

Universiti Teknologi MARA

**Development of Android Application
Student School Attendance System (SSAS)
Using Rapid Application Development Methodology**

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**Thesis submitted in fulfillment of the requirement for
Bachelor of Information Technology (Hons)
Faculty of Computer and Mathematical Sciences**

January 2015

ACKNOWLEDGEMENT

In the name of Allah SWT the Most Merciful and Most Gracious

Alhamdulillah, praise and thank to Allah because of His Almighty and His almost blessing, I was able to finish this research within the time duration given. Firstly, my special thanks goes to my supervisor, Madam Nor Diana Ahmad for her valuable information, advice, positive comments and encouragements from the beginning until the completion of this final research project proposal. Her guidance and wise supervision has benefited me greatly. I also would like to address my deepest appreciation and sincere thanks to Madam Nalini Dharmarajan for her guidance, ideas and tolerance towards this final my research project proposal.

Special appreciations also go to my beloved parents, for being supportive and pray for me. Moreover, I am so thankful especially to my father, Mohamad bin Gimam and my mother , all teachers from Sekolah Kebangsaan Air Panas for helping me to accomplish this project successfully.

Last but not least, I would like to give my gratitude to all my dearest friends, thank you very much. Lastly, for those who have been involve direct or indirectly.

ABSTRACT

Today, attendance has been used in the around the world either in public or private sector. In educational institution, student attendance is a very important for all class teachers. As one of the responsibility of the class teacher in school, they are always doing a lot of work include managing student attendance record. Currently, class teacher had a lot of problems with managing manual book student attendance record. To handle this situation, they need to change the manual system to digitalize application. The research focuses on the development of declaring for Android mobile application that assist class teachers to manage student attendance record through their smartphone. *Student School Attendance System* (SSAS) had been developed using the *Rapid Application Development* (RAD) methodology framework because it will develop that need urgent situation, faster speed development and produce higher quality output result. There are three users in SSAS which is PKHEM teacher, class teacher and parent. For PKHEM teacher can manage data information through the web base system, but for class teachers can manage student attendance record in Android mobile application. Parent also can monitor their child's attendance through their smartphone. As a conclusion, SSAS Android mobile application can be enhanced in term of taking attendance by using smart card with bar code or QR code scanner through the smartphone application.

Keywords: mobile application development, web-based architecture in android mobile platform, rapid application development, attendance management system

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CHAPTER 1

INTRODUCTION

This chapter will discuss about the project background of study, problem statement, research questions, objectives, project scope, research significance of study of the project and last part is an outline of the thesis. In the project background, will discuss about a brief overview about the whole project will be developed. The problem statement describes why this project should be developed. Then, the research question is related to the objective and then will be extracted from the problem statement. The project scope is to explain about the target user and area of the system used. The needs and the content of this project are also covered in this topic. Finally, the research significance is useful because what type of user to use this system and outline of the thesis of the project will briefly describe the expected result of this project.

1.1 Background of Study

According to (Statistic Canada, 2011) the definition of school attendance refers to whether a person attended, either full time or part time, any accredited educational institution or program during all or part of the specified reference period. School attendance is very useful for any private or public educational institution for their own references. School attendance is usually used when teachers are responsible for recording the daily attendance of students using books or forms. It is important that teachers actively ensure the attendance of student is an accurately recorded and maintained for their class.

Nowadays, the mobile phone also known as smartphone has been used for every teacher as the desired equipment but it's more for a necessity device. It has become a trend for young people, businessman, public or private sector,