DECISION SUPPORT SYSTEM FOR HOTEL AND CHALET SELECTION IN PANGKOR ISLAND

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UNIVERSITI TEKNIKAL MALAYSIA MELAKA

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DECISION SUPPORT SYSTEM FOR HOTEL AND CHALET SELECTION IN PANGKOR ISLAND

SITI FAIZAH BINTI MOHAMAD RAZALI

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

FACULTY OF INFORMATION AND COMMUNICATION TECHNOLOGY
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2009

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I hereby declare that this project report entitled

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

STUDENT : ..... Date: 10 JULAI 2009

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DEDICATION

To my beloved parents, supervisor, lecturers, and my friends for giving assistant to complete this project successfully.

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ABSTRACT

Decision Support System for Hotel and Chalet Selection in Pangkor Island is a system developed based on the web based application for hotel and chalet at Pangkor Island. The purpose of this system is developed to overcome the difficulties of expected visitors or users searching for hotel and chalet information that time consuming, difficulties to make hotel and chalet selection based on their preferred criteria and the managing of many records by manually. The main objectives to develop Decision Support System for Hotel and Chalet Selection in Pangkor Island are ease users in choosing their preferred hotel or chalet. To avoid all the difficulties, a few resolutions had been done especially by developing system computerized used the concept of Decision Support System (DSS) in producing the suggestion for expected users, and data managing systematically for administrator. As for the users of the system, two users are identified to access the system that they either expected users or visitors and system administrator. For distinctive features, the system has several functions such as hotel and chalet selection based on preferences value and managing of hotel and chalet information. As for the Decision Support System part, the system employs the Decisions Table technique. The system consists of three main modules, searching module, selection module and administration module. As for the development process, this project used the evolutionary prototyping methodology, Macromedia Dreamweaver 8 as software, PHP as the programming language whereas MySQL is for the database management system.

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ABSTRAK

'Decision Support System for Hotel and Chalet Selection in Pangkor Island' adalah sistem yang berasaskan aplikasi web yang dibangunkan untuk pemilihan hotel dan chalet di Pangkor Island. Tujuan sistem ini dibangunkan adalah bagi mengatasi masalah yang wujud seperti proses pencarian maklumat hotel dan chalet yang susah dan mengambil masa terlalu lama, sukar membuat pemilihan yang tepat bagi sesebuah hotel atau chalet dan masalah menyimpan rekod yang terlalu banyak disebabkan kaedah yang lama. Objektif utama dalam membangunkan *"Decision Support System for Hotel and Chalet Selection in Pangkor Island"* adalah untuk menawarkan bantuan kepada pengguna sistem atau pelancong dalam memilih hotel atau chalet idaman mereka. Bagi mengatasi masalah yang wujud dalam sistem sedia ada, beberapa langkah telah diambil antaranya memperlengkapkan penggunaan komputer secara menyeluruh, menitikberatkan penghasilan cadangan yang meliputi kriteria yang dipilih oleh pengguna sistem atau pelancong dengan menggunakan pendekatan *"Decision Support System (DSS)"* dan juga pengurusan data secara sistematik. Tedapat dua pengguna bagi sistem ini iaitu pelancong atau pelawat yang ingin mendapatkan maklumat hotel atau chalet dan pentadbir sistem. Sistem yang dibangunkan ini juga mempunyai fungsi-fungsi tertentu untuk memastikan keberkesanannya antaranya terdapat fungsi pemilihan hotel dan chalet berdasarkan nilai kecenderungan dan pengurusan maklumat bagi setiap hotel atau chalet. Sistem ini juga mengimplementasikan teknik jadual keputusan. Sistem ini merangkumi tiga modul utama iaitu Modul Carian, Modul Pemilihan dan Modul Pentadbir. Sistem ini dibangunkan berdasarkan metodologi prototaip evolusi dan menggunakan perisian Macromedia Dreamweaver 8 serta PHP sebagai bahasa pengaturcaraan manakala MySQL pula sebagai pangkalan data untuk sistem ini.

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LIST OF ABBREVIATIONS

AHP	-	Analytical Hierarchy Process
AUT	-	Application User Testing
DBMS	-	Database Managemant System
DDL	-	Data Definition Language
DFD	-	Data Flow Diagram
DGMS		Dialog Generation and Management System
DSS	-	Decision Support System
DSSHCSPI	-	Decision Support System for Hotel and Chalet in Pangkor Island
ERD	-	Entity Relationship Diagram
FTMK	-	Fakulti Teknologi Maklumat dan Komunikasi
GUI	-	Graphical User Interface
IC	-	Identity Card
LAN	-	Local Area Network
MBMS	-	Model-Base Management System
MLM	-	Manufacturing Less Manufacturers
MYSQL	-	Structured Query Language
PC	-	Personal Computer
PHP	-	Pre-Hypertext Processor
RAM	-	Random Access Memory
SCM	-	Software Configuration Management
SSADM	-	Software Structure Analysis Design Management

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CHAPTER I

INTRODUCTION

1.1. Project Background

Decision Support System for Hotel and Chalet Selection in Pangkor Island (DSSHCSPI) is a web-based targeted for users or visitors when selecting and choosing hotels or chalets. This computerized system has implemented a decision support engine. Traditionally, before going to the island, users need to search manually and do not know which hotel or chalet that can be chosen. This proposed system's function is to assist users especially visitors and is available every time and every where. Users need only view the system to know the hotel or chalet that can be chosen. After having entered their preferences, the users will be automatically given a suggestion by the system. Therefore, the selecting process becomes smoother as if will reduce the time and budget. Users can also ask questions from the system and will get the result with several clicks of the buttons.

1.2. Problem Statement(s)

a) The process of choosing the hotel and chalet normally takes a long time. Users must go to the destination or search through the Internet to get the information about the hotel and chalet. It was not provide faster and efficient service that can

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reduce the time taken and becomes a vast problem to users if users do not have enough time to do the searching.

b) Users prefer comparative information of hotel and chalet, which includes the price range, location and service that the hotel and chalet could provide. However, most of the comparative websites of the tourism accommodation does not provide a faster way in helping the users to choose their preferable accommodation.

1.3. Objective

The system will allow users to use the Internet to get information when choosing hotel or chalet at Pangkor Island. The system will allow for interactive communications and facilitate decision making. Among the project objective is:

a) To display or give summarized information on hotels and chalets to the users about the location, prices range and services that are currently offered.

b) To help users in making the decision for choosing the preferred hotel or chalet at Pangkor Island through the online system; such faster and efficient service can reduce the time taken.

1.4. Scope

This system is limited to hotels and chalets selection located in Pangkor Island only. It focuses on the Decision Support System for Hotel and Chalet Selection in Pangkor Island. This section been classified into two scopes. The first scope is about the

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users of the system (section 1.4.1) while the second scope is about the environment of the system (section 1.4.2).

1.4.1 Module for the Users of the System

The user of the system is divided into two groups. They are the Administrator and the Customer. Table 1.1 is the module scope for the Administrator while Table 1.2 is the module scope for the Customer.

Table 1.1: Scope of the Administrator

Modules	Descriptions
Login	This system provides the login module for administrator or system developer to manage the data in the system.
Searching and Viewing	This system provides searching module to help admin or system developer to search and view the information in the system.
Updating	Able to administrator or system developer to update or editing module the system.
Adding	This system provides the add module which allows developer to add the new information needed.
Deleting	This system provides the delete module which allows developer to delete the information needed.

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Table 1.2: Scope of the Customer

Modules	Descriptions
Searching	This system provides searching module to help users search the hotel and chalet information either by hotel and chalet type, price range, package or location.
Input / Decision Support / Selection	This module or function allowed expected users to make selection for their hotel and chalet choosing based on criteria given. Also known as advance searching.

1.4.2 Environment

Mozilla Firefox version 2.0 and Internet Explorer version 6.0 as a browser.

1.5. Project Significance

The system can be used to increase the tourism promotion or act as a Promotion tools to any hotels and chalets at Pangkor Island It is an effective way to generate the revenue for the Perak state. Besides, the system provides faster and efficient service that can reduce the time taken in get the better location of hotel and chalet.

However, searching a suitable accommodation based on customer's preference usually takes a long time. Ironically, when the users want to book the chosen accommodation, they may miss it since other people have grabbed it earlier. Therefore, this system is to help the customer to get a quicker decision by providing a Decision Support System for Hotel and Chalet Selection in Pangkor Island.

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