

## BORANG PENGESAHAN STATUS TESIS

JUDUL: MOBILE LEARNING NOTES FOR SPM SEJARAH : "ISLAM DI ASIA TENGGARA"

SESI PENGAJIAN: 2007/2008

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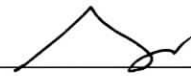
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**MOBILE LEARNING NOTES FOR SPM *SEJARAH* :  
“*ISLAM DI ASIA TENGGARA*”**

**SYAFIZA BINTI AB WAHAB**

**This report is submitted in partial fulfillment of the requirements for the  
Bachelor of Computer Science (Interactive Media)**

**FACULTY OF INFORMATION AND COMMUNICATION TECHNOLOGY  
UNIVERSITI TEKNIKAL MALAYSIA MELAKA**

## DECLARATION

I hereby declare that this project report entitled  
**MOBILE LEARNING NOTES FOR SPM *SEJARAH* :**  
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is written by me and is my effort and that no part has been plagiarized  
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## **ACKNOWLEDGEMENTS**

Alhamdulillah and thanks to Almighty Allah, my families and to all who has made this project come true. Special thanks to Dr. Sazilah Salam for being a dedicated supervisor in providing endless guidance throughout the fulfillment of the Bachelor's Degree Thesis. It is through her valuable and justified reasoning and suggestion that open my eyes to greater extent on the unexplored aspects of the field of my research. Thank you to En Ibrahim Ahmad for giving cooperation in making this project.

I shall also forward my appreciation to other lecturers who never turn me down when being consulted for extra advice in carrying out the project. Thank you to all of you.

## ABSTRACT

M-Learning : *Sejarah SPM “Islam di Asia Tenggara”* is a mobile application which is to be installed into a mobile device. This is an alternative to normal black and white notes which have been used for so long. Since teenagers are prone to using mobile phone nowadays, it is easier to have a built in notes for them to study. It is a very convenient way of learning because mobile phones are carried by anyone to mostly everywhere they go. There are 3 modules in this application, notes module, quiz module and story module. Notes module display mind maps on related topic, quiz module will provide quizzes about the topic, and will evaluate the user’s capability with the Drill and Practice technique, while the story module will give users notes in a story form for viewing and easier memorizing.

## ABSTRAK

M-Learning : Sejarah SPM “Islam di Asia Tenggara” ialah satu aplikasi mobil dimana ia boleh di masukkan ke dalam peralatan mobil seperti telefon bimbit. Ini ialah satu alternatif kepada nota kertas yang telah lama digunapakai. Oleh kerana remaja gemar menggunakan telefon bimbit pada masa kini, membaca nota akan menjadi lebih mudah kerana berada di dalam telefon bimbit. Ini ialah cara pembelajaran yang baik kerana telefon bimbit boleh di bawa ke mana-mana sahaja. Terdapat 3 modul utama di dalam aplikasi ini iaitu *Notes module*, *Quiz module* dan *Story module*. Notes module akan memberi nota di dalam bentuk peta minda mengenai tajuk yang dibincangkan. Quiz module pula akan memberi kuiz kepada pengguna untuk mengukur tahap pengetahuan mereka menggunakan teknik Drill and Practice. Manakala Story module akan memberikan satu nota dalam bentuk cerita untuk memudahkan pengguna menghafal nota.

## TABLE OF CONTENTS

CHAPTER	SUBJECT	PAGE
	<b>ACKNOWLEDGEMENTS</b>	<b>i</b>
	<b>ABSTRACT</b>	<b>ii</b>
	<b>ABSTRAK</b>	<b>iii</b>
	<b>TABLE OF CONTENTS</b>	<b>iv</b>
	<b>LIST OF TABLE</b>	<b>vii</b>
	<b>LIST OF FIGURES</b>	<b>viii</b>
<b>CHAPTER I</b>	<b>INTRODUCTION</b>	
	1.1 Project Background	1
	1.2 Problem Statement	2
	1.3 Objectives	3
	1.4 Scopes	3
	1.5 Project Significance	4
	1.6 Expected Output	4
	1.7 Conclusion	5

## **CHAPTER II                    LITERATURE REVIEW AND PROJECT METHODOLOGY**

2.1	Introduction	6
2.2	Fact and Finding	7
	2.2.1 Domain	7
	2.2.2 Existing Application	7
	2.2.3 Technique Used	14
	2.2.3.1 Mind Map	14
	2.2.3.2 Drill and Practice	15
	2.2.4 Accelerated Learning	17
	2.2.5 Learning History	19
	2.2.6 Learning with Mobile Device	21
2.3	Project Methodology	23
	2.3.1 Analyze	24
	2.3.2 Design	25
	2.3.3 Develop	25
	2.3.4 Implement	26
	2.3.5 Evaluate	26
2.4	Project Requirements	27
	2.4.1 Software Requirement	27
	2.4.2 Hardware Requirement	27
	2.4.3 Other Requirement	29
2.5	Project Schedule and Milestones	29
2.7	Conclusion	29

## **CHAPTER III                    ANALYSIS**

3.1	Introduction	30
3.2	Problem Analysis	31
	3.2.1 Observation	32
	3.2.2 Problem Statement	33



3.3	Requirement Analysis	33
3.3.1	Functional Requirement	34
3.3.2	Non-Functional Requirement	35
3.3.3	Software Requirement	36
3.3.4	Hardware Requirement	38
3.3.5	Other Requirement	39
3.4	Conclusion	40

## **CHAPTER IV DESIGN**

4.1	Introduction	41
4.2	System Architecture	42
4.3	Preliminary Design	43
4.3.1	Storyboard design	44
4.4	User Interface Design	49
4.4.1	Navigation Design	49
4.4.2	Input Design	51
4.4.3	Output Design	51
	4.4.3.1 Texts	52
	4.4.3.2 Animation	52
4.5	Conclusion	53

## **CHAPTER V IMPLEMENTATION**

5.1	Introduction	54
5.2	Product and Implementation	54
5.2.1	Production of Text	55
5.2.2	Production of Graphic	56
5.2.3	Production of Audio	57
5.2.4	Production of Animation	59
5.2.5	Process of Integration	60

	5.2.5.1 Multimedia Components Integration	60
	5.2.5.2 Overall Linking and Integration	61
5.3	Product Configuration Management	64
	5.3.1 Configuration Environment Setup	64
	5.3.2 Version Control Procedure	65
5.4	Implementation Status	66
5.5	Conclusion	66
<b>CHAPTER VI</b>	<b>TESTING</b>	
6.1	Introduction	68
6.2	Test Plan	69
	6.2.1 Test User	69
	6.2.2 Test Environment	70
	6.2.3 Test Schedule	71
	6.2.4 Test Strategy	72
	6.2.5 Test Implementation	73
	6.2.5.1 Test Description	73
	6.2.5.2 Test Data	74
6.3	Test Result Analysis	75
6.4	Conclusion	75
<b>CHAPTER VI</b>	<b>PROJECT CONCLUSION</b>	
7.1	Observation on Weakness and Strength	76
7.2	Proposition For Improvement	77
7.3	Contribution	77
7.4	Conclusion	78
<b>REFERENCES</b>		<b>79</b>
<b>APPENDIX A</b>		<b>80</b>

**LIST OF TABLE**

<b>TABLE</b>	<b>TITLE</b>	<b>PAGE</b>
2.1	PC Requirement	28
2.2	Mobile Phone Requirement	28
3.1	Existing Application Analysis	31
5.1	Configuration environment setup	65
5.2	Overall duration Schedule	66
6.1	Minimum hardware requirement for testing	70
6.2	Schedule of testing activity	71
6.3	Result of Alpha Testing	74
6.4	Result of Beta Testing	74
6.5	Test Result Analysis	75

## LIST OF FIGURES

DIAGRAM	TITLE	PAGE
2.1	Main interface of existing application	8
2.2	E-Test module in existing application	9
2.3	Summary page of existing applications	9
2.4	Selection interface of existing system	10
2.5	Interactive activity in existing application	11
2.6	Multimedia gallery in existing application	12
2.7	Examples of animated notes	12
2.8	Built-in media player in existing application	13
2.9	Drill and Practice : Users key in answer	16
2.10	Drill and Practice : Answer is displayed	16
2.11	Drill and Practice : Next question is displayed	17
2.12	Example screenshots of MILO with quiz	22
2.13	Examples screenshots of MILO with media bar	22
4.1	System architecture	42
4.2	Storyboard for main menu	44
4.3	Storyboard for Notes module	45
4.4	Storyboard for Quiz module	46
4.5	Storyboard for Story module	47
4.6	Navigational design	50

4.7	Texts as output in the quiz module	52
5.1	Example of text arrangement	56
5.2	Example of graphic used in this project	57
5.3	Audio placement in a button using Macromedia Flash	58
5.4	Properties of the audio file	59
5.5	Example of the action script in adding listener	62
5.6	Action script to set the button to be clicked	63
5.7	Actionscript used in manipulating the dynamic textbox	63
5.6	Actionscript in adding and removing the key listener	64

## CHAPTER I

### INTRODUCTION

#### 1.1 Project Background

History is one of the compulsory subjects offered for students who are taking their *Sijil Pelajaran Malaysia* (SPM). This project, SPM *Sejarah : “Islam di Asia Tenggara”* is a mobile-based learning application project to assist future SPM students to a better and easier learning environment. This mobile learning application will derive from the syllabus and the technique chosen in presenting the content is mind mapping.

Most students tend to memorize images, tables or simple mind map at shorter time compared to the long-full-of-details notes, which contains words only. This will be a big help for students, as they no need to bring along any paper notes at free times. A hand held device such as handphone, PDA or smart phone is a like a best friend to most students so they will feel comfortable while staring at the screen as a mobile phone is affordable by most students nowadays.

This application covers important detailed notes (e.g.: graph for “*Peraturan Kerusi Pilihanraya Pertama mengikut Parti*”). It can also cover images and graphic (e.g.: map of Asia Tenggara) or even simple details (e.g.: *ciri-ciri tulisan Cina*). User can also mark the notes for their own references (e.g.: highlight the important notes). This application will test the memory ability of a student and will sharpen their skills in memorizing.

This application will lessen the burden of a student to use a computer every time they need to study. By using this mobile application, students just have to install it on their hand held device for once and use it as soon as possible. It can be used as many times as they like because the application will not be erased unless the user removes it.

## 1.2 Problem Statements

This project act as an alternative to interactive compact disc (CD) which is used in many fields especially education and learning. There are just too many e-learning coursewares in the market.

As an interactive CD comes in handy for students, it is still a constraint, as student needs to be at a specific place with appropriate device (a computer) to use the CD. Without a computer or any appropriate device, it is impossible to gain as many knowledge as there is in the CD compared to a mobile application, as it is always ready to be used at any time and anywhere. Compared to the normal paper notes, which is unreliable, this mobile much better because it is not easily damaged or lost.

Most students find the traditional way of studying is boring. The normal reading and learning using books or interactive CD is the most effective method in learning but a mobile application is to be built as an alternative, which support the traditional method.

### 1.3 Objective

This mobile learning application is developed to fulfill the objectives, which are:

- i. To give future SPM students easy mobile notes which they can bring it anywhere and view it at any time.
- ii. To create an easier memorizing application of important notes using mind map, images, figure which use most of the multimedia elements.
- iii. To provide a well-arranged notes and applicable where the notes will not be mixed up and not lost
- iv. To provide simplicity in doing exercise as there are quiz module in the application.

### 1.4 Scope

The scopes of this project are:

- i. It covers only one syllabus from *Sejarah* subject of Form 4, which is *Islam Di Asia Tenggara*.



- ii. It only provides graphical notes such as images, figures or mind map for easier memorizing.
- iii. It does not cover any long informative not because it is not appropriate to be displayed on a hand held device.
- iv. This mobile learning will not be supported by all sort hand held device.

### **1.5 Project Significance**

This project will be built to give another alternative to students who needs extra guide or a different approach in studying. In studying the subject *Sejarah*, students need to focus more on the facts. This mobile application will help students in memorizing small details, figures, images or other notes in the form of a mind map.

### **1.6 Expected Output**

This project is expected to produce a mobile learning application, which will benefit students and make their learning process a fun time. Most students will use this project because it is a mobile based and it is easy to carry it everywhere. This mobile learning application expected to be a new way of learning in the modern era as most of the school students in Malaysia can afford a mobile phone. This application acts as a support to the conventional way of learning as it provides many benefit which will save time and much more appropriate to use.

## **1.7 Conclusion**

Overall, this chapter have captured the project background, problem statement, objective, scope, project significance and expected output. This mobile learning application can be considered as an alternative for future SPM students where they can use this application at anytime and anywhere they like it.

In the next chapter, literature review and project methodology will be discussed. Literature review will describe all the research and findings related to this project and the methodology will cover on the selected approach to develop this project.

## **CHAPTER II**

### **LITERATURE REVIEW AND PROJECT METHODOLOGY**

#### **2.1 Introduction**

This chapter will discuss the analysis and existing or similar application that is related to the project. Literature review will focus on the research of the existing and future application. Literature review is a process of searching, collecting, analyzing and drawing conclusion from all debates and issue raised in relevant body of literature. It describes all the analysis and findings which are related research, case study and other findings that are related to this project. In addition, it also consist the knowledge of the project elements such as domain specification, techniques and how these elements related and combined to each other.

Methodology is the key of succeeding of finishing a project within time and being able to satisfy user's requirement. It is also a description of the selected approach that will be used when developing the project. Every step in the selected methodology will be justified to suit every task. Since there are many kind of methodology, it is vital to select appropriate methodology that will be used.

## **2.2 Facts and findings**

This topic will discuss the researches that have been done from the point of domain, existing application and technique used, which are related to this project.

### **2.2.1 Domain**

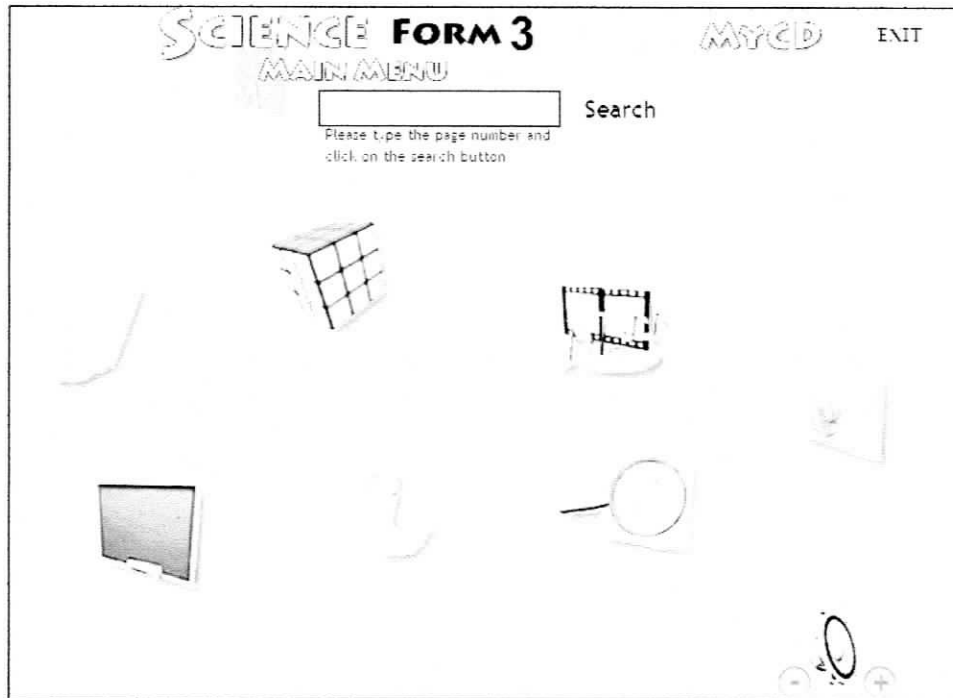
The domain of this project is Information and Communication Technology (ICT) in Education and Learning because the project is related to one of the syllabus in SPM for Form 5 students, History. As one of the compulsory subject in SPM examination, History is a very important subject to be learnt and understood by students. The subject which consists a lot of reading and memorizing, require a lot of patience and interest in a student.

### **2.2.2 Existing Application**

Up until now, there are no mobile learning applications for the subject History yet. The next best thing is interactive CD which can be found in some revision book or exercise book sold in most book stores around.

An interactive CD with the technique of quizzes and mind map was found for the subject Science for Form 3 students in Malaysia. So comparison and analysis of existing system will be made using this interactive CD.

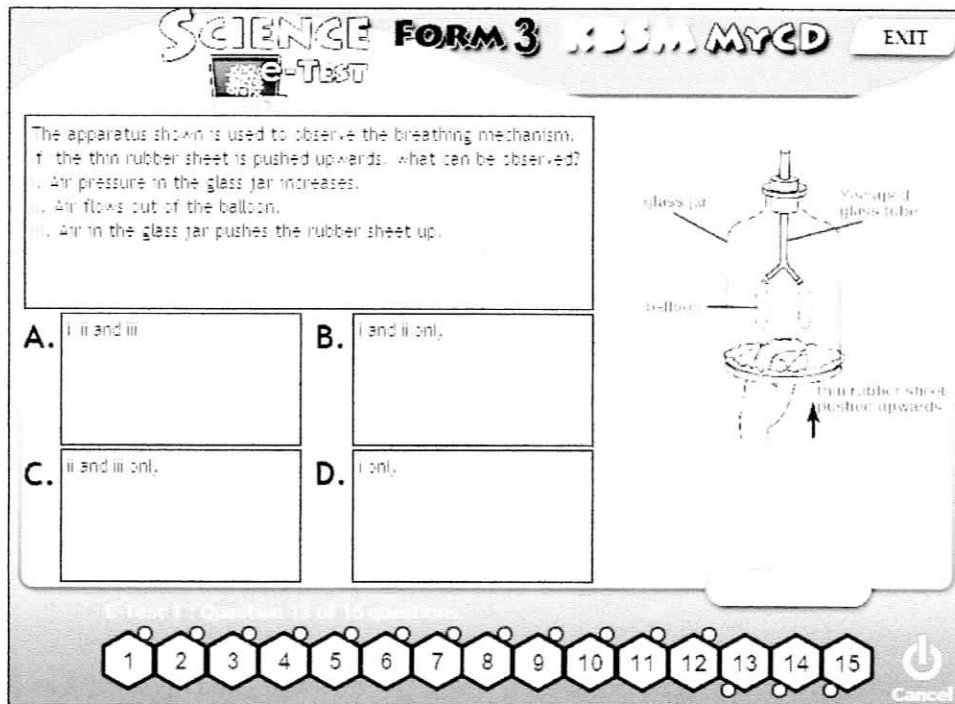
This CD consists of many modules. There are e-tests, user guide, multimedia gallery, glossary, interactive activities, e-journal and internet link. Figure 2.1 shows the main interface of the CD where user can click on the icons.



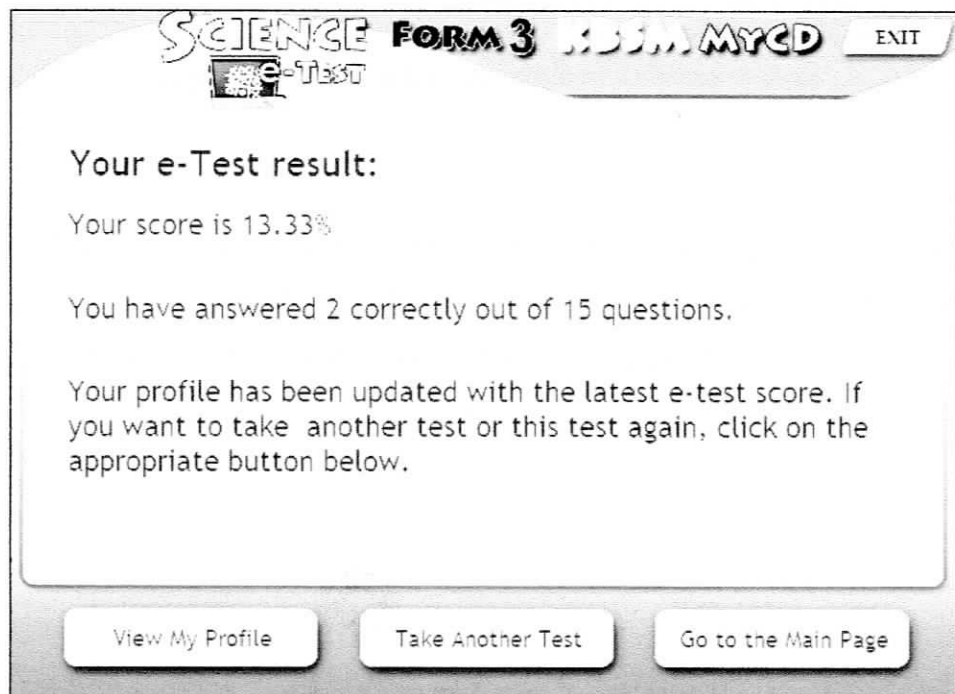
**Figure 2.1** : Main interface of existing application

Among the modules that exist in the CD, the e-test, interactive activities and multimedia gallery are similar to the modules that will be attached in this mobile learning project. So, analysis will be made only on these 3 modules.

Figure 2.2 shows one of the interfaces in e-test module. In this module user can chose from a few test according to the topic learnt. A set of 15 questions will be displayed continuously one after another after user answers each question. The duration for answering a set of test will be recorded for later reference. After answering all questions in the set, a summary will be displayed as shown in Figure 2.3

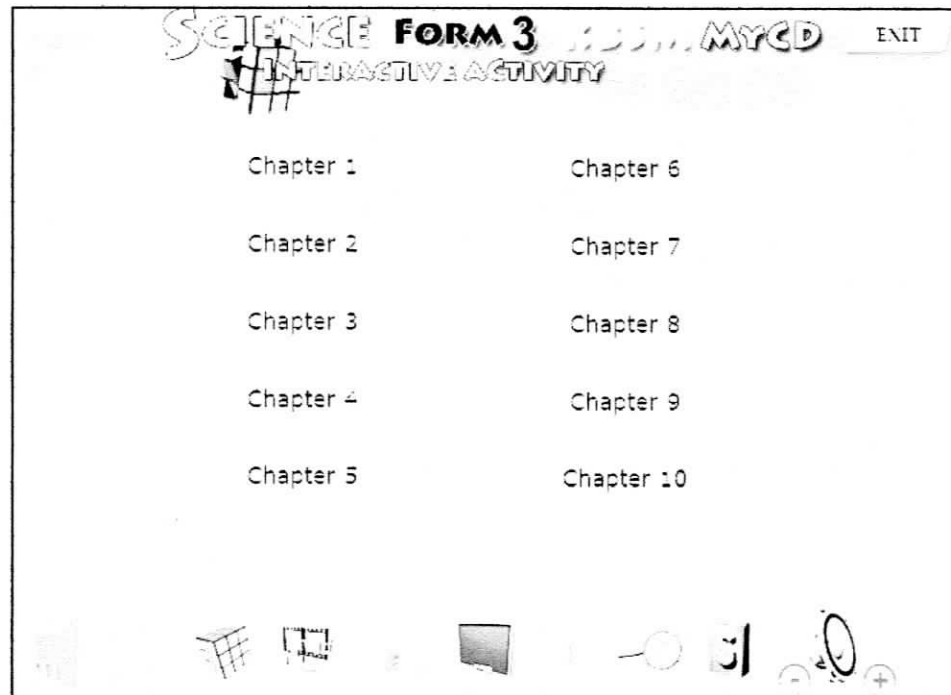


**Figure 2.2 : E-Test module in existing application**



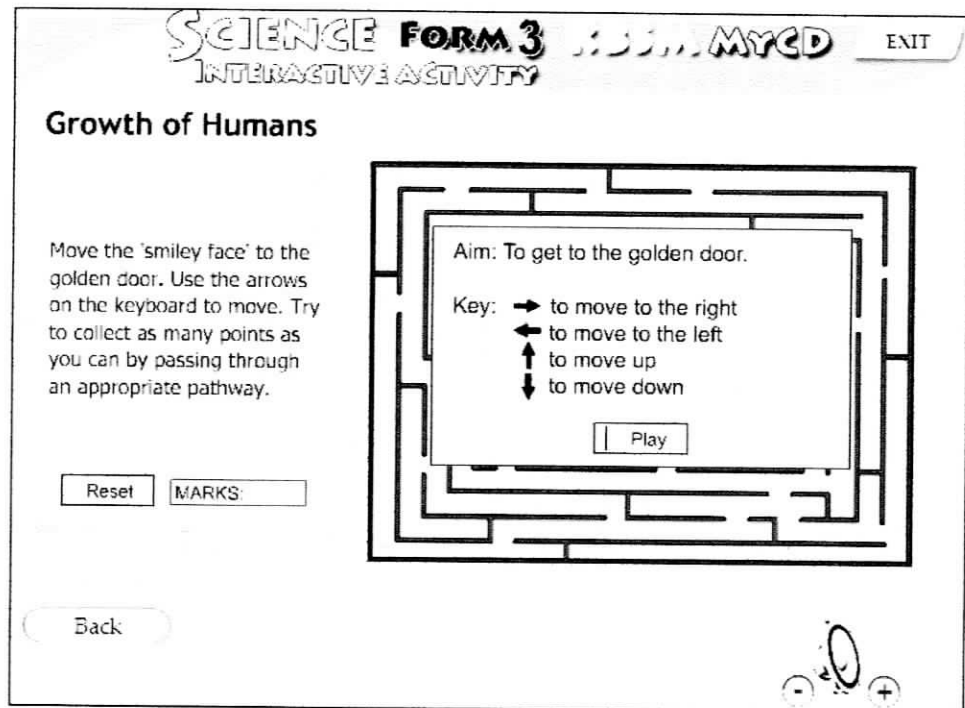
**Figure 2.3 : Summary page of existing applications**

In each module, users can make a selection of chapter which they wish to try. Figure 2.4 shows the interface that displays the chapter selection for Interactive Activities.



**Figure 2.4 : Selection interface of existing system**

Example of interactive activities is shown in Figure 2.5. Users are required to use navigational button to start the activity. This kind of activity is a good example of module which maybe can be used in the mobile learning project.



**Figure 2.5 :** Interactive activity in existing application

The multimedia gallery is very similar to the mind map modules which are to be built in the mobile learning project later. Examples can be seen in Figure 2.6 and Figure 2.7. There are animated notes which indicate the movement of a phase or an image.