BORANG PENGESAHAN STATUS TESIS

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

SESJI PENGAJIAN: 2007/2008

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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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without citations.

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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

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CHAPTER 1

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 “Peratusan Kerusi Pilihamraya 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.

![Main Menu](image)

**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
The apparatus shown is used to observe the breathing mechanism.

- When the thin rubber sheet is pushed upwards, what can be observed?
  - Air pressure in the glass jar increases.
  - Air flows out of the balloon.
  - Air in the glass jar pushes the rubber sheet up.

A. I and III
B. I and II
C. II and III
D. II

---

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

---

Your e-Test result:

Your score is 13.33%.

You have answered 2 correctly out of 15 questions.

Your profile has been updated with the latest e-test score. If you want to take another test or this test again, click on the appropriate button below.

---

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

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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.

![Selection interface of existing system](image)

**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.
Growth of Humans

Move the 'smiley face' to the golden door. Use the arrows on the keyboard to move. Try to collect as many points as you can by passing through an appropriate pathway.

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.