

**LIMITER REMOVAL: FITNESS TRACKING  
MOBILE APPLICATION**

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## **SUPERVISOR'S DECLARATION**

I hereby declare that I have checked this project, and, in my opinion, this project is adequate in terms of scope and quality for the award of the degree of Bachelors of Computer Science (Computer Systems and Networking).

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## **STUDENT'S DECLARATION**

I hereby declare that the work in this thesis is based on my original work except for quotations and citations which have been duly acknowledged. I also declare that it has not been previously or concurrently submitted for any other degree at Universiti Malaysia Pahang or any other institutions.

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## **ABSTRAK**

Untuk berdekad, peperangan terhadap mewujudkan masyarakat yang sihat telah berlangsung dan ia diramalkan tidak akan berakhir dalam masa terdekat. Penyelesaian selepas penyelesaian telah usulkan kepada mata dunia namun persoalan hanya menjadi bertambah rumit atas sebab persekitaran kian berubah. Selari dengan arus peningkatan masalah, peningkatan besar dalam pembangunan teknologi telah menetapkan resolusi baru untuk jurutera aplikasi mudah alih untuk melabur dalam mempromosikan kesihatan.

Apa yang terkandung dalam tesis ini adalah projek yang mempromosikan kesejahteraan diri melalui senaman dan nasihat untuk meningkatkan kesihatan. Projek ini menggunakan hakikat bahawa lebih mudah untuk memberikan bimbingan kepada individu dengan apa yang seseorang menghabiskan masa mereka yang paling dengan yang merupakan telefon pintar. Aspek yang paling ditekankan dalam projek ini ialah rangkaian penggunaan server dan bagaimana hubungan klien server memudahkan dalam membantu aplikasi mudah alih. Sebagai pelajar rangkaian yang kami dapati selepas bertahun-tahun amalan bahawa model rangkaian yang tepat akan meningkatkan kecekapan menjalankan aplikasi mudah alih.

## **ABSTRACT**

For decades the war on creating a healthy society goes on and is predicted not to end anytime soon. Solutions after solutions have been presented to the world but the task just gets harder as the environments change. Parallel to the increase of difficulty to the problem the massive increase in technology development have set a new resolution for mobile application engineers to invest in promoting health.

What exists in this thesis includes a project that promotes self-wellbeing through exercise and advice to increase health. This project uses the fact that it is easier to give guidance to individuals with what a person spends their time the most with which is the smartphone. The aspects most highlighted in this project is the network on applying a server and how a server client relationship eases in assisting the mobile application. As a networking student we found after years of practice that the right networking model will increase the efficiency of running a mobile application.

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## **LIST OF ABBREVIATIONS**

RAM	Random Access Memory
US	United States
CRUD	Create Retrieve Update Delete
FBI	Federal bureau of investigation
UI	User Interface
IOS	iPhone Operating System
PSM	Project Sarjana Muda
API	Application Program Interface
CPU	Central Processing Unit
npm	Node packager Module
CLI	Command Line Interface
HTML	Hypertext Markup Language
CSS	Cascading Style Sheets
UAT	User Acceptance Test
SQL	Structured Query Language

## CHAPTER 1

### INTRODUCTION

#### 1.1 Introduction

This chapter offers insight towards the understanding of this system by giving a solid explanation on the importance of this system implementation. To imply briefly what the implementation of this system offers, this report is divided into 5 sections. Section 1.1 explains the background of the study. Section 1.2 describes the problem statements by highlighting issues regarding the implementation of this system. Section 1.3 represents the Aim and Objectives of this system. While section 1.4 is the scope of the system. Lastly, Section 1.5 is the Report Organization.

#### 1.2 Background of Study

Alongside the advancing evolution of hand-held devices, comes the increase of application that can run in complex structured systems to provide rich features with it. In addition to the booming rate of RAM performance and powerful processor cores that are provided in smartphones expand the ever-limitless potential of what mobile application can offer today. Nowadays, not all applications in stores offer what the modern architecture of current smartphones can offer. Being single platformed and the need to rely on third-party devices are some of the reasons mobile application are being held back. *The cross-platform app market is expected to hit \$7.5 billion by the end of 2018, and the amount of cross platform mobile app development tools is on the rise* (Furlan, 2018).

Needless to say, the more function a mobile app can offer will determine the standing of that it is in a market. In the US, 67% of people use smartphones to access the Internet every day, and the majority won't leave home without their phone (Nandakumar, 2016)

which brings us to question how many of the application that resides in smartphones are invested to health and fitness of one's body.

The fact that no matter the age, self-wellbeing is an individual concern for his or her entire life. Neglecting the body will bring down many drawbacks affecting individual's social lifestyle and degrade work performance. Not to say that people are not aware of this situation, but it is mainly because they do not have the time to spare to squeeze these activities in their busy schedule. Limiter Removal system is a managing system that aids on self-scheduling, alarming and motivate its users by applying hints of gamification process to achieve higher potentials their physiques can offer.



### 1.3 Problem Statement

Towards modelling the structure of the project, a clear statement on issues that make the system is important is listed as follows: -

Table 1.1 Problem Statements and its explanations.

	<b>Problem</b>	<b>Description</b>	<b>Effects</b>
1.	The feasibility of choosing between real life training and a software application.	The dilemma between using an application or hiring a real-life trainer would benefit the increase of fitness	Individual could not make up his mind and resort to not doing both.
2.	Trends on using systems on mobile application instead of web page.	Systems like Self-Train Body rely on fast usage and simple view.	Opening it on a browser and relying on internet connection will cut user experience
3.	The availability of systems alike is costly	Probably since <i>to publish your app in the Google Play Store or the Apple App Store, then they charge a fee for becoming a "registered developer"</i> (Arya, 25). Hence developers start charging their users.	Upon seeing a price on installing the app most users will opt to prioritize others that are closest to 0 cost.
4.	Data loss in changing of devices	Application tend to use local data storage for user progress	Users that change devices will experience data loss. The need for software updates takes twice the time.

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