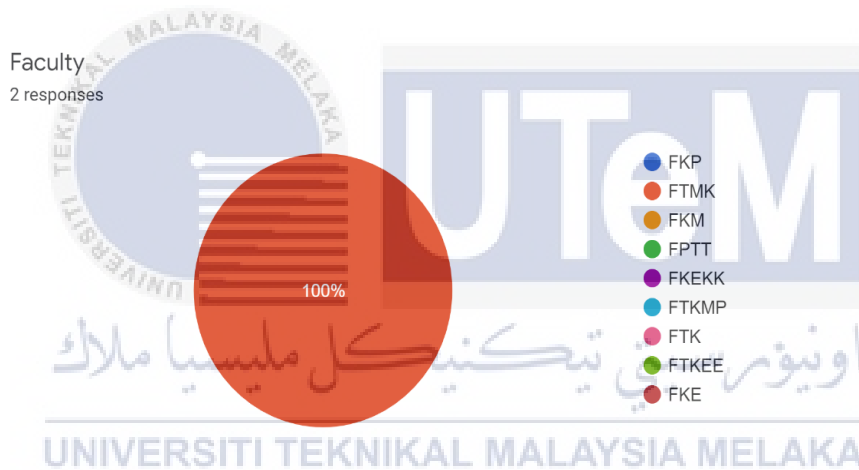


Figure 6.42: Result of Multimedia Expert Faculty in Alpha Testing

Both experts who did the alpha testing were from Interactive Multimedia department.

Department (\*example : BITM)  
2 responses

Interactive Multimedia

MI

Figure 6.43: Result of Multimedia Expert Department in Alpha Testing

Table 6.5: Result of Multimedia Expert in Alpha Testing

No.	Question	Satisfaction level (1=Strongly disagree 5=Strongly agree)					Average
		1	2	3	4	5	
<b>Effectiveness</b>							
1	The content arrangement makes the delivery of the Japanese language more effective.				1	1	4.5
2	The multimedia element provided was able to gain user interest in learning the Japanese language.				2		4
3	The interactive book provides various multimedia elements in teaching the Japanese language.			1		1	4
4	The content provided in the interactive book is able to help users gain knowledge of the Japanese language.				1	1	4.5
<b>Accessibility</b>							
5	The exercises provided are able and suitable for testing the user's level of understanding of the Japanese language.				2		4
6	The design of the interactive book is interesting and creative.				1	1	4.5
7	The video animation used is interesting and attractive.			1	1		3.5

8	The audio used in several parts of the interactive book is easy to understand and clear.				1	1	4.5
---	--	--	--	--	---	---	-----

**ii. Subject Matter Expert**

Total 2 expert are male.

Name  
2 responses

Mohd Nizam bin Yusof

Azrul Rabbani Fitri bin Naw

Figure 6.44: Result of Subject Matter Expert Name in Alpha Testing

The experts are having a different in their working field. One expert is lecturer who teach Japanese Language in UTeM the other one expert is Senior Researcher.

Position  
2 responses

Japanese Language Lecturer in UTeM

Senior Researcher

Figure 6.45: Result of Subject Matter Expert Position in Alpha Testing

Both experts are expert in Japanese Language.

Language expert (\*example: Japanese Language)  
2 responses

Japanese Language

Japanese Language

Figure 6.46: Result of Subject Matter Expert Language Expert in Alpha Testing

Table 6.6: Result of Subject Matter Expert in Alpha Testing

No.	Question	Yes	No
<b>Effectiveness</b>			
1	The content within interactive book teaches Japanese language	2	
2	Is the content arranged correctly?	2	
3	Are the multimedia elements in interactive book suitable in delivering the material of Japanese language?	2	
<b>Accessibility</b>			
4	Does the interactive book make the lesson material easier to understand and interesting?	2	
5	Can the interactive book attract students to learn Japanese language?	2	

About 30 people have taken part in the beta test and answered the questionnaire. All test results will be given and recorded after the testing is completed. There are several purposes for testing, including ensuring that the project meets the goals set forth in chapter one.

The test results will be compiled and evaluated by the application's creator. Therefore, the developer will be able to determine if the product is efficient and acceptable to the end user. As a result, the developer will still be able to establish whether the project met its objectives.

Beta testing has been completed by 30 people in total. For each question, the total number of answers was tallied up and the success rate was calculated. The results are summarised in the table below. For each question, there is a satisfaction level.

### iii. Public User

There are eight male and 22 female who are undergone the survey

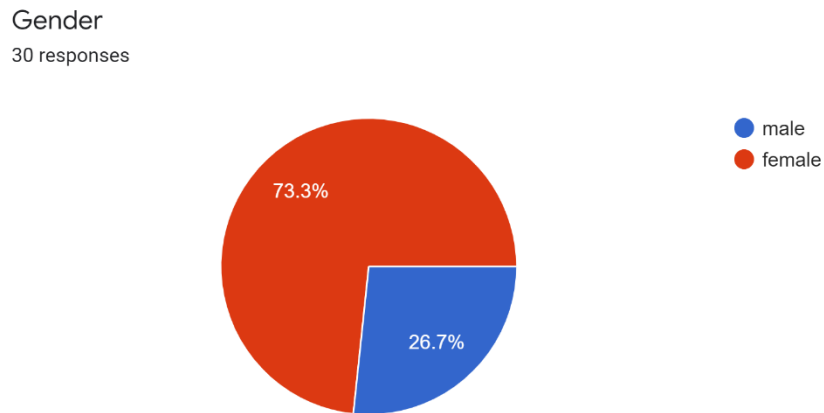


Figure 6.47: Result of Gender in Beta Testing

Based on the pie chart summary, there are 6 respondents age range 21 – 20, 22 respondents age range 23 – 24 and two respondent age range 25 – 27 are undergone the survey.

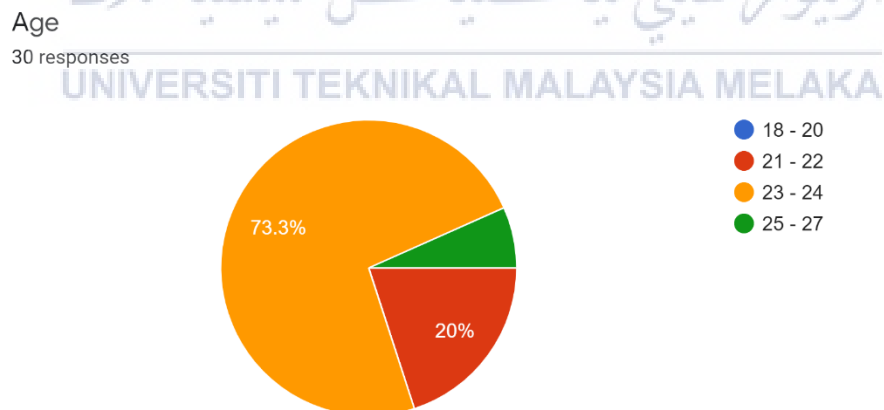


Figure 6.48: Result of Age in Beta Testing

There are one respondents from FPTT and FTK, two from FKEKK, FKE , and FKP, there form FKM, and 19 from FTMK

Faculty  
30 responses

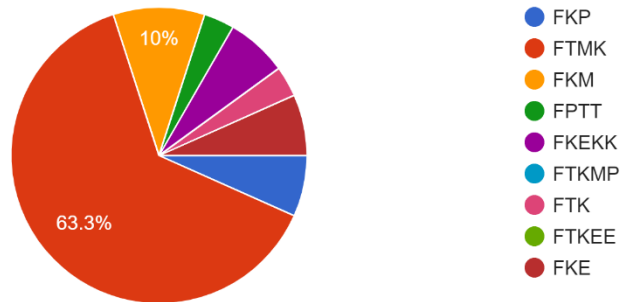


Figure 6.49: Result of Faculty in Beta Testing

Based on pie chart summary, there are six respondents form second year of study, eight respondents from Final year of study and 16 respondents from third year of study

Year of study  
30 responses

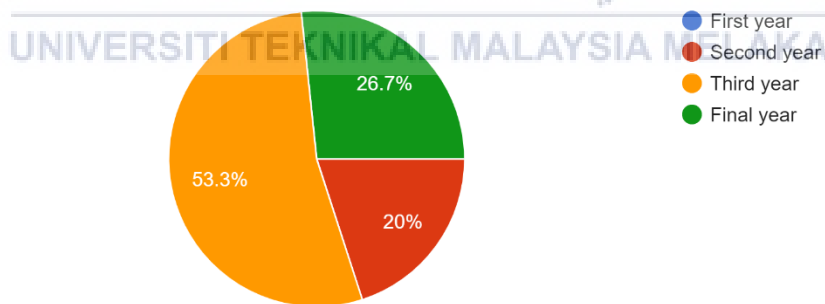


Figure 6.50: Result of Year of Study in Beta Testing



Table 6.7: Result of Beta Testing

No.	Question	Satisfaction level (1=Strongly disagree 5=Strongly agree)					Average
		1	2	3	4	5	
<b>Effectiveness</b>							
1	The content provided in the interactive book same as the original book "Mari Belajar Bahasa Jepun"			1	6	23	4.73
2	The addition note from pop up message are helpful to understand the topic?			2	10	18	4.63
3	The exercises provided are suitable to evaluate the level of understanding of the topic?			1	9	20	4.63
7	I think this method (interactive book) is more effective than the traditional method.				11	19	4.37
5	I was able to at least greet and introduce myself in the Japanese language.			3	13	14	4.63
6	I find it more interesting to learn and it is easier to understand the topic using the interactive book.				11	19	4.63
7	The understanding gained as a result of learning using an interactive book allows me to easily answer the exercises given.				15	15	4.5

Accessibility							
8	The video provided in the interactive book is interesting and attracted?				8	22	4.67
9	The audio provided in the interactive are clear and helpful?				10	20	4.53
10	I understand the content delivered in the interactive book				16	14	4.63

## 6.5 Test Result and Analysis

Graphs and charts will be displayed in this section to illustrate the analysis of the overall responses from the alpha and beta testing. This is the interpretation of the testing that was done to provide a clear view of the responses. The responses to each question are summarised in a graph or chart method based on the records.

### 6.5.1 Alpha Testing

The application's alpha testing was done by a total of 4 testers from two group which 2 testers from subject matter expert and another 2 testers from multimedia expert. All of them are from the different field. The application tested are including effectiveness and accessibility questions. After the testing was completed, each tester was given a survey form to fill out. The findings had been recorded based on the testers' responses.

#### i. Multimedia Expert

The graph below depicts the results of the alpha testing's demographics section for multimedia expert. Each question's average rating is clearly graphed. The testers believe that the application's effectiveness and accessibility are all good, based on the graph.

## Effectiveness

Graph of Effectiveness

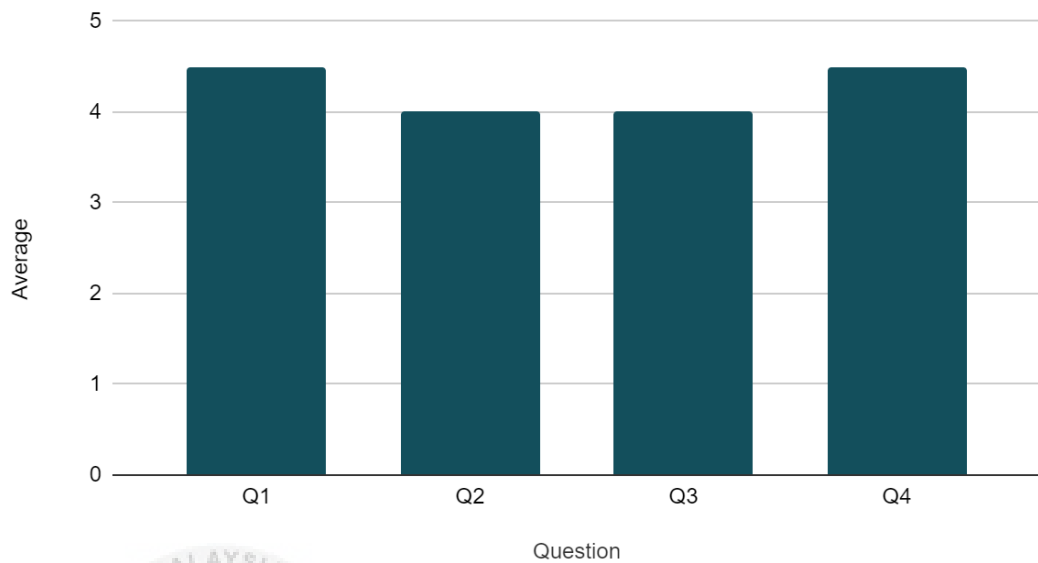


Figure 6.51: Result of Effectiveness in Alpha Testing

The figure down below is the question 1 of the survey form. There are 1 tester who agreed and 1 tester who strongly agreed that the content arrangement makes the delivery of the Japanese language more effective.

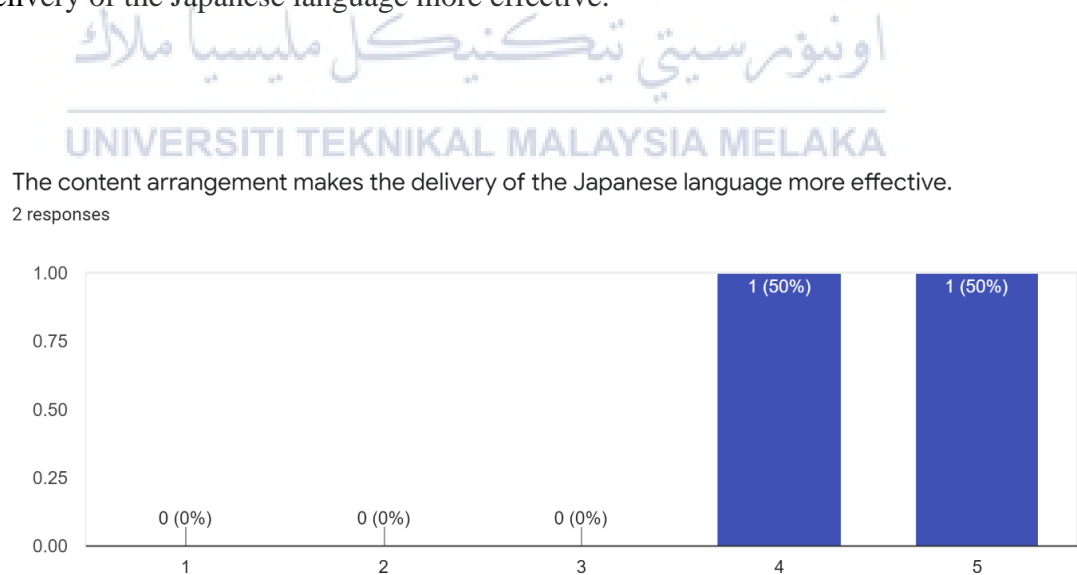


Figure 6.52: Result of Question 1 for Multimedia Expert form

The figure down below is the question 2 of the survey form. There 2 tester who agreed that the multimedia element provided was able to gain user interest in learning the Japanese language.

The multimedia element provided was able to gain user interest in learning the Japanese language.  
2 responses

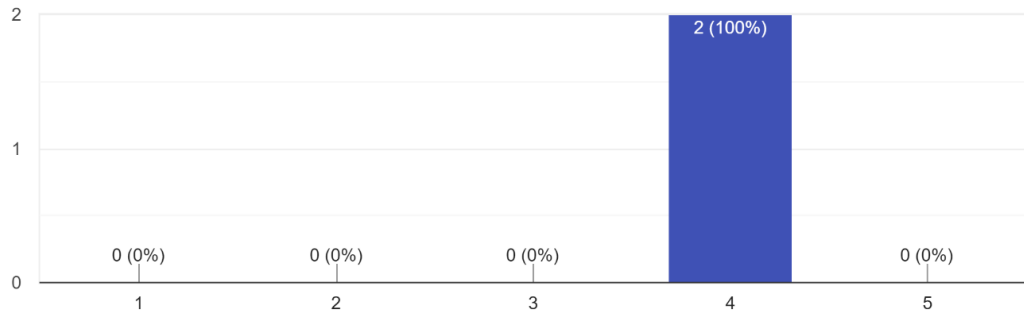


Figure 6.53: Result of Question 2 for Multimedia Expert form

The figure down below is the question 3 of the survey form. There are 1 tester who partially agreed and 1 tester who strongly agreed that the interactive book provides various multimedia elements in teaching the Japanese language.

The interactive book provides various multimedia elements in teaching the Japanese language.  
2 responses

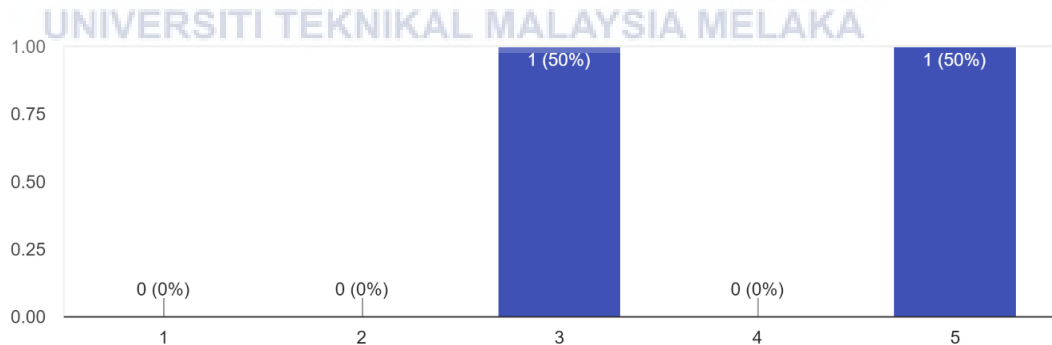


Figure 6.54: Result of Question 3 for Multimedia Expert form

The figure down below is the question 4 of the survey form. There re 1 tester who agreed and 1 tester who strongly agreed that the content provided in the interactive book is able to help users gain knowledge of the Japanese language.

The content provided in the interactive book is able to help users gain knowledge of the Japanese language.

2 responses

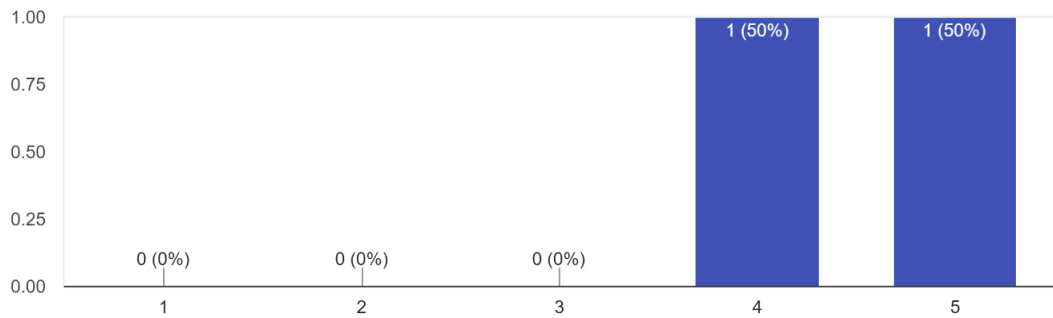


Figure 6.55: Result of Question 4 for Multimedia Expert form

**Accessibility**

Graph of Accessibility

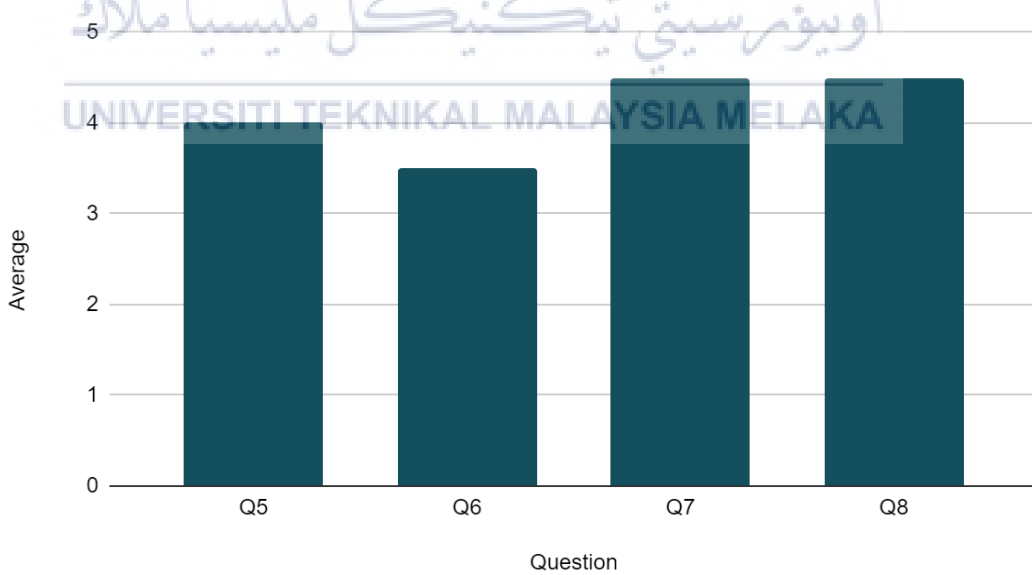


Figure 6.56: Result of Accessibility in Alpha Testing

The figure down below is the question 5 of the survey form. There are 2 tester who agreed that the exercises provided are able and suitable for testing the user's level of understanding of the Japanese language.

The exercises provided are able and suitable for testing the user's level of understanding of the Japanese language.

2 responses

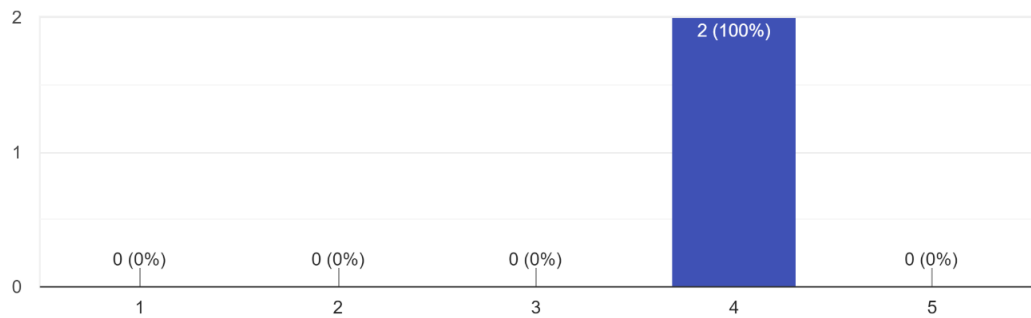


Figure 6.57: Result of Question 5 for Multimedia Expert form

The figure down below is the question 6 of the survey form. There are 1 tester who agreed and 1 tester who strongly agreed that the design of the interactive book is interesting and creative.

The design of the interactive book is interesting and creative.

2 responses

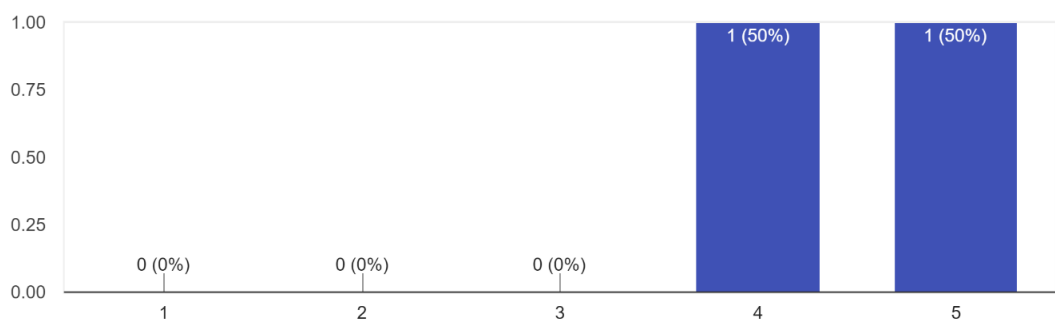


Figure 6.58: Result of Question 6 for Multimedia Expert form

The figure down below is the question 7 of the survey form. There are 1 tester who partially agreed and 1 tester who agreed that the video animation used is interesting and attractive.

The video animation used is interesting and attractive.  
2 responses

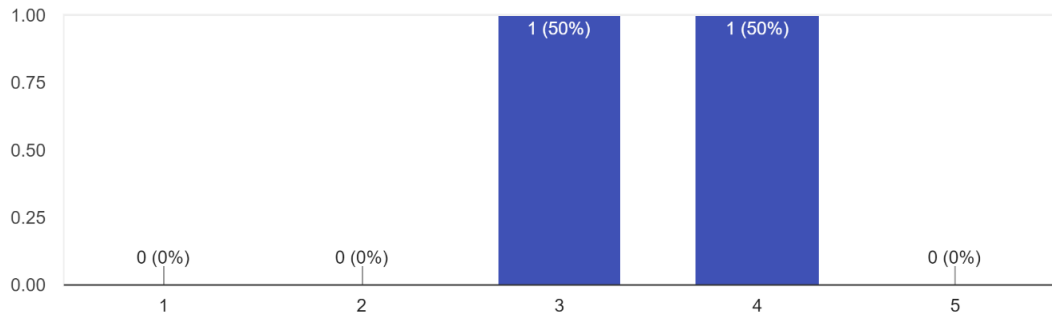


Figure 6.59: Result of Question 7 for Multimedia Expert form

The figure down below is the question 8 of the survey form. There are 1 tester who agreed and 1 tester who strongly agreed that the audio used in several parts of the interactive book is easy to understand and clear.

The audio used in several parts of the interactive book is easy to understand and clear.  
2 responses

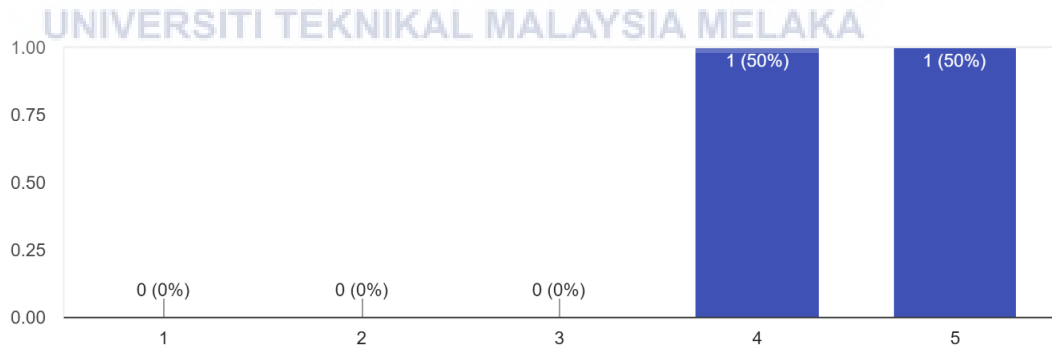


Figure 6.60: Result of Question 8 for Multimedia Expert form



The figure down below shows the respondents suggestion to improve the product.

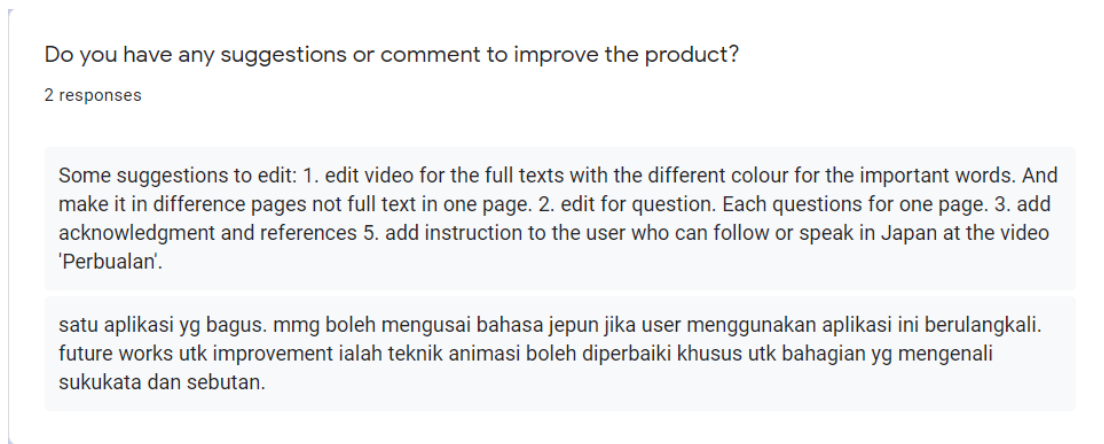


Figure 6.61: Result of Respondents Suggestion from Multimedia Expert form

**ii. Subject Matter Expert.**

The graph below depicts the results of the alpha testing's demographics section for subject matter expert. Each question's rating is clearly graphed. The testers believe that the application's effectiveness and accessibility are all good, based on the graph.

Effectiveness

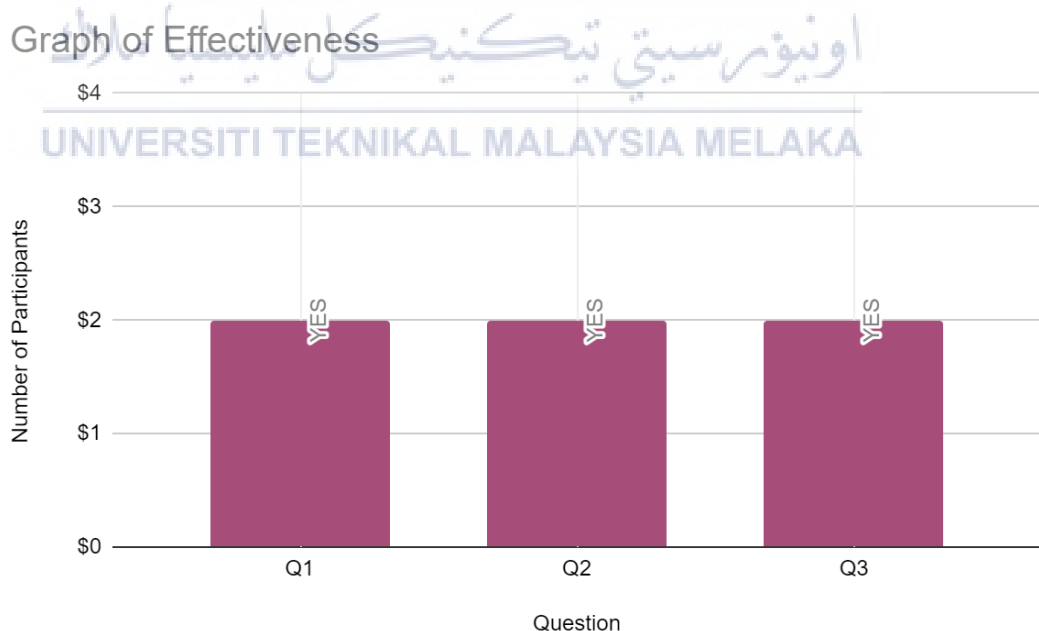


Figure 6.62: Result of Effectiveness Alpha Testing

The figure down below is the question 1 of the survey form. The total 2 tester are agreed that the content within interactive book teaches Japanese language.

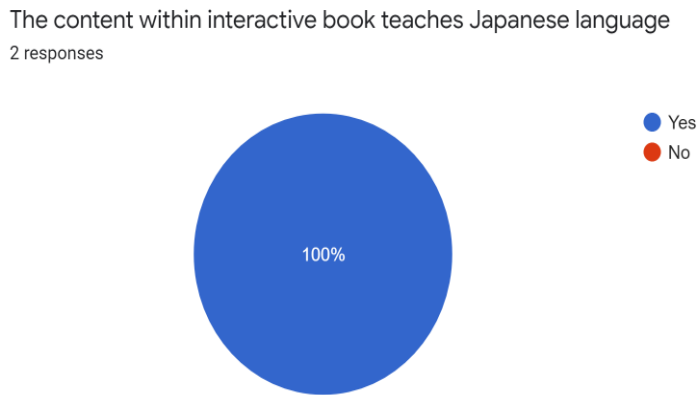


Figure 6.63: Result of Question 1 for Subject Matter Expert Form

The figure down below is the question 2 of the survey form. The total 2 tester are agreed that content arranged correctly.

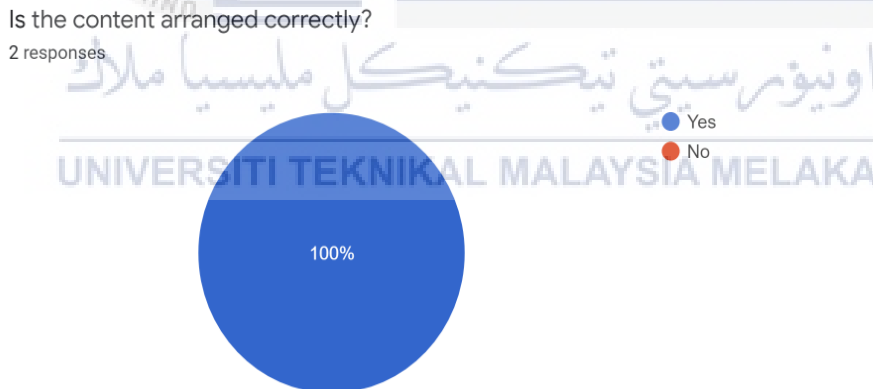


Figure 6.64: Result of Question 2 for Subject Matter Expert form

The figure down below is the question 3 of the survey form. The total 2 tester are agreed that multimedia elements in interactive book suitable in delivering the material of Japanese language.

Are the multimedia elements in interactive book suitable in delivering the material of Japanese language?  
2 responses

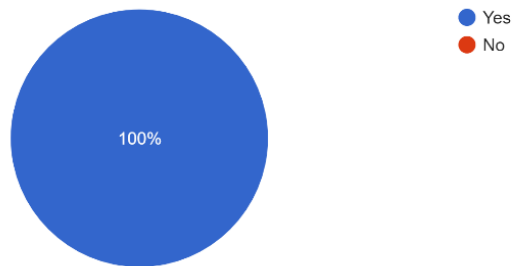


Figure 6.65: Result of Question 3 for Subject Matter Expert form

### Accessibility

Graph of Accessibility

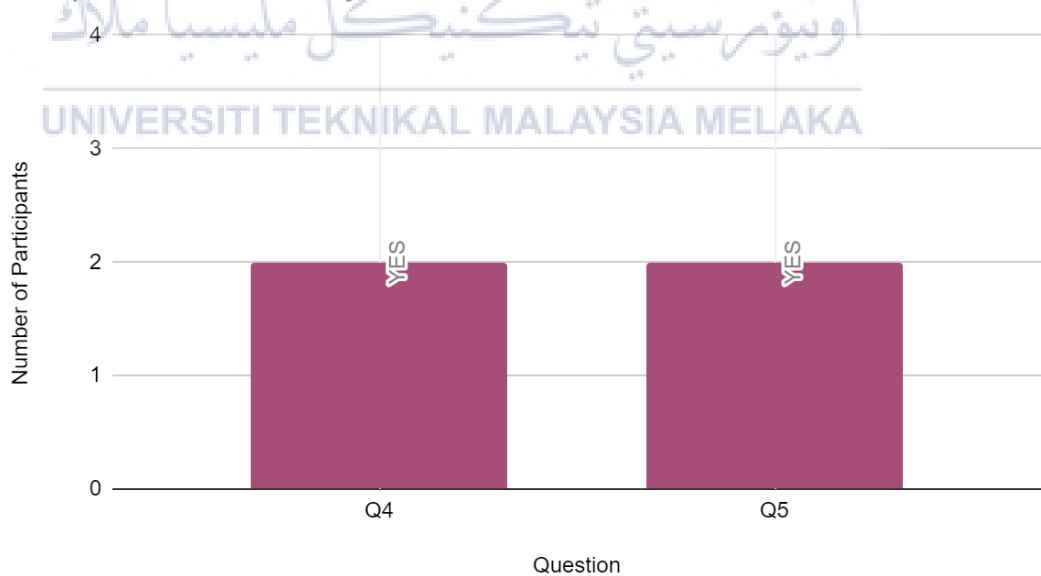


Figure 6.66: Result of Accessibility Alpha Testing

The figure down below is the question 4 of the survey form. The total 2 tester are agreed that interactive book make the lesson material easier to understand and interesting.

Does the interactive book make the lesson material easier to understand and interesting?  
2 responses

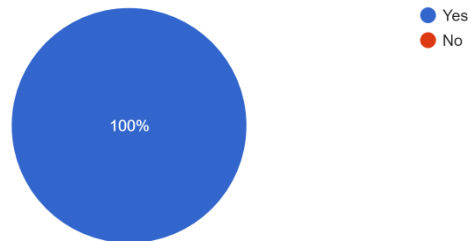


Figure 6.67: Result of Question 4 for Subject Matter Expert form

The figure down below is the question 5 of the survey form. The total 2 tester are agreed that interactive book attract students to learn Japanese language.



Figure 6.68: Result of Question 5 for Subject Matter Expert form

The figure down below shows the respondents suggestion to improve the product.

Do you have any suggestions or comment to improve the product?  
1 response

Boleh tunjuk contoh cara sebutan masa

Figure 6.69: Result of Respondents Suggestion from

## 6.5.2 Beta Testing

The application's beta testing was done by a total of 30 testers which is Universiti Teknikal Malaysia Melaka (UTeM) students. All of them are from the different faculty. The application tested are including effectiveness and accessibility questions. After the testing was completed, each tester was given a survey form to fill out. The findings had been recorded based on the testers' responses.

The graph below depicts the results of the alpha testing's demographics section. Each question's average rating is clearly graphed. The testers believe that the application's effectiveness and accessibility are all good, based on the graph.

### Effectiveness

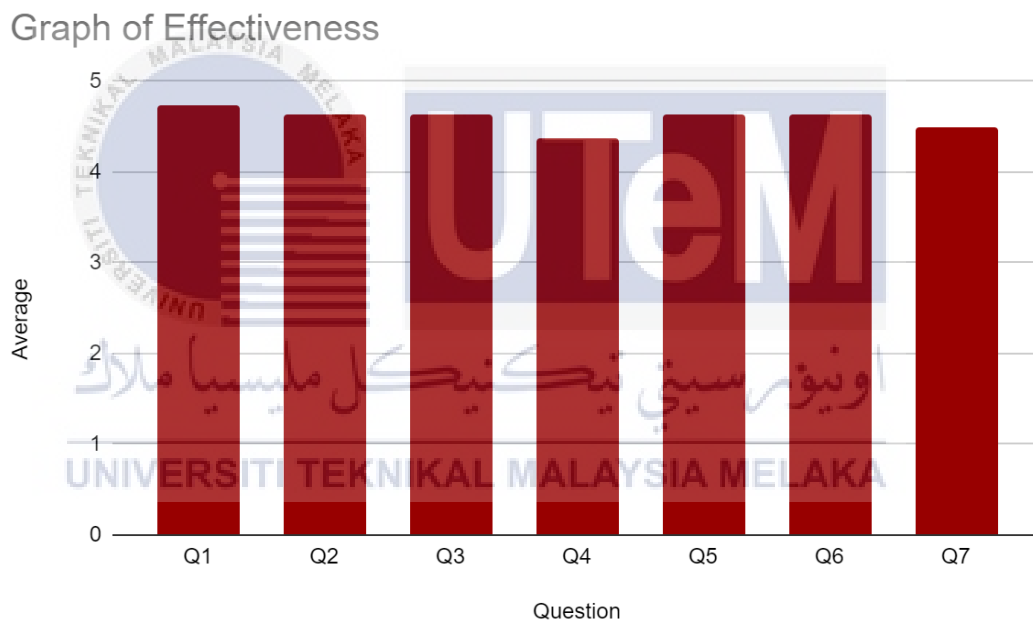


Figure 6.70: Result of Effectiveness Beta Testing

The figure down below is the question 1 of the survey form. There are 1 tester who partially agreed, 6 tester who agreed and 23 tester who strongly agreed that the content provided in the interactive book same as the original book "Mari Belajar Bahasa Jepun"

The content provided in the interactive book same as the original book "Mari Belajar Bahasa Jepun"  
30 responses

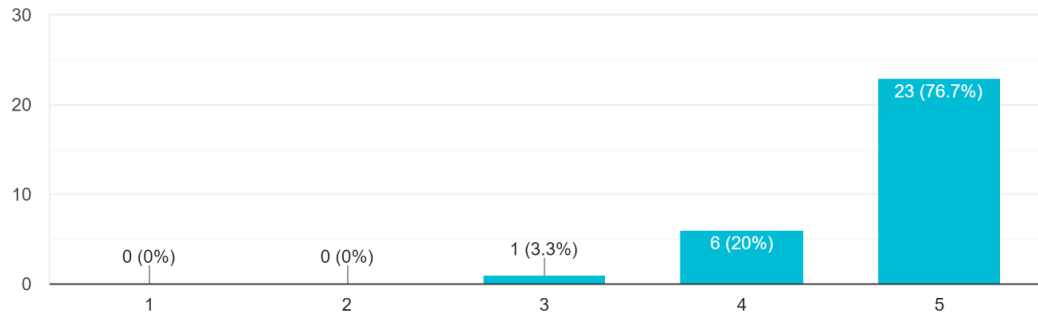


Figure 6.71: Result of Question 1 for User Survey form

The figure down below is the question 2 of the survey form. There 2 tester who partially agreed, 10 tester who agreed and 18 tester who strongly agreed that the addition note from pop up message are helpful to understand the topic.

The addition note from pop up message are helpful to understand the topic?  
30 responses

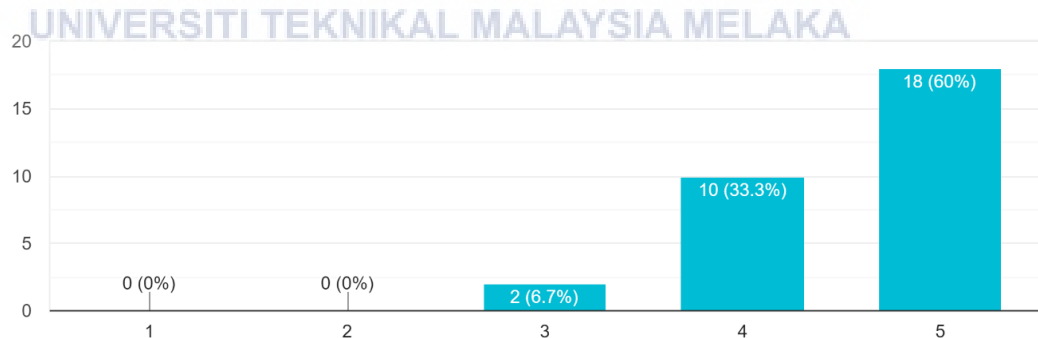


Figure 6.72: Result of Question 2 for User Survey form

The figure down below is the question 3 of the survey form. There are 1 tester who partially agreed, 9 tester who agreed and 20 tester who strongly agreed that the exercises provided are suitable to evaluate the level of understanding of the topic.

The exercises provided are suitable to evaluate the level of understanding of the topic?  
30 responses

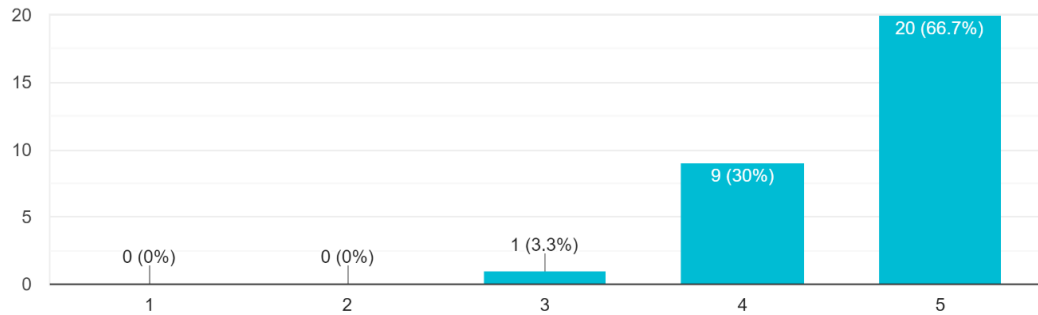


Figure 6.73: Result of Question 3 for User Survey form

The figure down below is the question 4 of the survey form. There are 11 testers who agreed and 19 testers who strongly agreed that they think this method (interactive book) is more effective than the traditional method.

I think this method (interactive book) is more effective than the traditional method.  
30 responses

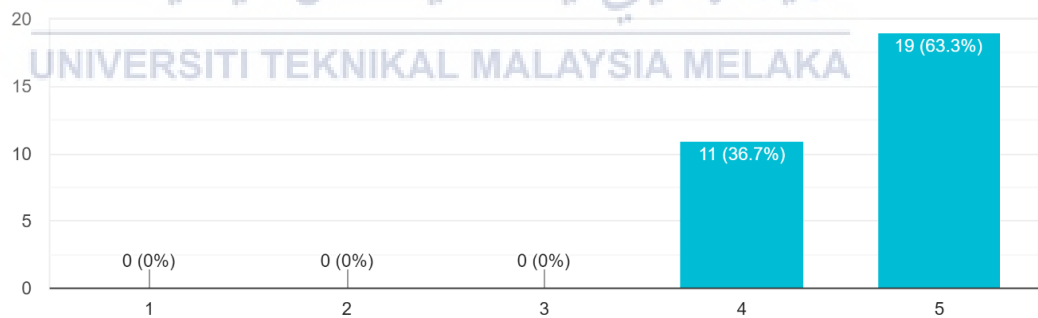


Figure 6.74: Result of Question 4 for User Survey form

The figure down below is the question 5 of the survey form. There are 3 testers who partially agreed, 13 testers who agreed and 14 testers who strongly agreed that they were able to at least greet and introduce myself in the Japanese language.

I was able to at least greet and introduce myself in the Japanese language.  
30 responses

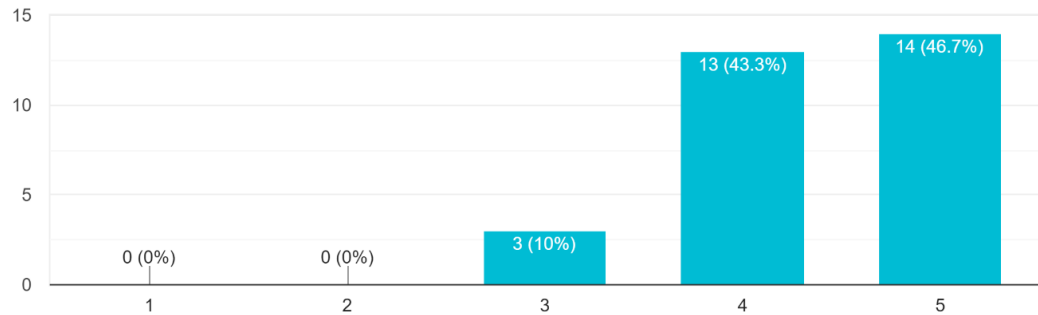


Figure 6.75: Result of Question 5 for User Survey form

The figure down below is the question 6 of the survey form. There are 11 testers who agreed and 19 testers who strongly agreed that they find it more interesting to learn and it is easier to understand the topic using the interactive book.

I find it more interesting to learn and it is easier to understand the topic using the interactive book.  
30 responses

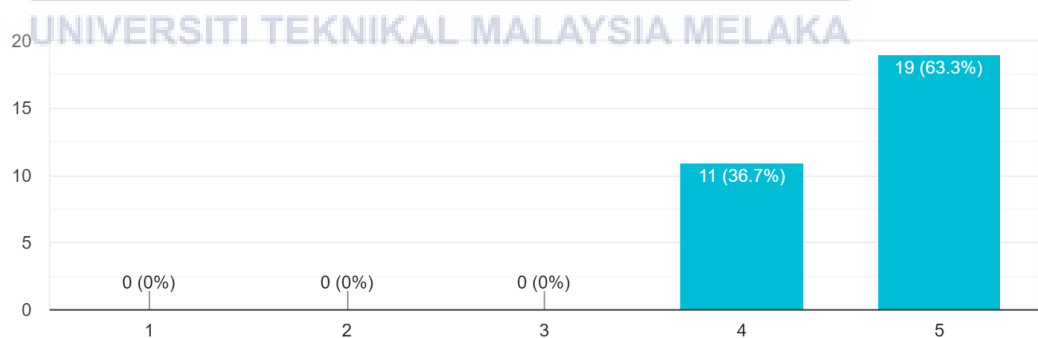


Figure 6.76: Result of Question 6 for User Survey form



The figure down below is the question 7 of the survey form. There are 15 testers who agreed and 15 testers who strongly agreed that the understanding gained as a result of learning using an interactive book allows me to easily answer the exercises given.

The understanding gained as a result of learning using an interactive book allows me to easily answer the exercises given.

30 responses

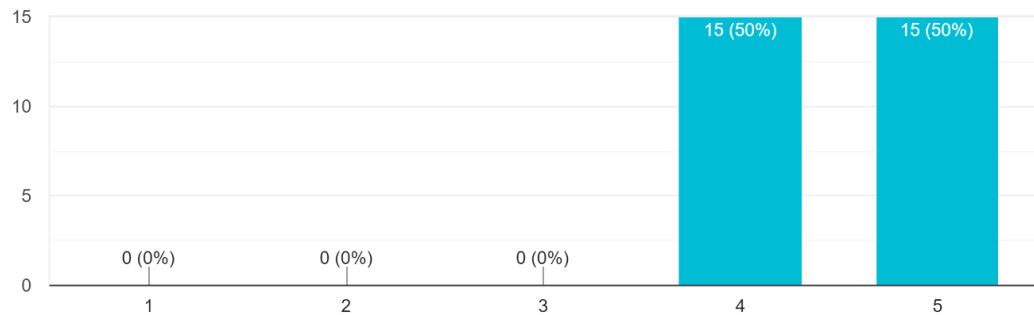


Figure 6.77: Result of Question 7 for User Survey form

**Accessibility**

Graph of Accessibility

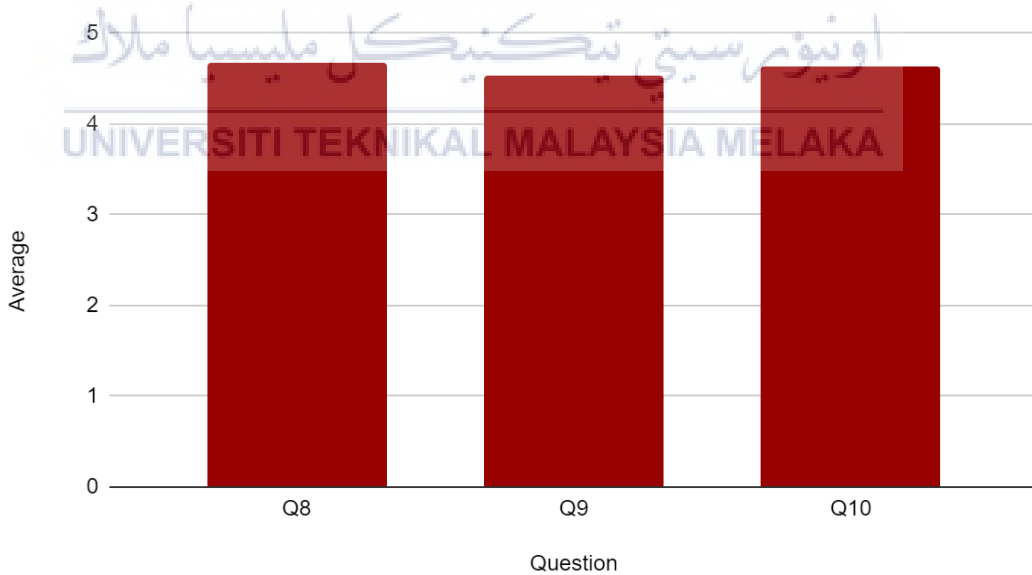


Figure 6.78: Result of Accessibility Beta Testing

The figure down below is the question 8 of the survey form. There are 8 tester who agreed and 22 tester who strongly agreed that the video provided in the interactive book is interesting and attracted.

The video provided in the interactive book is interesting and attracted?  
30 responses

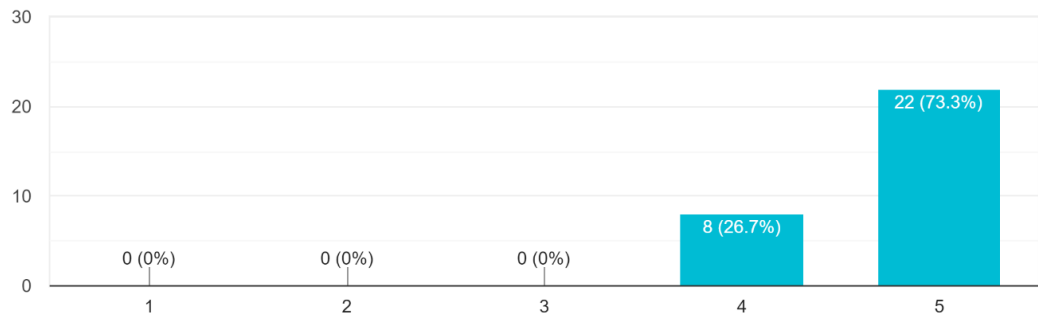


Figure 6.79: Result of Question 8 for User Survey form.

The figure down below is the question 9 of the survey form. There are 10 tester who agreed and 20 tester who strongly agreed that the audio provided in the interactive are clear and helpful.

The audio provided in the interactive are clear and helpful?  
30 responses

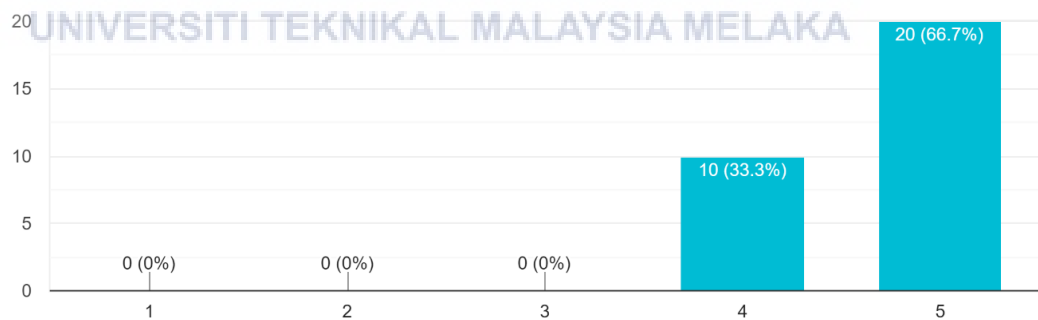


Figure 6.80: Result of Question 9 for User Survey form

The figure down below is the question 10 of the survey form. There are 16 testers who agreed and 14 tester who strongly agreed that they can understand the content delivered in the interactive book

I understand the content delivered in the interactive book  
30 responses

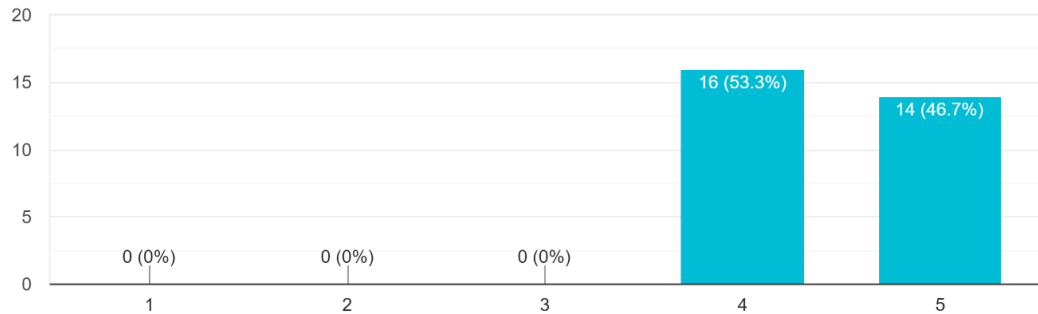


Figure 6.81: Result of Question 10 for User Survey form

## 6.6 Analysis Testing

As a result of the research test, it will be possible to determine whether the project's goals have been met by evaluating the information gathered from randomly selected participants. As a data collecting tool, questionnaire and evaluation are used to obtain reviews, opinions, and knowledge. Following is a graph analysis based on the feedback form supplied during the testing session, which shows the user's reaction.

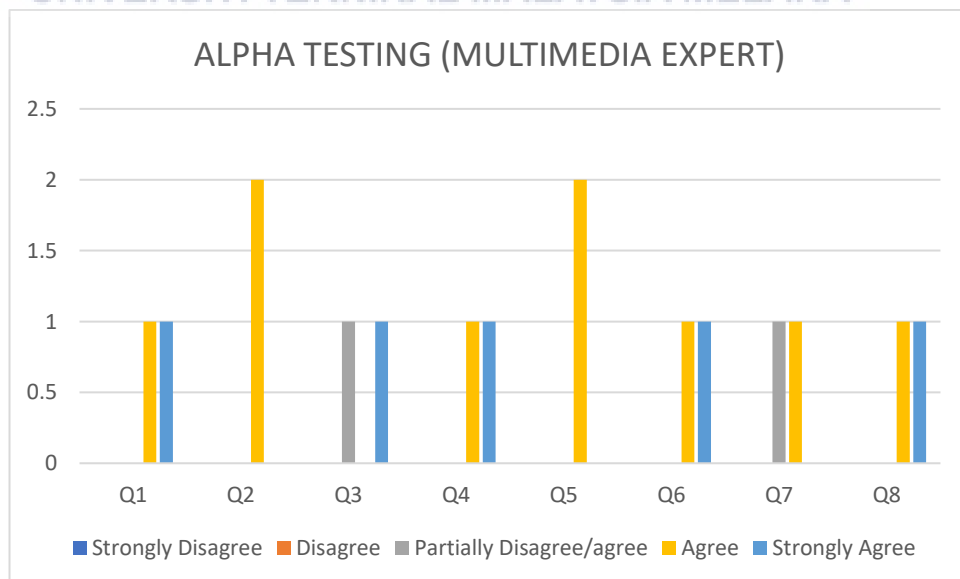


Figure 6.82: Analysis of Alpha Testing (Multimedia Expert)

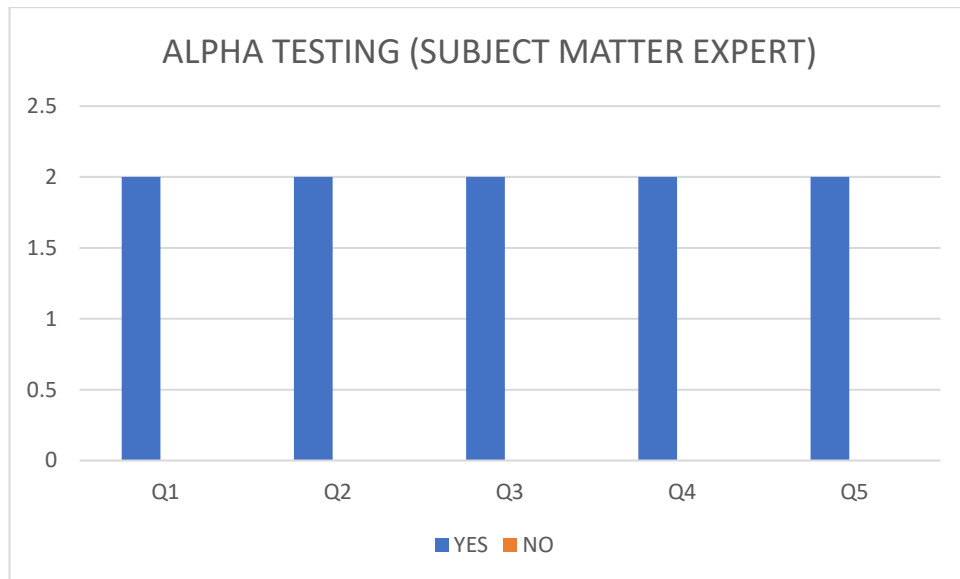


Figure 6.83: Analysis of Alpha Testing (Subject Matter Expert)

Based on the general summary of alpha testing from both graphs above, it is possible to conclude that a satisfactory result has been achieved. As a result, it demonstrates that the application achieved its goals. According to the multimedia expert and subject matter expert, the application has received a high degree of approval.

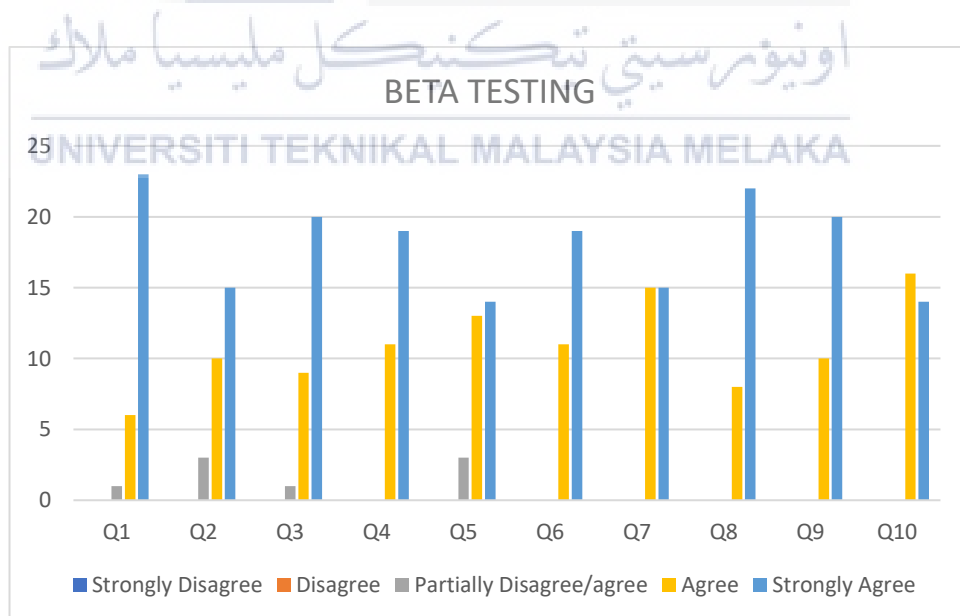


Figure 6.84: Analysis of Beta Testing

Based on the graphs above, it can be concluded that the application has a high degree of satisfaction among responders and has met its objectives. According to the results of the survey, the application can provide fresh knowledge to the user.

## 6.7 Conclusion

As a conclusion, it summarises what was discussed and what was learned by completing a questionnaire during the evaluation session. You need feedback from your target audience to confirm that the project fulfils the objectives outlined in the first chapter. Using interactive books as a powerful tool for interest-raising and teaching is a reasonable assumption to make. From the results and input gained from the assessment, a viable alternative will be created. The following chapter will focus on the project's vulnerability, power, and success.



## CHAPTER 7: PROJECT CONCLUSION

### 7.1 Introduction

The complete procedure is outlined in this chapter. This project's last chapter is the project's final chapter. This chapter will summarise all of the details discovered from the beginning of the issue statement until the project's final completion. This chapter will also describe the method's strengths and weaknesses, but this does not imply that the system will be terminated here. The gadget can be developed in the future to make it more effective.

### 7.2 Observation on Strength and Weakness

When a project is implemented, it must have several strengths while also having certain limits, requiring the project to be upgraded in the future.

As a result, as the developer and testers analyse, this project to use interactive books in Japanese language teaching and learning has its own set of strengths and limitations.

#### 7.2.1 Project Strength

The strengths of this project are listed down below:

##### i. Simple interaction

The application is designed with simple interaction to make sure user can use easily and peacefully. The element of media interaction in the interactive book are also easy to understand and use.

##### ii. Designs are attracted and interesting

The interactive book is designed with various and creative designed background, image arrangement and animated picture to make it more attracted and interesting to use.

**iii. Various interactive media element**

The interactive book also full of interactive media element. This to make sure that user was attracted to learning Japanese Language and avoid them too easily bored.

**iv. Exercises to evaluate user understanding**

There are exercises provided on every lasted of the chapter. This is purposely used to evaluate user understanding on every topic that they learn. The exercises also can be answer multiple times.

**7.2.2 Project Weakness**

The weaknesses of this project are listed down below:

**i. Less of sound interaction**

Some parts of the interactive book are not provided with sound interaction such as audio. User might get feel bored and not interested with the interactive book learning method.

**ii. Less number of exercises**

The exercises that provided on every chapter have only have few numbers of it. This might not be enough for user to evaluate their understanding on every chapter

**iii. Video not long enough**

The video of explaining the point of all topics are not long enough which is user are not able to finish to read the explanation on the page because the next page turning so quickly.

**7.3 Proposition of improvement**

There are a few things that can be done to improve the system's shortcomings. These methods may be able to resolve the issues that arose in this application.

**i. Put more sound interaction**

Added more sound interaction and syllable pronunciation audio to make it more interesting and help user to able pronounce the syllable correctly.

**ii. Adding more exercises question**

Adding more numbers of exercises in every chapter to make sure user can test their own understanding on every chapter. It's also will help them be more confident with their understanding in Japanese Language.

**iii. Make video long enough**

Make the video long enough on every page to gives user enough time to read on every point and explanation without repeating the video over and over again.

#### **7.4 Project Contribution**

The interactive book will be the educational technique of the future. As a result, this project focuses on learning Japanese Language using interactive books and educational methods. It may be implemented at Universiti Teknikal Malaysia Melaka (UTeM) for students who study Japanese as a third language. This initiative encourages users to acquire and improve their Japanese language skills.

#### **7.5 Conclusion**

This chapter concludes by addressing and expanding on the proposal's summary. From chapter 1 through 7, the project satisfied all the criteria, achieved the goals, and expected performance outlined in the plan, and effectively created the technique in chapter 1. Finally, there are a few flaws that will need to be addressed in the future.



## REFERENCES

*Why you should be using interactive books in speech therapy?* (2019, February 20). HearingSol.

< <https://www.hearingsol.com/faq/using-interactive-books-speech-therapy> >

Pat the bunny. (2021, May 17). Wikipedia, the free encyclopedia. Retrieved May 19, 2021, from

< [https://en.wikipedia.org/wiki/Pat\\_the\\_Bunny](https://en.wikipedia.org/wiki/Pat_the_Bunny) >

Dube, M. (2019, January 28). Interactive Ebooks: What are they and how to make them. PublishDrive - Write more, worry less.

< <https://publishdrive.com/5-things-everybody-gets-wrong-interactive-books.html> >

Daniel Seifert (Karma Implementor). (n.d.). Live statistics. Welcome to RevolverMaps | RevolverMaps - Free 3D Visitor Maps.

< <https://www.revolvermaps.com/livestats/locations/03khgymq2c6/> >

Interactive\_books. (n.d.). index.

< [https://www.letshavefunwithenglish.com/interactive\\_books.html](https://www.letshavefunwithenglish.com/interactive_books.html) >

Why Learning Multiple Languages Is Important, inlingua Washington DC, 21 November, accessed 15 April 2020,

< <https://idc.edu/learning-multiple-languages-important/>>.

9 Big Advantages of Learning a Foreign Language, Rachelwagers, accessed on 15 April 2020,

< <https://www.fluentu.com/blog/advantages-of-learning-a-foreign-language> >

Learn A Language and Interact with the Culture that Speaks It, Rozana Sani, 1 May 2019, accessed on 21 April 2020,

< <https://www.nst.com.my/education/2019/05/484532/learn-language-and-interact-culture-speaks-it> >

ADDIE: 5 steps to effective training. (2019, November 13). LearnUpon.

< <https://www.learnupon.com/blog/addie-5-steps/> >

Utilization of interactive book in Japanese language teaching and learning. (n.d.).

Google Docs.

<[https://docs.google.com/forms/d/e/1FAIpQLSeXlwLyyDksAaRPLXsGGeq2EZfs0s71q3vN\\_23Z5yaYMjCg/viewform](https://docs.google.com/forms/d/e/1FAIpQLSeXlwLyyDksAaRPLXsGGeq2EZfs0s71q3vN_23Z5yaYMjCg/viewform) >

7 types of interactive Flipbooks. (2020, November 18). Interactive Content Blog.

< <https://blog.dot.vu/7-types-of-interactive-flipbooks/> >

A safe place for Caleb. (n.d.). Google Books.

<<https://books.google.com.my/books?hl=en&lr=&id=HC3hdCxqARoC&oi=fnd&pg=PP1&dq=interactive+book+for+kids+&ots> >

Educational stages and interactive learning: From kindergarten to workplace training. (n.d.). Google Books.

<<https://books.google.com.my/books?id=nKCeBQAAQBAJ&printsec=frontcover&dq=interactive+book+learning&hl=en&sa=X> >

Human and faith visual/Interactive book. (n.d.). Google Books.

< <https://books.google.com.my/books?id=-smCDwAAQBAJ&printsec=frontcover&dq=interactive+book+human+faith&ei=gCwYOP0EMKHjAOvw7tQ&cd=1#v=onepage&q=interactive%20book%20human%20faith&f=false> >

Interactive books. (n.d.). Google Books.

<[https://books.google.com.my/books?id=7HA3DwAAQBAJ&source=gbs\\_navlinks\\_s](https://books.google.com.my/books?id=7HA3DwAAQBAJ&source=gbs_navlinks_s) >

Piggy. (n.d.). Google Books.

<[https://books.google.com.my/books?id=qOpSDQAAQBAJ&printsec=frontcover&source=gbs\\_ge\\_summary\\_r&cad=0#v=onepage&q&f=false](https://books.google.com.my/books?id=qOpSDQAAQBAJ&printsec=frontcover&source=gbs_ge_summary_r&cad=0#v=onepage&q&f=false) >

Interactive learning for innovation. (n.d.). Google Books.

<[https://books.google.com.my/books?id=lpwZLsZobmAC&printsec=frontcover&source=gbs\\_ge\\_summary\\_r&cad=0#v=onepage&q&f=false](https://books.google.com.my/books?id=lpwZLsZobmAC&printsec=frontcover&source=gbs_ge_summary_r&cad=0#v=onepage&q&f=false) >

Interactive multimedia learning. (n.d.). Google Books.

<<https://books.google.com.my/books?id=dtepCAAAQBAJ&printsec=frontcover#v=onepage&q&f=false>>

Academic Handbook Session 2019/2020 (FTMK)

<<https://ftmk.utem.edu.my/web/wp-content/uploads/2019/09/e-versionFTMK-040919.pdf>>



## APPENDIX A

### USER APPLICATION SURVEY (Collected Application Requirement)

#### USER APPLICATION SURVEY

Assalamualaikum and hello everyone. I am third year student of Bachelor Information Technology (Interactive Media) from Universiti Teknikal Malaysia Melaka (UTeM) is currently conducting a survey for my final year project. This project is related to the interactive book of Japanese Language Book "Mari Belajar Bahasa Jepun" published by UTeM for my final year project. Hence, I am hoping everybody could contribute to give your response to this survey. All responses are completely confidential and used for the analysis. A demo video regarding the interactive book needed to be watched before the participants answering the survey.

Thank you in advance for your participation.

#### VIDEO DEMO

[https://youtu.be/Z\\_gggW3P6mk](https://youtu.be/Z_gggW3P6mk)



Gender \*

male

female

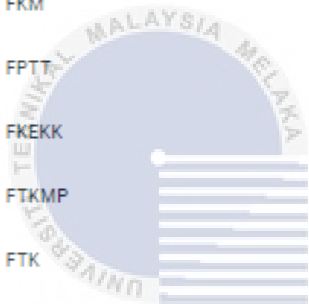


Age \*

- 18 - 20
- 21 - 22
- 23 - 24
- 25 - 27
- Other...

Faculty \*

- FKP
- FTMK
- FKM
- FPTT
- FKEKK
- FTKMP
- FTK
- FTKEE
- FKE



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Year of study \*

- First year
- Second year
- Third year
- Final year

The content provided in the interactive book same as the original book "Mari Belajar Bahasa Jepun" \*

1 2 3 4 5

strongly disagree      strongly agree

The video provided in the interactive book is interesting and attracted? \*

1 2 3 4 5

strongly disagree      strongly agree

The audio provided in the interactive are clear and helpful? \*

1 2 3 4 5

strongly disagree     strongly agree

The addition note from pop up message are helpful to understand the topic? \*

1 2 3 4 5

strongly disagree     strongly agree

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⋮  
The exercises provided are suitable to evaluate the level of understanding of the topic? \*

	1	2	3	4	5	
strongly disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	strongly agree

I understand the content delivered in the interactive book \*

	1	2	3	4	5	
strongly disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	strongly agree

I think this method (interactive book) is more effective than the traditional method. \*

	1	2	3	4	5	
strongly disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	strongly agree

I was able to at least greet and introduce myself in the Japanese language. \*

	1	2	3	4	5	
strongly disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	strongly agree

I find it more interesting to learn and it is easier to understand the topic using the interactive book. \*

	1	2	3	4	5	
strongly disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	strongly agree

The understanding gained as a result of learning using an interactive book allows me to easily answer the exercises given. \*

	1	2	3	4	5	
strongly disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	strongly agree

## APPENDIX B

### ALPHA TESTING FORM

#### 1. Multimedia Expert

## MULTIMEDIA EXPERT APPLICATION SURVEY

Assalamualaikum and hello, I am Nursshahadah binti Tamby Suleiman third year student of Bachelor Information Technology (Interactive Media) from Universiti Teknikal Malaysia Melaka (UTeM) is currently conducting a survey for my final year project. This project is related to the interactive book of Japanese Language Book "Mari Belajar Bahasa Jepun" published by UTeM for my final year project. Hence, I am hoping you could contribute to give your response to this survey. All responses are completely confidential and used for the analysis. A demo video regarding the interactive book needed to be watched before the participants answering the survey.

Please download the ebook file on the laptop or smartphone. To open up the ebook file user need to download kotobee reader.

SMARTPHONE : Download on google play store or apple play store "kotobee reader"

LAPTOP: Download from the link given and install it on laptop  
Thank you in advance for your participation.

KOTOBEE READER FOR MAC LINK:  
[https://drive.google.com/file/d/1XkjGl8ngPF91B\\_DEk95zVA86rSXxHYTD/view?usp=sharing](https://drive.google.com/file/d/1XkjGl8ngPF91B_DEk95zVA86rSXxHYTD/view?usp=sharing)

KOTOBEE READER FOR WINDOW LINK:  
<https://drive.google.com/file/d/1GxbVNI8FkBd6QVWri0L6kTO07QkWOqOm/view?usp=sharing>

EBOOK FILE LINK :  
<https://drive.google.com/file/d/1pJU1131zw2hiqvP2muVurzSQ-wWx0u6/view?usp=sharing>

Thank you in advance for your participation.

 nursshahadah98@gmail.com (not shared) [Switch account](#) 

\* Required



VIDEO DEMO



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Name \*

Your answer

Faculty

- FKP
- FTMK
- FKM
- FPTT
- FKEKK
- FTKMP
- FTK
- FTKEE
- FKE
- Other: \_\_\_\_\_

Department (\*example : BITM) \*

Your answer

The content arrangement makes the delivery of the Japanese language more effective. \*

- |                   |                       |                       |                       |                       |                       |                |
|-------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|----------------|
|                   | 1                     | 2                     | 3                     | 4                     | 5                     |                |
| strongly disagree | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | strongly agree |

The multimedia element provided was able to gain user interest in learning the Japanese language. \*

1      2      3      4      5

strongly disagree                  strongly agree

The interactive book provides various multimedia elements in teaching the Japanese language. \*

1      2      3      4      5

strongly disagree                  strongly agree

The content provided in the interactive book is able to help users gain knowledge of the Japanese language. \*

1      2      3      4      5

strongly disagree                  strongly agree

The design of the interactive book is interesting and creative. \*

1      2      3      4      5

strongly disagree                  strongly agree

The video animation used is interesting and attractive. \*

1 2 3 4 5

strongly disagree      strongly agree

The audio used in several parts of the interactive book is easy to understand and clear. \*

1 2 3 4 5

strongly disagree      strongly agree

The exercises provided are able and suitable for testing the user's level of understanding of the Japanese language. \*

1 2 3 4 5

strongly disagree      strongly agree

Do you have any suggestions or comment to improve the product? اوپنؤم سؤتؤ تئكنؤكؤ ملؤسؤ ملؤكؤ

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Your answer

Submit

Clear form

Never submit passwords through Google Forms

## 2. Subject Matter Expert

# SUBJECT MATTER EXPERT APPLICATION SURVEY

Assalamualaikum and hello, I am Nursshadah binti Tamby Suleiman third year student of Bachelor Information Technology (Interactive Media) from Universiti Teknikal Malaysia Melaka (UTeM) is currently conducting a survey for my final year project. This project is related to the interactive book of Japanese Language Book "Mari Belajar Bahasa Jepun" published by UTeM for my final year project. Hence, I am hoping you could contribute to give your response to this survey. All responses are completely confidential and used for the analysis. A demo video regarding the interactive book needed to be watched before the participants answering the survey.

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KOTOBEE READER FOR WINDOW LINK:

<https://drive.google.com/file/d/TGxbvNI8FkBd6QVWri0L6kT0070kWOgOm/view?usp=sharing>

EBOOK FILE LINK:

<https://drive.google.com/file/d/1pJU1131zw2hiqvP2muVurzS0-wWx0u6/view?usp=sharing>

Thank you in advance for your participation.

 nursshadah98@gmail.com (not shared) [Switch account](#)



\* Required

VIDEO DEMO



[https://youtu.be/Z\\_gggW3P6mk](https://youtu.be/Z_gggW3P6mk)

Name \*

Your answer

Position \*

Your answer

Language expert (\*example: Japanese Language) \*

Your answer \_\_\_\_\_

The content within interactive book teaches Japanese language \*

- Yes  
 No

Is the content arranged correctly? \*

- Yes  
 No

Are the multimedia elements in interactive book suitable in delivering the material of Japanese language? \*

- Yes  
 No

Does the interactive book make the lesson material easier to understand and interesting? \*

- Yes  
 No

Can the interactive book attract students to learn Japanese language? \*

Yes

No

Do you have any suggestions or comment to improve the product?

Your answer

Submit

Clear form



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## BETA TESTING FORM

# USER APPLICATION SURVEY

Assalamualaikum and hello everyone. I am third year student of Bachelor Information Technology (Interactive Media) from Universiti Teknikal Malaysia Melaka (UTeM) is currently conducting a survey for my final year project. This project is related to the interactive book of Japanese Language Book "Mari Belajar Bahasa Jepun" published by UTeM for my final year project. Hence, I am hoping everybody could contribute to give your response to this survey. All responses are completely confidential and used for the analysis. A demo video regarding the interactive book needed to be watched before the participants answering the survey.

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EBOOK FILE LINK :

<https://drive.google.com/file/d/1HpJU1131zw2higvP2muVürzsQ-wWx0u6/view?usp=sharing>

Thank you in advance for your participation.

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 nursshadah98@gmail.com (not shared) [Switch account](#)



\* Required

VIDEO DEMO



[https://youtu.be/Z\\_gggW3P6mk](https://youtu.be/Z_gggW3P6mk)

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Gender \* UNIVERSITI TEKNIKAL MALAYSIA MELAKA

- male
- female

Age \*

- 18 - 20
- 21 - 22
- 23 - 24
- 25 - 27
- Other: \_\_\_\_\_

Faculty \*

- FKP
  - FTMK
  - FKM
  - FPTT
  - FKEKK
  - FTKMP
  - FTK
  - FTKEE
  - FKE
- 
- UTeM
- UNIVERSITI TEKNIKAL MALAYSIA MELAKA
- اونيورسيتي تيكنيكل مليسيا ملاك

Year of study \*

- First year
- Second year
- Third year
- Final year

The content provided in the interactive book same as the original book "Mari Belajar Bahasa Jepun" \*

1      2      3      4      5

strongly disagree                  strongly agree

The video provided in the interactive book is interesting and attracted? \*

1      2      3      4      5

strongly disagree                  strongly agree

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The audio provided in the interactive are clear and helpful? \*

1      2      3      4      5

strongly disagree                  strongly agree

The addition note from pop up message are helpful to understand the topic? \*

1      2      3      4      5

strongly disagree                  strongly agree

The exercises provided are suitable to evaluate the level of understanding of the topic? \*

1      2      3      4      5

strongly disagree                  strongly agree

I understand the content delivered in the interactive book \*

1      2      3      4      5

strongly disagree                  strongly agree

I think this method (interactive book) is more effective than the traditional method. \*

1      2      3      4      5

strongly disagree                  strongly agree

I was able to at least greet and introduce myself in the Japanese language. \*

1      2      3      4      5

strongly disagree                  strongly agree

I find it more interesting to learn and it is easier to understand the topic using the interactive book. \*

1      2      3      4      5

strongly disagree                  strongly agree

The understanding gained as a result of learning using an interactive book allows me to easily answer the exercises given. \*

1      2      3      4      5

strongly disagree                  strongly agree

Submit

Clear form

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