

**Universiti Teknologi MARA**

**Android Mobile Application: Calorie Counter for  
Malaysian**

**Masadrisham Bin Talib**

**Thesis submitted in fulfilment of the requirements for the  
Bachelor of Computer Science (Hons) (Multimedia Computing)  
Faculty of Computer and Mathematical Sciences**

**January 2014**

## **ACKNOWLEDGEMENT**

First and foremost, I am grateful and thanked to Allah All the Mighty for giving me an opportunity to complete this project in a time given. Special thanks to my supervisor, Mr. Mohd Nor Hajar Hasrol Jono for providing assistance in solving problems occurred and provides guidance to me in order to complete the tasks besides the ideas, comments and suggestions given. Besides that, special thanks for the stakeholders, Madam Suzana Baharudin and Mr. Mohd Yunus Mohd Yussof because willing to spend time for giving me explanations regarding the project scopes. Their contributions in this project are very supportive.

To my fellow colleagues, despite being highly occupied in completing their personal final year project, the thought to being munificently openhearted and openhanded are greatly appreciated. Unforgotten to my fellow friends, thanks to you all because willing to help me support and sharing times to share the information that is related with the project.

Lastly, I myself like to convey my deep-hearted appreciation to my beloved parent and my family members. Because of your continuous support to always do my best and never give up.

Thank you.

# TABLE OF CONTENTS

## Contents

<b>SUPERVISOR'S APPROVAL</b> .....	ii
<b>DECLARATION</b> .....	iii
<b>ACKNOWLEDGEMENT</b> .....	iv
<b>TABLE OF CONTENTS</b> .....	v
<b>LIST OF TABLES</b> .....	viii
<b>LIST OF FIGURES</b> .....	ix
<b>ABSTRACT</b> .....	xi
<b>CHAPTER 1</b> .....	1
1.1.    Project Background .....	1
1.2.    Problem Statement .....	2
1.3.    Objectives .....	3
1.4.    Scope of the Study .....	3
1.5.    Significance of the Project .....	4
<b>CHAPTER 2</b> .....	5
2.1.    Why Develop Calorie Counter for Malaysian? .....	5
2.2.    Malaysian Dietary Guidelines .....	6
2.3.    Calorie? .....	8
2.3.1.    How Calorie Works? .....	8
2.3.2.    How to Calculate Calories Need per Body? .....	10
2.3.3.    The Mifflin-St Jeor as Basal Metabolic Rate's (BMR) Formula .....	12
2.3.4.    The benefits of Calorie Counting .....	13
2.3.5.    Effectiveness to Lose Weight by Counting Calories .....	13
2.3.8.    Mobile User Interface Design .....	18
2.3.8.1.    Learnability .....	18
2.3.8.2.    Efficiency .....	18
2.3.8.3.    Memorability .....	18
2.3.8.4.    Simplicity .....	18
2.3.8.5.    Mapping .....	19
2.3.8.6.    Visibility .....	19
2.3.8.7.    Feedback .....	19

## **ABSTRACT**

Nowadays, Malaysian having a busy life and do not taking care of the food that been consumed. This leads to obesity among Malaysian. This project will concern the development of Android mobile Application and the calorie formula to help Malaysia to lose, gain or maintain weight. The idea for this Android application is aim to help Malaysian to have the body that they want by adjusting their weight by calculating calorie intake of food since Android is globally operating system been used nowadays. The calorie counter for Malaysian is formulated by the Miffler-St Joer Equation. The project uses an Agile Model for software development lifecycle. This Android application is designed by using Eclipse as tool for Android mobile application development. An evaluation is made in aspect effectiveness of the application on user satisfaction. This project finds out the user who uses calorie counting technique to lose, gain or maintain weight is effective.

# **CHAPTER 1**

## **INTRODUCTION**

This chapter will explain the project background, problem statement, objective, scope of study and significance of the project. The project background is an overview about the project and the problem statement is something that may need to solve by doing some researches on it.

### **1.1. Project Background**

Nowadays, Malaysian having a busy life and really have no care about food that been consumed in daily life. Yet, Malaysian has been worried about the gaining body weight. From that, android mobile application that been called calories counter for Malaysian is going to be developed due to increasingly android smartphone users in Malaysia. This application will help busy Malaysian to automatically calculate calories in and calories out of the body by a person per day. By that, the weight can be controlled by maintaining, losing or gaining it. Plus, this application will provide a database that contained food's calories information that easy for the users to refer to.