

**Universiti Teknologi MARA**

**Development of Android Application: M-GPA  
Calculator**

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

**December 2014**

## **ACKNOWLEDGEMENT**

Alhamdulillah, praise and thank to Allah because of His Almighty and His utmost blessings, I was able to finish this research within the time duration given. Firstly, my special thanks go to my supervisor, Mr. Syamsulhairi Bin Yaakob for his mentoring, surveillance, moral support and encouragement to all of this final year project. I am really appreciate the blessing, support and motivation given by him during this period to complete this project.

I also wish to express my warm and sincere thanks to my lecturer CSP650, Puan Diana Binti Ahmad for her continues guidance, motivation, support and give valuable information to me in order to complete this project.

Special appreciation also goes to my beloved family, my father Kamaludin Bin Ismail and Adran Bin Jahuri, my mother , my sister and my brother for their support, precious love, motivation, and prayers during the completion of my project.

Last but not least, I would like to give my gratitude to my dearest friends especially to my classmate CS2406A for their valuable idea and information during the process in developing the application. I also would like to thanks to the respondent that give cooperation and spend some time to answer the questionnaire given to them.

Once again, my deepest thanks to all that were involved in the process of making this project successful. Thank you.

## **ABSTRACT**

There are many application to calculate target Grade Point Average (GPA) for other University but not in University Technology Mara (UiTM). In this paper, researcher study about the calculation for GPA and Cumulative Grade Point Average (CGPA). The purpose development of this application is to help the student to calculate their target GPA and CGPA by using mobile application. Student will be able to calculate their target for every semester and they can save their data. During the research, the researcher found there is a problem for the student to calculate their target GPA and CGPA. The problem is difficulty of the student to calculate the target manually because they need to memorize the formula and calculate it one by one manually. The main objective of this study is to identify the requirement, to design the user interface and to develop mobile application of the GPA calculator. The scope of the study is for UiTM student. In the study the researcher use Rapid Application Development (RAD) model for the development. RAD model have four phase which are requirement planning, user design, construction and cutover. The explanation of RAD model is in chapter three. Data for the research were collected through questionnaire distributed to 106 respondents. The findings and analysis show that the majority of the student use a smart phone. The 92 % of student use smart phone concern about their GPA and CGPA. From that 80 % of them are always target their GPA and CGPA. The result show the application should be develop. The significant of developing the project is to eases the student, so they don't need to calculate manually, to save the time for the student to calculate GPA and CGPA and the application helps to save their CGPA for every semester and they can view it any time. For the future work of the project is developing the application with a reminder to remind the student that they need to focus on their study to achieve their target. The conclusion is M-GPA Calculator application is develop according to the requirement need.

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# **CHAPTER 1**

## **INTRODUCTION**

This chapter describe the overview of the research which include the project background, problem statement, scope of the project, objective of the project, research question, and significant of the project.

### **1.1 Project Background**

University Technology MARA (UiTM) is the largest Malaysian institution of higher learning in term of size and population. Student can apply for continuing study for Diploma, Bachelor's (Honours) Degree and Master programs based on their academic qualification needed. When they become UiTM student, they need to register and pass all courses taken for every semester.

Grade Point Average (GPA) is the value of a student achievement in a certain semester. At the end of every semester student academic achievement will be represent by their Grade Point Average (GPA) which includes the students' assessments and final examination results (UiTM Academic Regulations, Amendment 2011). As a student, it is important for them to pass in every subject for every semester to continue study in UiTM and to prevent them from repeat the subject. It also can cause for dismissal if they failed and terminated for most of the subject they taken in that semester.