

BORANG PENGESAHAN STATUS TESIS[^]

JUDUL: HERBAL THERAPY ADVISOR SYSTEM

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Herbal therapy advisor system / Adidah Ibrahim.

HERBAL THERAPY ADVISOR SYSTEM

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**This report is submitted in partial fulfillment of the requirement for the Bachelor of
Information and Communication Technology (Software Development)**

FACULTY OF INFORMATION AND COMMUNICATION TECHNOLOGY

KOLEJ UNIVERSITI TEKNIKAL KEBANGSAAN MALAYSIA


2006

DECLARATION


I hereby declare that this project report entitled
HERBAL THERAPY ADVISOR SYSTEM

Is written by me and is own effort and that no part has been plagiarized
without citations.

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DEDICATION

I would like to dedicate my appreciation to my parents,
Encik Ibrahim Ahmad and Puan Hawa Bahari
who have provided me with support emotionally
and financially throughout this long journey called my college career.

To my brothers, Kholin and Nordin,
And my sisters,
Wahidah, Tohibah, Hajar, and Fauziah
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Not to forget my lovely friends.
Thank you for all supports and
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ABSTRACT

Herbal therapy advisor system is a system that will be used by the internet user especially traditional practitioner. This system is able to convey the related information to herbs and also provide information based on user symptoms. All user need to do is to enter their disease and symptoms, then the system will analyzed and suggest what herbs medication should be consult by them and how to make the herbs preparation. This system also could help the user to recognized herbs types that exist around them. Besides gathering the information, user also can interact with each other in Forum area. So, user can discuss any related topic. Advertisement space will be provided for user to get information about herbs products. So, with this way, user can advertise their newest product. This system is hoped to increase one of information sources of herbs.

ABSTRAK

Herbal Therapy Advisor System adalah sebuah sistem yang akan digunakan oleh pengguna internet dan juga pengamal perubatan traditional. Sistem ini berupaya memberikan maklumat yang berkaitan herba dan juga memberikan maklumat herba yang sesuai digunakan berdasarkan jenis penyakit pengguna. Pengguna hanya perlu memasukkan jenis penyakit atau simptom yang dihadapi, sistem akan menganalisis dan akan mencadangkan herba yang perlu digunakan untuk mengubatnya serta cara-cara untuk menyediakannya. System ini juga dapat membantu pengguna mengenalpasti jenis herba yang terdapat di persekitaran mereka. Selain mengumpul maklumat, pengguna juga boleh berinteraksi dengan pengguna yang lain. Dengan menggunakan ruangan Forum. Di sini, pengguna boleh memberi dan mendapatkan pendapat, pandangan tentang sesuatu topik yang berkaitan herba. Ruangan iklan disediakan untuk pengguna mendapatkan maklumat tentang produk-produk yang berasaskan herba yang terdapat di pasaran. Dengan cara ini, pengguna dapat mengiklankan produk-produk yang mereka jual atau produk terbaru. Dengan terbinanya sistem ini, ia dapat menambahkan satu salah satu cabang saluran untuk mendapatkan maklumat tentang herba.

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CHAPTER I

INTRODUCTION

1.1 Background Project

System that will be developed is to make sure that the user can get information easier about herbal therapy. User also will get information about the type of herbs that should be used for the health problems. With this system, user can now know and learn different type of herbs.

User can get all information from this system. They just need to register as member in the system. If the user does not register as member in this system, they can not take part in certain module of this system. After registration, user will get username and password. By being the member, user can participate in this system such as forum area, product announcement and user can search the information that they want about the herbs.

Most the young generation do not know about the benefit of using herbs. This system will increase knowledge about herbs and also the way to use the herbs. User is able to learn and gain information about the type of herbs that are suitable to be use according to the disease symptoms. User just needs to insert the symptoms of the disease and the system will automatically analysis the symptoms and display the list of herbs

that are suitable to be use and place where to get the herbs. Besides that, user also learn how to use the herbs, and this system also teach how to preparing the herbs.

Besides that, these systems also provide product announcement area. In this area, user can advertise and promote the latest product herbs in market. So, user can share information about the latest product, benefits and all information about the product with the others user. User can promote their product in this area with upload the picture and detail information about product herb. This system can help the user in the business.

These systems also provide the forum area. The forum area will act as the middle person where user can share their opinion, and knowledge about the herbs. User can ask their confusion and problem about herbs to another user. Other user can give response about any problem. So, this will upgrade the knowledge about the herbs and also therapy. User also can send their article or news about the herbs, disease and others. By having this area, user can gain their knowledge and they can learn more about the herbs.

1.2 Problem Statement

Recently, a lot of people do not know the goodness of the ingredients either herbs or spices. This problem happen because user not sensitive to herb and its benefit. There are much young generation that does not know what herbs are and also the benefit of herbs. It's because they less exposure about herbs.

The problem happens because user does not know how to get information about herbs. Most information about the herb is learnt from generation to generation. So, the learning process happened by spreading information orally. To know about herbs, user needs to find the information from the magazines or articles. This will take time as user needs to find the related magazines or articles. As a result, users take the easiest way by ignoring any related information about herbs.

Most of the people do not know about the benefits of herbs. Actually, herbs can cure lots of diseases, such as fever, cough, and others. If user has the symptoms of the disease, they can use herbs for cure the disease from the early stage.

1.3 Objective

Herbal Therapy Advisor will make sure that the problems that are usually faced by the user can be solved. The objectives of developing this system are:-

- To provide knowledge and detail information about herbs.
- To assist the consumer in order to use what type of herb to be used on symptoms faced by them.
- To share experience or idea among the user.
- To advertise any product that related to herbal therapy.
- To expose to the consumer the benefits of the herbs.
- To teach on how to prepare the herbs before it can be applied.
- To suggest a place where the herbs available.

1.4 Scope

1.4.1 User

The targeted user for this system is user who access to the Internet. They can surf this site in the Internet and can use it to get all the information about herbs. This system can be used by all such as Internet's user, people who need information related herbs and traditional consumer. By using this system, the young generation can get knowledge, information and experience on how to use herb in daily life.

1.4.2 Entities

The topics that will be covered in this system are introduction, member registration, search and information about herbs, forum area and banner advertisement area.

For introduction, it introduces and describe about the Herbal Therapy Advisor System. User can get information about general herbs. User can be activated in the system by registering to the system as a member. The registration process is to make sure that user involves in the forum session, product announcement and search information.

User also can search the herbal that suit for the user according to the diseases. User need to key in the symptoms of the disease, system will analyze the symptoms and display the suitable herbs for the user. User will also get the information about the steps and techniques to use the herbs and also the treatment for the disease. Besides, it helps to suggest the place where the herbs are available.

In forum area, user is able to ask question, give opinion and also make a discussion about herbs. User just needs to register and send their opinion in the area provided. User also can advertise the herbs and also the products which made from herbs in the product announcement. User will gain information about the latest products, advantages and also how to use about some of the herbs products.

1.4.3 Platform

User requires Internet connection to access to this system. Type of operating system that will be used is Windows XP Professional and Apache acts as a Web Server.

This system used PHP languages and My SQL for the database system. The only software that needs to be installed on the users' machine is MS Internet Explorer 6.0.

1.5 Project Significance

The significant of this system is to provide knowledge and detail information about herbs. The young generation can be introduced to the herbs. They do not need to go out and to find the magazines to get information. This system is design as guidance to the user to choose what type of herbs based on symptoms faced by them. User will be taught on how to use and prepare the herbs before it can be applied. The system also can give a suggestion of a place where the herbs are available. In addition, it gives exposure to the user about the benefits of the ingredients contain in the herbs. User can share experience or idea among the other user who take part in the forum. Besides that, this system can give benefit for the herbs product seller. They can advertise any product that related to the herbal therapy in the product announcement.

1.6 Conclusion

Herbal Therapy Advisor acts like a system that provides information about various types of herbs and spices that are available in Malaysia. Nowadays, only old generation uses this kind of therapy and this system will give exposure to the youngster generation about the usage is benefit of herbal.

In addition, user can get detail information about the suitable herbs to be used in order to cure the disease. User just need to key in symptoms of the disease and automatically the system will diagnosed. As a result, it will list all the herbs that can be used. By having this system, it will reduce time in searching information about it.

This system also features forum that enable user to give opinion, share opinion and comment about certain herbs. A lot of knowledge can be gained based on user's experience.

Then, the explanation of the next activity that will be developed is in the chapter II, Literature Review and Project Methodology.

CHAPTER II

LITERATURE REVIEW

2.1 Introduction

In this chapter, it will cover Literature Review and Project Methodology.

Literature Review is process of searching, collecting, scanning, studying and analyzing the relevant sources such as books, journals, technical reports and others. Besides that, in the Fact and Finding subchapter will discuss based on passed research, references or others that are related to this system. Source for this system are research done on herb shop, Seri Harum that is located at Taman Tasik Utama and CD-ROM about herbs.

In subchapter Project Methodology, it will describe methodology that will be used in Herbal Therapy Advisor System. All information about the activities that are related to the methodology will be described in every stage. Besides, Project Requirement will explain briefly about software requirement, hardware requirement and others. Under software and hardware requirement subchapter, it describes what software and hardware suitable to be used in this system.

2.2 Fact and Finding

2.2.1 Domain

Herbal Therapy Advisor system is the system that will give more information and knowledge about herbs to the user. By having this system, user can now know and learn more about different type of herbs. User can know the goodness and the benefit of the ingredients that contained in the herbs.

Besides that, user can know type of herbs based on the symptoms of the diseases. User also can get and give their opinion, comments or knowledge in the forum area. This system also allows seller or retailer of herbs' product to promote or advertise their latest product in the market. By this, it can give new information for user about herbs product.

In reality, there are several types of herbs such as plants, spices, flowers, roots and others. Each type of herbs has different aroma, taste and shape. The usage of herbs used from generation to the generation. The old generation used the herbs in their daily life. They use the herbs for medicating the diseases, and the herbs eaten raw as accompaniment to rice. Besides that, the herbs also can be used as a decoration because certain herbs have a beautiful flower and a nice fragrant aroma. The ingredients either herbs or spices bring a lot of goodness and benefits to the consumer.

The concept of this system is consumer to consumer where information can be shared among the consumer who joins the system. The user can upload the information that related to herbs or products to the system. By this, it can gain more information about herbs.

2.2.2 Existing System

2.2.2.1 Herbal Guide CD-ROM

Herbal Guide CD-ROM describes the type of herbs. In this CD-ROM, user can collect information about type of herbs, can know more about benefits of the related herbs, safety concern, and how to prepare and to use the herbs. Besides that, this CD-ROM includes the real pictures of herbs. By having this, user can know more and imagine the real shape of the herbs. Besides, this CD-ROM provides the information about the herbs that suitable to be used based on the diseases. Users just need to click on type of disease and herbs for disease will be displayed on the screen.

Although this CD-ROM give more information about herbs but it is not practical for user because user need to buy the CD-ROM at the shop. The user takes time to survey the CD-ROM at the shop and to buy it. Actually, this software needs to be uploaded in Internet. Nowadays, user more comfortable to get all the information from Internet. But, by developing Herbal Therapy Advisor system, user can get information easier, faster and in effective manner.

Besides that, user does not get information about herbs by searching according to the symptoms. With Herbal Guide CD-ROM, user needs to click on type of disease and type of herbs will be displayed. In the Herbal Therapy Advisor system, user just needs to insert the symptoms of the disease and system will analyze the symptoms. As a result, it will display the type of herbs. User gets information faster because it directly gives the solution to the user based on disease symptoms. This system acts as a decision maker.

2.2.2.2 References

For developing this system, “Heinerman’s Encyclo] and Herbs” book written by John Heinerman becomes a reference in this system. From this book, more information about types the herb, benefit and how to prepare and to use the herbs can be obtained. In this book, it also explain in detail about the herbs such as the origin of the herbs, type of the herbs, and user can know the scientific name of the herbs.

But, by developing this system, it can give benefit to the user because user no needs to buy or read the book. User just needs to surf the Internet to get information. It can save a lot of time. User also can get more information compare to the book.

2.2.2.3 Technique

The technique that had been chosen to gather information is by having interview. Mr. Jaafar Abd. Razak is the owner of Seri Harum Herbs. Seri Harum Herbs does not have any system to record the herbs to be used. The herbs used to cure the diseases based on the experience and knowledge about herbs.

The treatment gives to the user according to the ingredient of the herbs and its benefit. They will make sure the cause of the disease and they suggest the suitable herbs. So, the information about the herbs that being used by the remedy without refers to any system or reference. By using this method, it can bring a problem to the new generation to know the benefits and how to use and prepare the herbs. It will cause the problem since the knowledge and practice about herbs do not well document.

By having this system, the others user can know and learn about herbs. So, it can perpetuate knowledge about the herbs.

2.3 Project Methodology

2.3.1 Methodological Approaches

Object Oriented Activity Diagram (OOAD) is one of the major influences on the quality of the system developed is the software development approach adopted. If the approach used is not appropriate for a particular type of application then it may limit the quality of the system being produced. The object-oriented approach provides a mechanism for mapping from real-world problems to abstractions from which software can be developed effectively. Besides that, object-oriented provides conceptual structures that help to deal with modeling complex information systems. As information system requirements are becoming increasingly complex the use of an object-oriented approach is more necessary. It is a sensible strategy to transform the development of a large, complex system into the development of a less complicated sub-system. Object-oriented also aims to provide a mechanism to support the reuse of program code, design and analysis models.

2.3.2 Methodology SDLC (System Development Life Cycle)

The SDLC methodology has been chosen because the result of each phase flows to the next phase. The traditional life cycle is mostly a reference framework. For most system, the boundary between phases is blurred and there is considerable backtracking between phases. There are several phases to complete this project which involves system analysis phase, system design phase and system implementation phase.

The project has decided to use the RUP (Rational Unified Process) an Object-Oriented methodology for the Herbal Therapy Advisor system. The Rational Unified Process divides one development cycle in four phases that is inception phase, elaboration phase, construction phase and transition phase. Each phase is included with a

well-defined milestone which is appointed in time at which certainties can be made and therefore key goals must have been achieved. This is the end of the activities in each phase.

- **Inception Phase**

In this phase the business case which includes business context, success factors and financial forecast is established. To complement the business case, a basic use case model, project plan, initial risk assessment and project description are generated. After these are completed, the project is checked against the following criteria such as stakeholder concurrence on scope definition and schedule estimates, requirement understanding as evidenced by the fidelity of the primary use cases, depth and breadth of any architecture prototype that was developed and also credibility of the schedule estimates, priorities, risks and development process.

- **Elaboration Phase**

During elaboration phase, the project will focus on the architecture and plan. The nature of the iteration won't need the much changing but the longer software produced will certainly increase. During elaboration the project will discover the rest of the use cases and will implement the minimal set.

The outcome of the elaboration phase is a use-case model which the all use cases are and actors have been identified, and most use case descriptions have been developed.

The Milestone of the Lifecycle Architecture is at the end of the elaboration phase is the second important project milestone and the Lifecycle Architecture Milestone. At this point, the project will be examines the detailed system objectives and scope, the choice of architecture, and the resolution of the major risks. The main evaluation

criteria for the elaboration phase involve the answers to the questions like what is the credible basis of estimates.

- **Construction Phase**

During the construction phase, the project will be continued by giving the customer the minimum system that they need. The nature of the iterations won't change much, but the project will be focus on identifying the smallest possible deliverable that will still meet at least some of the customers needs. During construction, the use cases will be change followed by the customer sees the developing of the systems and feeds changes back to the project work. The project will be decides in the software, the sites and the users are ready to go operational, without exposed the project to the high risks.

- **Transition Phase**

The purpose of the transition phase is the transition of the software product to the user community. Once the product has been given to the end user, the issues normally will be arise that require the project to develop new releases, correct some problems or finish the features that were postponed.

The transition phase is start when a basic developed are enough for the end user. This basically requires that some separation of the system has been completed to an acceptable level of quality and the user documentation is available so that the transition will be provided positive results for all parties. This includes the "Beta Testing" to validate the new system and user expectations parallel operation with a legacy system.

The transition phase focuses on the activities required tp place the software of the users. Normally, this place includes several iterations, including beta releases, general availability releases, as well as the fix errors and enhancement releases.

Considerable effort is finished in developing user-oriented documentation, training users, supporting users in their initial product use and will be wait for the user feedback.

2.4 Project Requirements

2.4.1 Software Requirement

2.4.1.1 Development Tools

PHP is chosen for to develop this system. PHP as a server-side scripting language. For this system, PHP is use because it is an easy language to develop, learn and can support many databases.

Besides that, PHP can be free use on any machine for any purpose without paying for software or making royalty payments to anyone. By using PHP, system can create any application and distribute PHP with it any way user wants.

Using PHP, administrator can update, create databases and perform mathematical calculations include complex trigonometric functions. PHP allow can create and delete arbitrary files on the system, depending on the level of security at which have PHP running.