

**DEVELOPMENT AN IBOOK FOR KURIKULUM PENDIDIKAN  
PEMANDU KELAS D MANUAL**

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**UNIVERSITI TEKNIKAL MALAYSIA MELAKA  
2015**

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JUDUL: Development an iBook For Kurikulum Pendidikan Pemandu Kelas D rendah

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**DEVELOPMENT AN IBOOK FOR KURIKULUM PENDIDIKAN  
PEMANDU KELAS D MANUAL**

**NORSAZILAH BINTI MUHAMMAD**

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

**FACULTY OF INFORMATION AND COMMUNICATION TECHNOLOGY  
UNIVERSITI TEKNIKAL MALAYSIA MELAKA  
2015**

## DECLARATION

I hereby declare that this project report entitled

### DEVELOPMENT AN IBOOK FOR 'KURIKULUM PENDIDIKAN PEMANDU KELAS D MANUAL'

Is written by me and is my own effort and that no part has been plagiarized without citations.

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## DEDICATION

I dedicated this thesis especially to my parents, my family, friends, evaluator, and my supervisor that gives me full support to continue this thesis. Without them, I would not come this far. From the bottom of my heart, I would like to thanks them for their trust to finish this project. Thanks to lecturers BITM for their commitment and their support.

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Thanks to my parents and family for their support in everything I do. Lastly, I would like to thank to all my BITM students who are always there when I need them.

## ABSTRACT

This project is related iBook Class D Driver Education Curriculum Manual and communicated to the user by using the gadgets of Apple products. The iBook is an interactive book that contains a lot of multimedia elements such as video, sound, 2D animation, text, images and widgets. The objective of this project is to see how learning is delivered via iBook, to develop an application based on an analysis of the collected and to test or evaluate the results of projects that have been developed. This project uses the ADDIE model for its methodology. As a result, the project has yielded positive results, contain multimedia elements and design appropriate to give maximum effect to the reader through the iBook.

## ABSTRAK

Projek ini merupakan projek iBook berkaitan Kurikulum Pendidikan Pemandu Kelas D dan disampaikan kepada pengguna dengan menggunakan gajet daripada produk Apple. iBook ini adalah sebuah buku interaktif yang mengandungi banyak unsur multimedia seperti video, bunyi, animasi 2D, teks, imej dan widget. Objektif projek ini adalah untuk melihat sejauh mana pembelajaran disampaikan melalui iBook, untuk membangunkan sebuah aplikasi mengikut analisis yang dikumpul serta menguji atau menilai sejauh mana hasil projek yang telah dibangunkan. Projek ini menggunakan model ADDIE untuk metodologinya. Sebagai keputusan, projek ini memberikan hasil yang positif, mengandungi unsur-unsur multimedia serta design yang sesuai bagi memberikan kesan maksima kepada pembaca melalui iBook.



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## **CHAPTER I**

### **INTRODUCTION**

#### **1.1 Project Background**

Statistics Royal Malaysian Police (PDRM) found that a total 85.7 % of the accidents on the highway due to the attitude of drivers. Deputy Transport Minister Dato' Abdul Aziz Kaprawi said, speeding and in a state of drowsiness and fatigue among the factors causing the accident. According to Abdul Aziz, the statistics revealed by Miros showed a total of 450,000 road accidents have been reported since 2007 until 2011. "In Malaysia, the motorcyclist had the highest %age of 60.4 % in an accident on the highway while cars (20.7 %) and heavy vehicles (21.5 %)" (Dato' Abdul Aziz Kaprawi, 2013).

Various effects following an accident, whether physically, mentally or emotions will continue to haunt victims who are fortunate survivors of death. Malaysia road accident statistics in recent years show that more than 50% of accident victims are those who aged between 20-35 years. (JKJR, 2011)

On top of this, we can create a whole new type of learning experience where we can insert 2D animations and other multimedia elements such as videos and audios to facilitate the learning process.

Observing from current method, Jabatan Pengangkutan Jalan (JPJ) is using a textbook for the driving education curriculum. JPJ is the government agency who responsible to the traffic matter in the country. Among the responsibility is to educate and give license to the road user. This thesis will cover the development of an iBooks with the content of KPP learning module.

The content of this project is integrated with Malay language. It uses simple animation and interactive widget to make user understand the meaning of driving education curriculum. The application will present in mobile device by iOS. iBooks is an application that available as a free download from the App Store on iOS device, and it's included with OS X Mavericks on Mac that very useful

Actually, iBook is an iBooks application by Apple Inc. for its iOS and OSX operating systems and devices. The supported iBooks formats by iBooks are EPUB and PDF files. Additionally, iBooks is not pre-loaded onto iOS devices, and candidate driving licence may install iBooks free of charge from the iTunes App Store. iBooks is also capable of display iBooks that incorporate multimedia, "read the contents of any page", can operate in landscape mode and allows for interactive reading. This project is to upgrade the learning system from usage slide show notes replace to iBook system in KPP learning module. Students will be more interested and understand if we upgrade the learning system from usage slide show replace to iBook approach.

## **1.2 Problem Statement**

Procedure to take a driving license, they must follow the driving education curriculum (KPP) before they can take a test to get L license. Problem of this project is KPP Session for 6 hours in which speakers using conventional tools such as PowerPoint slides and speech. This make the learning process ineffective.



Uninteractive textbooks cause them to feel tired and sleepy. They also have problem to understand the real situation that the speakers tell to them.

In addition, current reference book used in KPP is very thick and heavy to bring along. Using their mobile device, user may open and refer to the book anywhere they want.

With recent technology development, a new approach should be implemented to this area, where it can enhance the traffic education to the society. Nowadays, education more effective with interactive image and video not only with text and embeded image.

### **1.3 Objective**

This project is based on the following objectives:

- i. To understand the learning module involved in Malaysia driving licence procedure.
- ii. To develop a interactive book (books) involving multimedia element for KPP.
- iii. To observe the acceptance of the new approach in KPP learning method from the public sampling.

## **1.4 Scope**

Main focus or target user this iBooks is for will be the candidate taking traffic exam for licencing process. The developer will focused on how to make it easy to learn and understand by using multimedia element such as text, pictures, audio and video. This product is developing base on iBooks technology that can support for iOS platform

## **1.5 Project Significant**

The development of this iBooks intended to help the learning process involving road user and the instructor at driving school. Using this application, the objective of identify the elements multimedia which are suitable for them might be achievable because iBook have element of 2D animation, text; video, audio, and interactive image that very interactive learning.

## **1.6 Expected Output**

An iBooks for KPP involving various multimedia element such as graphics, video and animation intended to improve public learning experince. Moreover, it will also make it easier for teachers to teach and demonstrate the significant elements they need to know before getting a license to drive a more prudent and competent and can reduce the occurrence of accidents.

In addition, an iBooks also can reduce the cost of publishing the book module. User may download from the App Store on iOS device . It also alleviate the burden they carry is evidence that a thick and heavy to class. With iBooks is also likely to get

the license price will be reduced slightly. The product is easy to use and effectiveness to end user. Hope the content of this product useful, satisfaction and user can use the product everywhere.

## **1.7 Conclusion**

As we know driving students are often exposed to a manual system of learning meaning that learning by using manual book. It is very behind compared to the technology we have now. Moreover, the facts tell us that the people more easily remember a picture, audio and video than words. For example, people are more sensitive to image and colour on the road compare to the word of the sign board. But if we remember the sign without understand the meaning of the sign is should not be.

This project will be built the application that will help them to understand the meaning of every road sign, care of vehicles, component in the vehicles, and most important is the road safety. It can help users more easily to understand the real scenario on the road. The establishment of this project, I hope it can help driving student in their learning process so that much easier to understand all procedure that has learnt in the module.

## **CHAPTER II**

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

#### **2.1 Introduction**

This chapter will be discussing about the literature review for this area of study which is iBooks application on iOS platform. This chapter, literature review focuses on the fact and finding, existing system and comparison of tools. Fact and finding in this study is to tell us about the bad attitude of road users will make an accident. Attitude of road users to do not obey laws and violate the traffic lights were increased accidents every year in Malaysia. This chapter also will discuss the data statistic get from other source. The comparison of three type of system and the comparison of tools will show.

Literature review is a process of reading, analysing, evaluating, and summarizing the secondary sources about a specific topic. It will help me to come out the information and ideas about the previous product with more detail in this area of study. It explains and guide how my investigation may help answer some of the questions or gap in this area of research.

This chapter also will discuss the methodology of this project. This project uses the ADDIE model as a methodology technique. The ADDIE model is a



framework that lists generic process that instructional designers and training developers use. It represents a guideline for building effective training and performance support tools in five phases. ADDIE model stand for Analyse, Design, Develop, Implement and Evaluate. The product requirement and requirement analysis also will be discuss in this chapter.

## 2.2 Fact and Finding

Accidents often occur around the world, including Malaysia itself has reached millions of lives that are lost because of road accidents. Statistics released by the Traffic Branch, Bukit Aman (N.A, 2014) shows May is the highest state has accidents, and followed by January and April. This is very worrying and should be taken seriously by all people. Figure 2.1 shows the accident statistics in Malaysia from January until June 2014. Figure 2.2 show accident statistics by type of vehicles in Malaysia from January until June 2014; Cars recorded the highest accidents in the year, while Lorry 2 tonne recorded the lowest number of accidents.

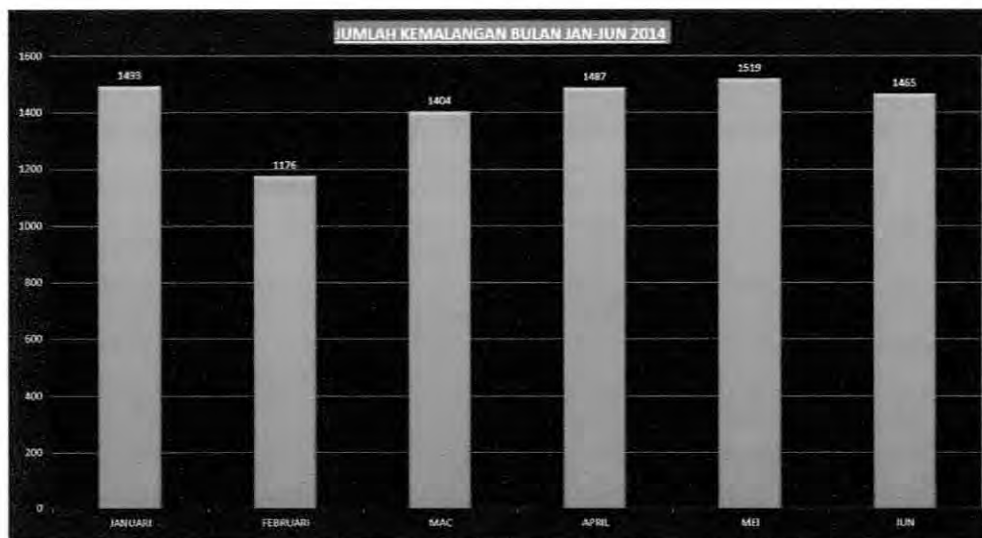
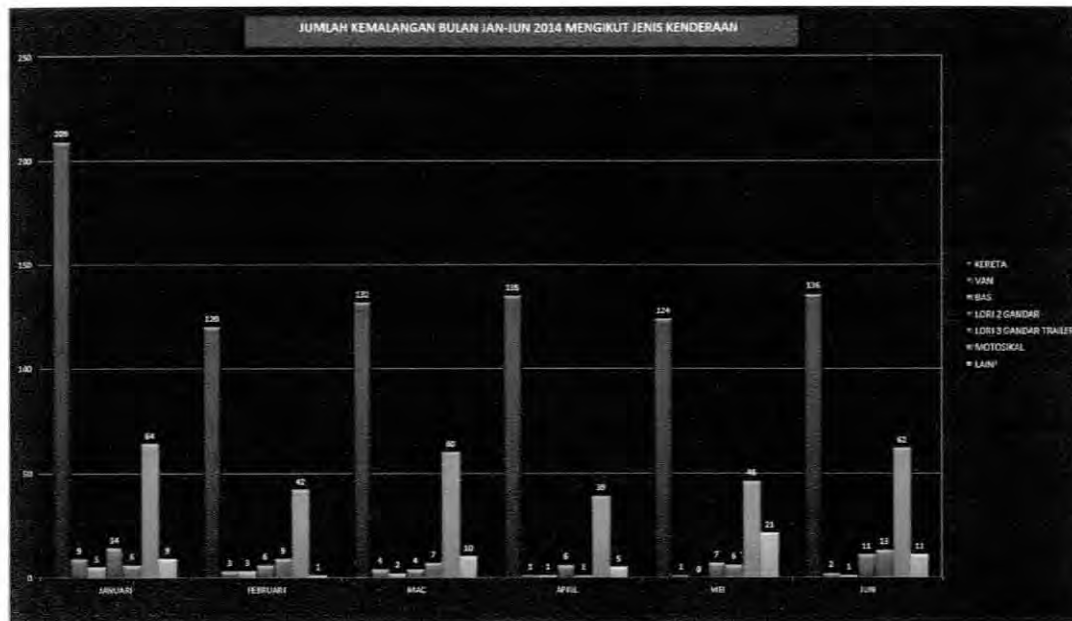


Figure 2.1: Accident statistics in Malaysia in Jan-June (Jabatan Perangkaan, 2014)



**Figure 2.2: Accident statistic by type of vehicles in Malaysia in Jan-June (Jabatan Perangkaan, 2014)**

There are two main factors that cause road accidents occur between the weather and the second factor is caused humans. Driving in poor weather conditions can cause an accident. One such example is driving in heavy rain conditions that obstruct the driver's eye view. Second example is driving in a thick haze that can be seen only at close range only. The second source is a major factor caused the drivers themselves in a situation where they are driving drowsy, speeding and dangerous, careless and attitude of the driver. We can see the attitude of drivers who are impatient, like queue jumping, raced on the road and beating traffic lights.

Based on the attitude of the driver, the Royal Malaysian Police also released statistics indicating that 30.7% of fatal accidents caused by drivers overtaking in a dangerous, 26.5% because drivers drive over the speed limit, 8.1% negligence while in or out of junctions, and 6.3% because the driver followed too closely with other vehicles. Based on external elements indicated that 67% of the cause of the accident is due to the attitude of drivers, 28% stemming from environmental conditions and 5% was due to a technical fault.

Based on Royal Malaysian Police quotations, I figured a cause of traffic accidents is driver behaviour itself. Many accidents happen because of driver behaviour that does not follow to the regulations rules of the road. Most drivers usually to drive faster than the speed limit set by the government. There are also drivers who violate red traffic light at the intersection of the road and parking the vehicle in a prohibited place. Negativity is not the only driver in accident, but he also inconvenient to other road users.

To reduce road accidents in Malaysia, I would like to build an iBook about driver education curriculum class D for will be drivers and existing driver that helps them to understand the true meaning of road signs, care of vehicles, procedure on the road. If road users understand the meaning of each sign, accidents can be handling because all driver will obey the laws of the road. To compete with existing book that provides to them it thick and heavy to bring along, KPP session for 6 hours in which speakers using conventional tools such as PowerPoint slides and speech. This makes the learning process ineffective because they cannot see the real situation to understand it.

With recent technology development, a new approach should be implemented to this area, where it can enhance the traffic education to the society. They can see by the multimedia elements that involve in the iBook while KPP session and make it easy to understand.

### **2.2.1 Domain**

This study is about the applications using iBook technology. Currently, in Malaysia not many company or developer want develop the content or module in interactive ways. Thus, I will develop an iBook for KPP consisting of presentation object that is direct production product with the objective to convey specific module



to apple user. The results of this study are that users who will take license can learn about KPP module using iBook based applications.

#### **2.2.1.1 iOS Platform**

iPhone OS or the new name iOS is Apple's property operating system that runs on the iPhone, iPod Touch, and iPad. On 2007, iPhone originally unveiled and it has been extended to support other Apple devices such as the iPod Touch on September 2007, iPad on January 2010, iPad Mini on November 2012 and second generation is Apple TV onward September 2010. Apple does not have license iOS for installation on non-Apple hardware different with Microsoft's Windows Phone and Google's Android. Steve Jobs' is the first owner of Apple Inc. and after Steve died on 5 October 2011, Tim Cook in charge for all of Apple's.

The concept for the user interface of iOS is based on direct manipulation, using multi-touch gestures. Interface control elements consist of sliders, switches and buttons. The interaction with the OS includes gestures such as swipe, tap, pinch, and reverse pinch that all of which have specific definitions within the context of the iOS operating system and its multi-touch interface.