

JUDUL: eCare- Health Science System

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eCARE – HEALTH SCIENCE SYSTEM

SURIANI BINTI MOHAMED

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**

2007

DECLARATION

I hereby declare that this project report entitled

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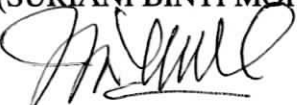
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DEDICATION

To my beloved parents

ACKNOWLEDGEMENTS

First of all, I would like to thank PM Dr.Nanna Suryana for giving assistance to complete this project successfully

I would also like to thank my beloved parents who have been giving me support and motivation throughout my project and not forgettable, my sister that also giving ideas and opinions in this system development.

Thanks also to all my friends who have helped me very much in completing this project.....all of your support is very much appreciated.....I would also like to thank to all those who involved in this system development at every stage.

Alhamdulillah, praise to Allah because this system can be finished in the timeline given with support and help from those involved either direct or indirectly... We cannot imagine what the process would have been like without their enthusiasm, patience and hardwork...Thank you very much... ..

Thanks

ABSTRACT

eCare – Health Science System is develop to overcome the current system existed. This system is build as a combination of various application or sub modules such as registration for join discussion, share and upload file, calculating BMI, search disease, quizzes and health news configuration. Besides that, this system is develop using OOAD approach that applies object modeling techniques to analyze the requirements for a context to design a solution. It is develop to help user more concern to take care their health and add their knowledge how to prevent the disease. This system allows them to share tips, and changing idea with other user. This system can help them to solve and reduce their fearless about the diseases by let the user know and read the current news regarding health and new disease. eCare – Health Science system also provide the health quizzes to test their knowledge about health. Besides that, this system also suggests the best solution to control their diet based on their BMI status. The implementation of this system is hoped can provide ease of use to the user and help them to keep their body healthy and free from disease. This system will be improve and adding new features from time to time in order to provide good health services to the user.

ABSTRAK

eCare – Health Science System dibangunkan sebagai satu kombinasi pelbagai aplikasi atau modul seperti pendaftaran untuk perbincangan, berkongsi tips dan idea, mengira BMI, mencari maklumat mengenai penyakit, kuiz dan konfigurasi berita tentang kesihatan. Selain itu, sistem ini dibangunkan menggunakan pendekatan OOAD yang mengaplikasikan teknik pemodelan objek untuk menganalisis keperluan keseluruhan untuk merekabentuk satu penyelesaian. Ia dibangunkan untuk membantu pengguna lebih mengambil berat kesihatan diri dan menambah pengetahuan bagaimana untuk mengatasi penyakit tersebut. Sistem ini membenarkan pengguna berkongsi tip dan bertukar fikiran dengan pengguna lain. Sistem ini dapat membantu mereka mengurangkan ketakutan mereka terhadap penyakit tersebut dengan menggalakkan pengguna membaca berita kesihatan dan wabak baru. Selain itu juga, sistem ini akan mencadangkan cara terbaik untuk mengawal diet seimbang berdasarkan status BMI mereka. Perlaksanaan sistem ini diharapkan dapat memberi kemudahan kepada pengguna dan membantu pengguna menjaga kesihatan tubuh badan dan bebas daripada penyakit. Sistem ini akan diperbaiki dan menambah modul baru dari semasa ke semasa untuk memberikan perkhidmatan kesihatan yang lebih baik kepada pengguna.

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LIST OF ABBREVIATIONS

BMI	Body Mass Index
OOAD	Object Oriented Analysis Design
PSM	Projek Sarjana Muda
GUI	Graphical User Interface
DBMS	Database Management System
UML	Unified Modeling Language

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CHAPTER 1

INTRODUCTION

1.1 Project Background

Everyone has his or her own definition of health but one thing for sure and agreed by all is being healthy is one of an important factor for them to live in secure, longer and better condition. They need more information about health to support them in caring their health to make sure they always being in healthy and preventing all the diseases. ICT in Health and Bioinformatics are needs to make sure there are improvements in health organization.

There are still no integrated application that combining all the health tips, good recipe, health news, quizzes, and other simple application such as calculating BMI together. Besides that the current system existed does not give chance to users to sharing their knowledge or tip, health food recipe, and others. So for that purpose an application system that called “eCare- Health Science System” has been developed to overcome all the problem existed in the current system. The purpose of this system is to provide more information regarding the health science, how to cure the disease, ways to prevent and etc. Besides that it provides simple quizzes about health to test how many information that they know regarding a particular health topics. They can also share their health tips or problem with others. From this application they gain more knowledge about health and how to care it.

This system hopefully can be successful to develop and to provide more information regarding the health. eCare- Health Science System has been implemented using the Visual Studio, ASP/net and the SQL as the database. It also hope to make users more easier and provide good services, user friendly application in order to prove them that this system is an useful application that they must visit every time and use it to support them when they need it .

1.2 Problem Statements

Health science is the discipline of applied science which deals with human and animal health. There are few parts on health science: the study, research, and knowledge of health and the application of that knowledge to improve health, cure diseases, and understanding how humans and animals function. It cannot be denied that there are many health information that can be found in the internet but there are still a few problem that facing the user such as there are still no application that combining all the health tips, good recipe, health news, quizzes, and other simple application such as calculating BMI together. Besides that the current system does not give chance to the user to sharing their knowledge or tip, health food recipe, and others. Furthermore, the current systems provide health information that too complex which gives difficulties to the user to get better understand. The current system also is not systematic and deficient in providing the information. The user requires to find the information needed in different page and need them to read all unimportant stuff before they found what they want. It is very time consuming even to get a simple data. Besides that the current system does not provide an interactive application that attracts the user to access the system. So for that purpose an application system that called “eCare- Health Science System” will be developed to overcome all the problem existed in the current system.

1.3 Objective

There are a few objectives that contribute to the development of this system such as listed as below:

- 1) To develop a health information system that combining all the health tips, good recipe, health news, quizzes, and other simple application such as calculating BMI together.
- 2) To provide simple application regarding the health such as calculating BMI and etc.
- 3) To provide member registration for those user who interest in joining discussion and quizzes.
- 4) To enable user upload and share their health tips and food recipe to control diet.
- 5) To allow user to login as a member and allow system to verify them.
- 6) To allow user search the disease, description about the disease and how to prevent it.
- 7) To develop user friendly health science system
- 8) To provide an interactive health system that attracts the user to use it.
- 9) To make sure that the health content does not too complex for the user to understand it.
- 10) To minimize user input and easy to manage.
- 11) To allow administrator to configure the health news by add, update and delete function.

1.4 Scope

The scope of this project is divided into two categories:

User

- i) Develop as web based application system for all user that interest in gaining health information.

System

- i) Development tools for the application are ASP.Net, Microsoft Visual Studio .NET and IIS. It also used SQL Server as a database.
- ii) Module 1- Member registration for health discussion
Function: This module allow user to register as a member and login to join health discussion
- iii) Module 2 - Upload and share health tips, food recipe
Function: This module allow user to share their health tips and upload health food recipe to control diet, keep healthy to be share to the readers
- iv) Module 3 - Calculating BMI (suggest tips or food)
Function: This module allow user to calculate their Body Mass Index (BMI) to determine whether they fat, thin or normal. The system will also suggest tips or food according their status.
- v) Module 4 – Health Quizzes
Function: This module is enable user for those who interest to test their knowledge stage about health. The system will calculate the score and display their position for that score.
- vi) Module 5 - Search and verify disease information
Function: This module allows user to search health information and type of diseases. The user can enter type of disease and the system will display the symptom and ways to prevent or how to cure it.
- vii) Module 6 - Health news configuration
Function: This module allows the administrator to add, update and delete the news.

1.5 Project significance

This project is important to those who needed all the features that it provide especially user who are interest in health care. This eCare- Health Science System gives an accommodation in health organization to make sure people are exposed to the basic knowledge of health. There are few benefits that can be gained from this application development.

- i) The user can add their knowledge about health
- ii) They can also use the knowledge to prevent their body from all the diseases.
- iii) They can use this application more easier than the current system existed.
- iv) They also can share their knowledge and changing idea with others to care their health. This system can help them to solve and reduce their fearless about the diseases.

1.6 Expected output

- i) A system where allows user to search health information and type of diseases.
- ii) The system able to display the symptom and ways to prevent or how to cure it.
- iii) The user need to login or register as a member to post question about health or share their health tip to other members.
- iv) The user is also allow to upload their health food recipe or health tips to be share to the readers.
- v) The system able to provide health quizzes for those who interest to test their knowledge stage about health.

- vi) The system able to calculate the score and display their position for that score.
- vii) The system is also able to provide the nutrition food information and calculating the Body Mass Index(BMI) and suggest the best exercise to care their health
- viii) The system will also display the health news. The user can view more for the news.
- ix) The system allow the administrator to configure the health news whether to add or delete the news.

1.7 Conclusion

As for the conclusion, eCare- Health Science System hopefully can be implemented successfully. This application system are hoped to solve all the problems that existed in the current system and provide good services to the user. The used of this system hopefully give advantages and convenience for those who really need it as a reference and support for healthy life. It also hoped to encourage them to maintain their health and always prevent the diseases. This system development hopefully can give an accommodation to the user and increase their knowledge about health and help to contribute in increasing of ICT in health and Bioinformatics organization.

After all, this chapter describes the project background, objective; scope, benefits gained and problem arise in current system. The literature review and project methodology will be described in the next chapter.

CHAPTER II

LITERATURE REVIEW AND PROJECT METHODOLOGY

2.1 Introduction

This chapter describes the results of literature review and project methodology. Literature review provides the meaningful context of the project within existing research. It sets the basis for discussion or analysis or contemplation of implications or anticipation of further research. Through the literature review, we need to distinguish what has been done from what needs to be done. Selected approach or methodology used is very important in any kind of project. Different methodologies are inevitable, stemming directly from the questions of what constitutes a methodology and what are a methodology's underlying principles. Projects differ according to size, composition, priorities, and criticality. The people on a project have different biases based on their experiences, principles, and fears. These issues combine so that what is optimal differs across projects. The content of this chapter are described in details such as in fact finding, project methodology, project requirement, and project schedules sub topics.