

BORANG PENGESAHAN STATUS TESIS

JUDUL: MOBILE HEALTH ENCYCLOPEDIA (MHEpedia)

SESI PENGAJIAN: 2011/2012

Saya CHIP WAI YEIN

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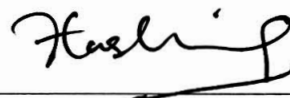


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MOBILE HEALTH ENCYCLOPEDIA

CHIP WAI YEIN

This report is submitted in partial fulfillment of the requirements for the
Bachelor of Computer Science (Software Development)

FACULTY OF INFORMATION AND COMMUNICATION TECHNOLOGY
UNIVERSITI TEKNIKAL MALAYSIA MELAKA

2012

DECLARATION

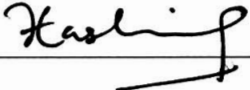
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(PUAN NOR HASLINDA BINTI ISMAIL)

DEDICATION

To my beloved parents, your moral support is my greatest divine inspiration. To my friends, your encouragement is the essence of my determination. To Puan Nor Haslinda Ismail, my supervisor, your dedication and effort has truly been my core of strength in the quest of completing this application.

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Last, I would like to thank you, the reader for taking your time to read this report.

Thank you.

ABSTRACT

Smartphones available in the market today provide number of advanced functions for the users as purpose to solve daily problems, as well as entertainment and a way to gain knowledge. The project aims in developing this mobile health encyclopedia application named MHEpedia. MHEpedia is an easy-to-use mobile application that is ideal reference tool for those requiring quick access to health care services and information. MHEpedia is a mobile application that help to improve health care quality which support any Android enabled smartphones. It is applicable to all smartphones with Android operating system. MHEpedia offer a great potential and benefits for users; it is quick and easy-to-use and provides unlimited accessing even without internet connectivity. The developed mobile application is expected to meet the needs of a wide range of users such as housewife, teenagers, hard to reach population and travelers all around the world. The project incorporates the development of three main components: (1) Android-based mobile client that provides interface for front-end query input; (2) A back-end database for serving health care services and information contents; (3) A health care service for handling the exchange activities between the mobile client's queries and the database.

ABSTRAK

Telefon pintar yang terdapat di pasaran masa kini menyediakan pelbagai fungsi yang maju untuk pengguna untuk menyelesaikan masalah harian, sebagai hiburan serta menimba ilmu. Projek ini membangunkan aplikasi mudah alih dalam bidang kesihatan dinamakan MHEpedia. MHEpedia merupakan aplikasi yang mudah digunakan untuk pihak yang memerlukan saluran cepat dalam memperolehi perkhidmatan dan maklumat kesihatan. MHEpedia merupakan aplikasi mudah alih yang menyokong Android telefon pintar untuk meningkatkan mutu kesihatan. Ia boleh digunakan oleh mana-mana telefon pintar bersistem operasi Android. MHEpedia menawarkan potensi yang besar dan faedah bagi pengguna, ia cepat dan mudah untuk digunakan serta menyediakan tanpa had mengakses walaupun tanpa sambungan internet. Aplikasi mudah alih yang dibangunkan memenuhi keperluan pelbagai pengguna seperti suri rumah, remaja, penduduk luar bandar dan pelancong di seluruh dunia. Project ini mengandungi tiga komponen utama: (1) berasaskan Android yang menyediakan muka kepada input. (2) Pangkalan data back-end untuk perkhidmatan penjagaan kesihatan dan kandungan maklumat; (3) Perkhidmatan kesihatan untuk mengawal pertukaran aktiviti antara pengguna dan pangkalan data.

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LIST OF ABBREVIATION

ADT	-	Android Development Tools
Android SDK	-	Android Software Development Kit
AVD	-	Android Virtual Device
BMI	-	Body Mass Index
CD	-	Compact Disc
DVD	-	Digital Versatile/Video Disc
GPS	-	Global Positioning System
HTML	-	Hypertext Markup Language
ICT	-	Information Communication and Technology
IDE	-	Integrated Development Environment
JDK	-	Java Development Kit
MHEpedia	-	Mobile Health Encyclopedia
OOAD	-	Object Oriented Analysis and Design
OS	-	Operating System
PDA	-	Personal Digital Assistant
UK	-	United Kingdom
UML	-	Unified Modeling Language

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CHAPTER I

INTRODUCTION

1.1 Project Background

An encyclopedia is a type of reference work, a compendium holding a summary of information or knowledge. Encyclopedia synthesizes knowledge, giving readers a view of what is known about a myriad of specific topics, and presents an orderly assembly (often in alphabetical order) of the facts essential to an understanding of each topic.

Health encyclopedia is an encyclopedia that under medical and health categories. It contains a comprehensive of medical and health consumer information resources which includes detailed information about common symptoms, health conditions, medical treatments and medical knowledge in order to provide user a better, healthier life.

Nowadays, health encyclopedia are most commonly found in form of book, CD, DVD or available on-line. However, it is inconvenient for the user to carry the health care book around or use CD/DVD to obtain health care knowledge. Besides that, there is a lot of health encyclopedias website available online. When there is no internet connection, user cannot access to the website anytime, everywhere.

In order to overcome the problems above, mobile health is one of terms used for practice of medicine and public health, supported by mobile services. The term is most commonly used in reference by using mobile communication devices, such as smartphones or tablet computers, for health service and information. Within the last year, the growth in the mobile healthcare market has greatly accelerated. Nevertheless, the Mobile Health market is still in an embryonic state. These findings are part of research2guidance's new Mobile Health Market Report 2011-2016.

It is very important to develop Mobile Health Encyclopedia because this mobile application provides greater access to larger segment of a population in developing countries, as well as improving the capacity of health systems in such countries to provide quality healthcare. This mobile application including searching details/information of common symptoms, homecare treatment of symptoms, doctor questioning diagnosis, hearts rate calculator and first aid videos guide.

1.2 Problem Statement

There are few problems and weaknesses identified from the current/existing mobile health application. Some of the problems are listed as below:

1.2.1 Limited access without internet/wireless connection

Most of the current/existing mobile applications required internet/wireless connection in order to access to the health care information or services. As a result, user unable to request for health services at anytime, everywhere. Hence, new Mobile Health Encyclopedia is developed to be a standalone mobile application which does not require internet connection to access health care services.

1.2.2 Lack of user friendly

The user interface of the current mobile health application is lack of user friendly. User may needs to navigate more screens in order to find certain symptoms. Hence, the new version that to be developed must improve the menu, provide a clear and more quickly access to certain function.