

California State University, San Bernardino
CSUSB ScholarWorks

Theses Digitization Project

John M. Pfau Library

2006

Online hotel booking system

Junxian Wang

Follow this and additional works at: <https://scholarworks.lib.csusb.edu/etd-project>



Part of the [Databases and Information Systems Commons](#)

Recommended Citation

Wang, Junxian, "Online hotel booking system" (2006). *Theses Digitization Project*. 3083.
<https://scholarworks.lib.csusb.edu/etd-project/3083>

This Project is brought to you for free and open access by the John M. Pfau Library at CSUSB ScholarWorks. It has been accepted for inclusion in Theses Digitization Project by an authorized administrator of CSUSB ScholarWorks. For more information, please contact scholarworks@csusb.edu.

ONLINE HOTEL BOOKING SYSTEM

A Project

Presented to the

Faculty of

California State University,

San Bernardino

In Partial Fulfillment

of the Requirements for the Degree

Master of Science

in

Computer Science

by

Chun-Hsien Wang

March 2006

ONLINE HOTEL BOOKING SYSTEM

A Project

Presented to the

Faculty of

California State University,

San Bernardino

by

Chun-Hsien Wang

March 2006

Approved by:

[REDACTED]
Dr. Keith Schubert, Chair, Computer Science

March 9, 2006
Date

[REDACTED]
Dr. David Turner

[REDACTED]
Dr. George M. Georgiou

ABSTRACT

The Online Hotel Booking System is a project implemented for GoodLuck Hotel, which is an imaginary hotel. It provides people all over the world with an easy and fast way to book hotel rooms online.

The interface of the Online Hotel Booking System is Web pages that can be accessed with a Web site browser. The system is implemented in PHP (Hypertext Preprocessor) and HTML (Hyper Text Markup Language). Users can perform room booking activities at GoodLuck Hotel anytime and anywhere by accessing it via Internet.

The Online Hotel Booking System is an easy-to-use application. Everyone who knows how to use a Web browser can easily carry out booking, change the booking details, cancel the booking, change the personal profile, view the booking history, or view the hotel information by following its simple and clear GUI (Graphical user interface) design.

ACKNOWLEDGMENTS

I would not have finished my graduate project successfully without the support and encouragement of my advisor, my friends, and the help from my classmates during my studying at California State University, San Bernardino (CSUSB). I am so grateful to Dr. Keith Schubert, who is so helpful a supervisor. He has not only been my advisor on my master project but has also directed me through this entire effort. He provided me with lots of valuable information that has increased my knowledge and understanding of Web application and helped me in improving the quality of my project. Without his patient instructions for problem solving and program debugging, I think I could not have even finished my master project. I am also thankful to Dr. Turner and Dr. Georgiou for their serving on my committee and providing helpful comments on my master project.

Also, I appreciate the love, encouragement, understanding and tolerance from all my family members. They have provided full financial aid that makes my dream come true and let me finish my studies at CSUSB. Without their support, I would not have had the chance to come to United States and I would not get my master degree by completing this project.

Finally, I would like to thank the faculty of Computer Science Department for giving me an opportunity to pursue my M.S. in Computer Science at California State University, San Bernardino. I also want to thank all those who have helped me during my studying at CSUSB.

TABLE OF CONTENTS

ABSTRACT	iii
ACKNOWLEDGMENTS	iv
LIST OF TABLES	ix
LIST OF FIGURES	x
CHAPTER ONE: INTRODUCTION	
1.1 Purpose of this Project	1
1.2 The Scope and Limitations of Project	2
1.3 Significance of the Project	4
1.4 Definition of Terms	4
1.5 Organization of the Documentation	6
CHAPTER TWO: ONLINE HOTEL BOOKING SYSTEM	
2.1 Software Interfaces	7
CHAPTER THREE: SOFTWARE REQUIREMENTS SPECIFICATION	
3.1 Introduction	11
3.2 Overall Description	11
3.2.1 Product Perspective	11
3.2.2 Product Functions	12
3.2.3 Product Architecture	13
CHAPTER FOUR: DATABASE DESIGN	
4.1 Data Analysis	15
4.2 Database Schema Logical Model	16
4.3 Data Type and Details	19
CHAPTER FIVE: PROJECT IMPLEMENTATION	
5.1 Graphical User Interface Requirement	26
5.2 Graphical User Interface Website	28

5.2.1 Home of ChunHsien Wang's Project	28
5.2.2 Home of GoodLuck Hotel	30
5.2.3 Register Page	34
5.2.4 User Login Page	40
5.2.5 Main Page - Login Already	42
5.2.6 Booking Details Page	43
5.2.7 Confirm Booking Page	47
5.2.8 Change Booking Details Page	48
5.2.9 Booking Updated Page	50
5.2.10 Price Details Page	51
5.2.11 Payment Page	52
5.2.12 Booking Completed Page	56
5.2.13 View Booking Details Page	57
5.2.14 Cancel Booking Determined	59
5.2.15 Booking Cancelled Page	60
5.2.16 Change my Profile Page	60
5.2.17 User Profile Updated Page	61
5.2.18 Check Availability Page	62
5.2.19 Result Availability Page	63
5.2.20 Room Information Page	64
5.2.21 Special Promotion Page	65
5.2.22 About GoodLuck Page	66
5.2.23 Customer Care Page	67
5.2.24 Contact us Page	68
5.2.25 Travel and Shopping Page	69
5.2.26 Privacy Policy Page	70

5.2.27 Admin Login Page	71
5.2.28 Admin Menu Page	72
5.2.29 Change Price and Quantity Page	73
5.2.30 View Users' Profiles Page	74
5.2.31 Create New Administrators Page	75
5.2.32 Change Users' Records Page	76
5.2.33 Cancel Users' Records Page	77
5.2.34 Change About GoodLuck Page	78
5.2.35 Change Customer Care Page	79
5.2.36 Change Contact us Page	80
5.2.37 Change Travel and Shopping Page	81
5.2.38 Change Privacy Policy Page	82
5.2.39 Change Room Information Page	83
CHAPTER SIX: CONCLUSION AND FUTURE DIRECTIONS	
6.1 Conclusion	85
6.2 Future Enhancements	86
REFERENCES	88

LIST OF TABLES

Table 1. Structure of Table CLIENTS	20
Table 2. Structure of Table BOOKINGS	21
Table 3. Structure of Table USER	22
Table 4. Structure of Table STATEINUSA	22
Table 5. Structure of Table 2005OCT - 2006DEC	23
Table 6. Structure of Table ABOUTUS	23
Table 7. Structure of Table ROOMINFO	24
Table 8. Structure of Table CUSTOMERCARE	24
Table 9. Structure of Table TRAVELSHOPPING	25

LIST OF FIGURES

Figure 1.	System Architecture	8
Figure 2.	Online Hotel Booking System Use Case Diagram (Admin)	12
Figure 3.	Online Hotel Booking System Use Case Diagram (User)	13
Figure 4.	Deployment Diagram of Online Hotel Booking System	14
Figure 5.	Entity Relationship Diagram	17
Figure 6.	Database Relational Schema (Part I)	18
Figure 7.	Database Relational Schema (Part II)	19
Figure 8.	System Architecture Pages	27
Figure 9.	Main Page of Chun Hsien Wang's Project	29
Figure 10.	Hyper-Text Transfer Protocol by Secure Socket Layer	30
Figure 11.	Main Page of GoodLuck Hotel	34
Figure 12.	Register Page (Users)	36
Figure 13.	Error Message in State (Users)	37
Figure 14.	Error Message in Telephone (Users)	38
Figure 15.	Error Message in Email (Users)	39
Figure 16.	Error Message in Password (Users)	40
Figure 17.	User Login Page (Users)	41
Figure 18.	Error Message in Login Page (Users)	42
Figure 19.	Main Page - Login Already (Users)	43
Figure 20.	Booking Details Page (Users)	45
Figure 21.	Error Message in Wrong Date (Users)	46
Figure 22.	Error Message in Room Types (Users)	47

Figure 23. Confirm Booking Page (Users)	48
Figure 24. Change Booking Details Page (Users)	50
Figure 25. Booking Updated Page (Users)	51
Figure 26. Price Details Page (Users)	52
Figure 27. Payment Page	54
Figure 28. Error Message in Card Number (Users)	55
Figure 29. Error Message in Card Date (Users)	56
Figure 30. Booking Completed Page (Users)	57
Figure 31. View Booking Details Page (Users)	58
Figure 32. Cancel Booking Decided Page (Users)	59
Figure 33. Booking Cancelled Page (Users)	60
Figure 34. Change my Profile Page (Users)	61
Figure 35. User Profile Updated Page (Users)	62
Figure 36. Check Availability Page (Users)	63
Figure 37. Result Availability Page (Users)	64
Figure 38. Room Information Page (Users)	65
Figure 39. Special Promotion Page (Users)	66
Figure 40. About GoodLuck Page (Users)	67
Figure 41. Customer Care Page (Users)	68
Figure 42. Contact us Page (Users)	69
Figure 43. Travel and Shopping Page (Users)	70
Figure 44. Privacy Policy Page (Users)	71
Figure 45. Admin Login Page (Admin)	72
Figure 46. Admin Menu Page (Admin)	73
Figure 47. Room Price and Quantity Page (Admin)	74

Figure 48. View Users' Profiles Page (Admin)	75
Figure 49. Create New Admin Page (Admin)	76
Figure 50. Change Users' Records Page (Admin)	77
Figure 51. Cancel Users' Records Page (Admin)	78
Figure 52. Change About us Page (Admin)	79
Figure 53. Change Customer Care Page (Admin)	80
Figure 54. Change Contact us Page (Admin)	81
Figure 55. Change Shopping Page (Admin)	82
Figure 56. Change Privacy Policy Page (Admin)	83
Figure 57. Change Room Information Page (Admin)	84

CHAPTER ONE

INTRODUCTION

1.1 Purpose of this Project

This project is a Web-based application that provides a user-friendly and simple interface to let users easily book hotel rooms and perform booking activities via Internet. The records are shared with not only Web users but also with administrators to the site.

The project uses a regular Web browser with HTML (Hyper Text Markup Language) as the basic interface language. Users can perform booking activities via the Internet browser. The administrations also can view all users' files and maintain the Web site on it. The Web pages are written in PHP (Hypertext Preprocessor) and stored in apache server. All the data is stored in a MySQL database and accessed by PHP.

The Online Hotel Booking System is a very easy-to-use Web-based application. Everyone who knows how to use a Web browser can book rooms on specific date and finish the basic payment process online. Users will receive a confirmed email included basic booking details after finishing all steps in reservation.

1.2 The Scope and Limitations of Project

The Online Hotel booking System offers the following functionality:

1. Users can register at GoodLuck Hotel and then they can view or modify the personal profile.
2. Users can book a room on any specific date.
3. Users can view all their booking history at GoodLuck Hotel.
4. Users can change the booking at any time 3 days before the arrival date.
5. Users can cancel the booking at any time 3 days before the arrival date.
6. Users can check the room availability at GoodLuck Hotel before they book a room.
7. Administrators can change the quantity and price on all four types of rooms.
8. Administrators can change any specific booking details.
9. Administrators can cancel any specific booking.
10. Administrators can modify the details of static pages including room information, about us information, contact us information, customer service Q&A details, local travel and shipping guide, and privacy policy after logon.

11. Besides the basic booking relative functions, this simulated Website contains basic room types introduction, contacting information, customer service Q&A, local travel and shipping guide, and privacy policy

The Online Hotel booking System has the following limitations:

1. The Online Hotel Booking System only offers users to book rooms within one year from current date and the interval of every booking can not be over certain number of days which the number is modified by the administrators. For example, the current default number is 7.
2. Users can book up to four rooms per purchase. If they need more than four, they need to re-book again. It has the corresponding limit for the number of occupants (adults or children), which depends on the room quantity you choose.
3. Users only can change a specific booking details or cancel specific booking whose arrival days is less than certain number of days (the number is modified by administrators) before today (system time). For example, the current default number is 3.

1.3 Significance of the Project

The Internet technology has been reached a significant achievement and we almost could get any information we need via surfing on the Web browser at anytime or anywhere where computer and Internet are available. The Online Hotel Booking System offers a simulated environment to let users perform what they could do in the real world via its simple and user-friendly interface. Online Hotel Booking System meets most functions and efficiency of a real Web-based application of the real-life case and offers the extension of future development for more completed capabilities.

1.4 Definition of Terms

This section defines terms and abbreviations used in the Hotel Booking System project document.

Apache - Apache is an open source HTTP server for UNIX, Windows NT, and other platforms.

Browser - A program which allows a person to read hypertext. The browser gives some means of viewing the contents of nodes (or "pages") and of navigating from one node to another.

ER Diagram - Diagrams that use Entity-Relationship model to design or describe database.

GUI - Graphical User Interface. A user interface based on graphics (icons and pictures and menus) instead of text. User enters data using both a mouse and keyboard.

HTML - Hyper Text Markup Language. HTML is the lingua franca for publishing hypertext on the World Wide Web. It is a non-proprietary format based upon SGML, and can be created and processed by a wide range of tools, from simple plain text editors.

HTTP - Hyper Text Transfer Protocol. The client/Server protocol that defines how messages are formatted and transmitted on the World Wide Web.

HTTPS - Hyper Text Transfer Protocol by SSL (Secure Sockets Layer). The secure version of HTTP provides authentication and encrypted communication.

Hyperlink - A link from a hypertext files to another location or file, typically activated by clicking on a highlighted word or icon at a particular location on the screen.

MySQL - Structured Query Language. MySQL is an open source relational database management system (RDBMS) that uses Structured Query Language (SQL), the most popular language for adding, accessing, and processing data in a database.

OHBS - Online Hotel Booking System.

PHP - Hypertext Preprocessor. A widely used general-purpose scripting language that is especially suited for Web development and can be embedded into HTML.

UML - Unified Modeling Language. The Unified Modeling Language (UML) is a language for specifying, constructing, visualizing, and documenting the artifacts of a software-intensive system.

1.5 Organization of the Documentation

The remaining sections of this document will be organized as follows: Chapter 2 introduces the architecture of Online Hotel Booking System. Chapter 3 is the software requirement specification (SRS). Chapter 4 illustrates the database design. Chapter 5 presents the project implementation. Chapter 6 contains conclusions and future directions.

CHAPTER TWO

ONLINE HOTEL BOOKING SYSTEM

In this chapter I will briefly introduce the architecture of my project. The Online Hotel Booking System implements a Web system that provides an environment for users to book hotel rooms online. The system is a 3-tier-distributed architecture that displays the user interface to a Web browser using PHP. The middle tier is the Apache Web server that handles requests from the client Web browser and provides access to the third tier MySQL database.

2.1 Software Interfaces

- Internet browsers.
- Operating system: Windows 98/Me/2000/XP, or Unix/Linux.
- Database: MySQL.
- Language: HTML / JavaScript / PHP.
- Web server: Apache.
- Connect Protocol: HyperText Transfer Protocol and HyperText Transfer Protocol by SSL.

The Web application executes a user command:

- User types a URL in Web browser.
- Request is transmitted to Web server via HTTP protocol.
- Web server responds to the request and executes from a PHP page and loaded by the PHP engine.
- PHP generates custom HTML documents or generates custom WML documents and sends them back to the user via the HTTP protocol.
- User's Web browser displays HTML page.

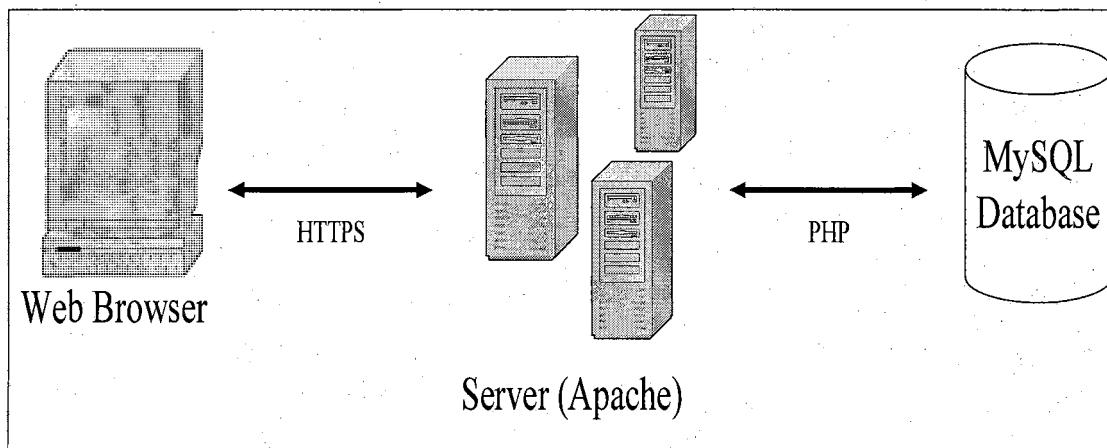


Figure 1. System Architecture

The components used to build Online Hotel Booking System (OHBS) were chosen with the following criteria:

- (I) the components should be shareware, i.e., available freely for all users, (II) they do not depend on a

specific operating system and hence are easily portable across systems, (III) database server's flexibility, so that new and different versions of the server can be plugged in easily.

The user interface components are built by using HTML 6.0 forms, HTTP, frames and JavaScript. The application is implemented using Hypertext Preprocessor (PHP). PHP is mainly focused on server-side scripting, so I almost could do anything any other common gateway interface (CGI) program could do, such as collect form data, generate dynamic page content, or send and receive cookies. PHP can be used on all major operating systems and it is not limited to output HTML. One of the strongest and most significant features in PHP is its support for a wide range of databases.

The database availability to online Hotel Booking system is MySQL. MySQL is a real multi-user database and free. Also, because of its consistent fast performance, high reliability and ease of use, it has become the world's most popular open source database ranging from large corporations to specialized embedded applications on every continent in the world. It runs on more than 20 platforms including Linux, Windows, OS/X, HP-UX, AIX, Netware, giving me the kind of flexibility that puts me in

control. That is why I choose the MySQL as the application of database.

CHAPTER THREE

SOFTWARE REQUIREMENTS SPECIFICATION

3.1 Introduction

The purpose of the Online Hotel Booking System Project is to provide people with the convenience to book hotel rooms online. Users can book rooms, modify booking details and view the hotel Web site. They can do these through the user-friendly Web pages with a regular Web browser.

3.2 Overall Description

3.2.1 Product Perspective

The Online Hotel Booking System is a Web-based application. Its interfaces are implemented on regular Web browser connected via Internet.

The hardware interface requirement is that it must run on the existing Web servers. The software interface requirement is that it must support current versions of Web browsers (Internet Explorer, Netscape, Mozilla Firebox, etc.). The communications interface requires support for Hyper-Text Transfer Protocol by Secure Socket Layer (SSL). It is the well-known HTTPS.

3.2.2 Product Functions

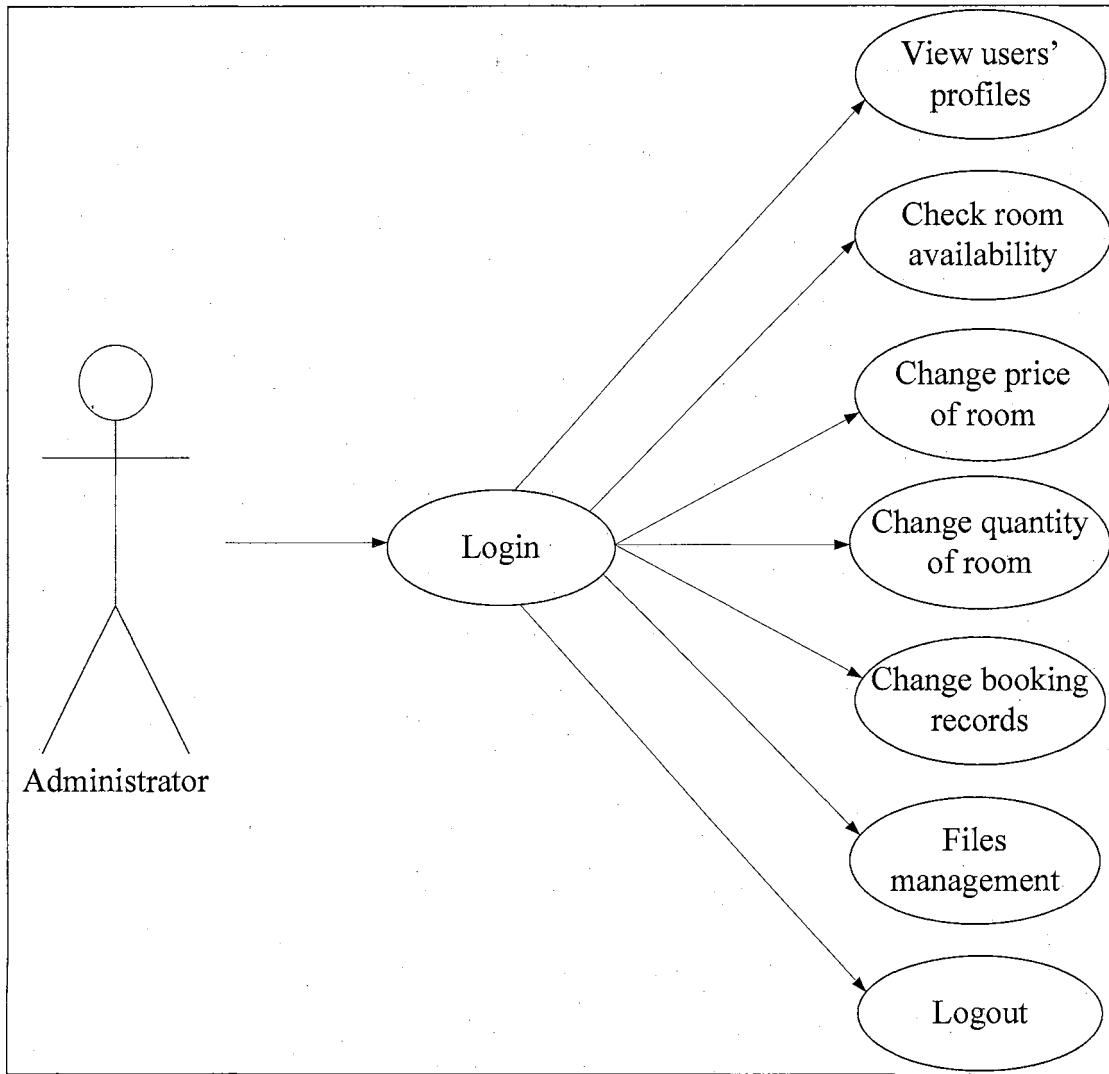


Figure 2. Online Hotel Booking System Use Case Diagram

(Admin)

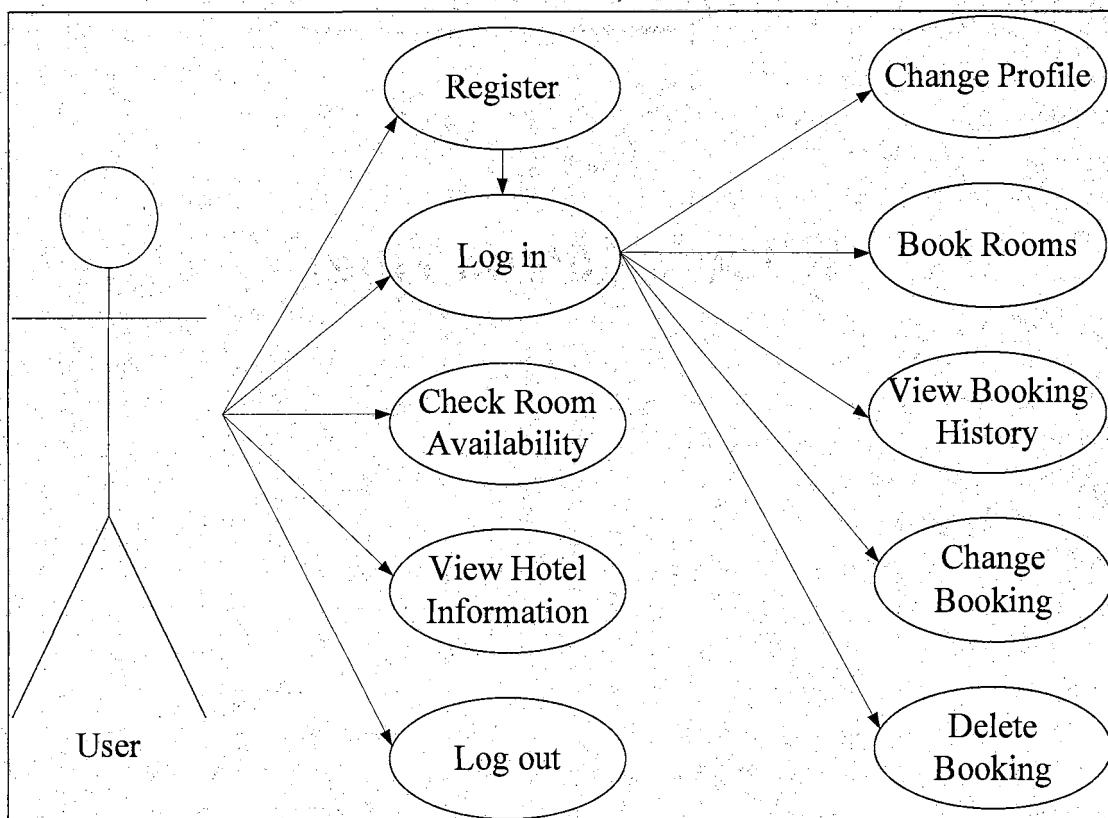


Figure 3. Online Hotel Booking System Use Case Diagram
(User)

3.2.3 Product Architecture

The system contains three main parts of architecture, client side machine, Web server, and database.

- (1) Client side machine: It requires having Internet browser and Internet connection. This machine can connect to Web server by HTTP protocol.
- (2) Web Server: This project uses Linux 9.0 as the operating system, and Apache Web server. It establishes communication between server and

client machine, and also between server and database.

(3) Database: MySQL database is used in this project.

To connect database, we use PHP to control when to access the database, and which information to access.

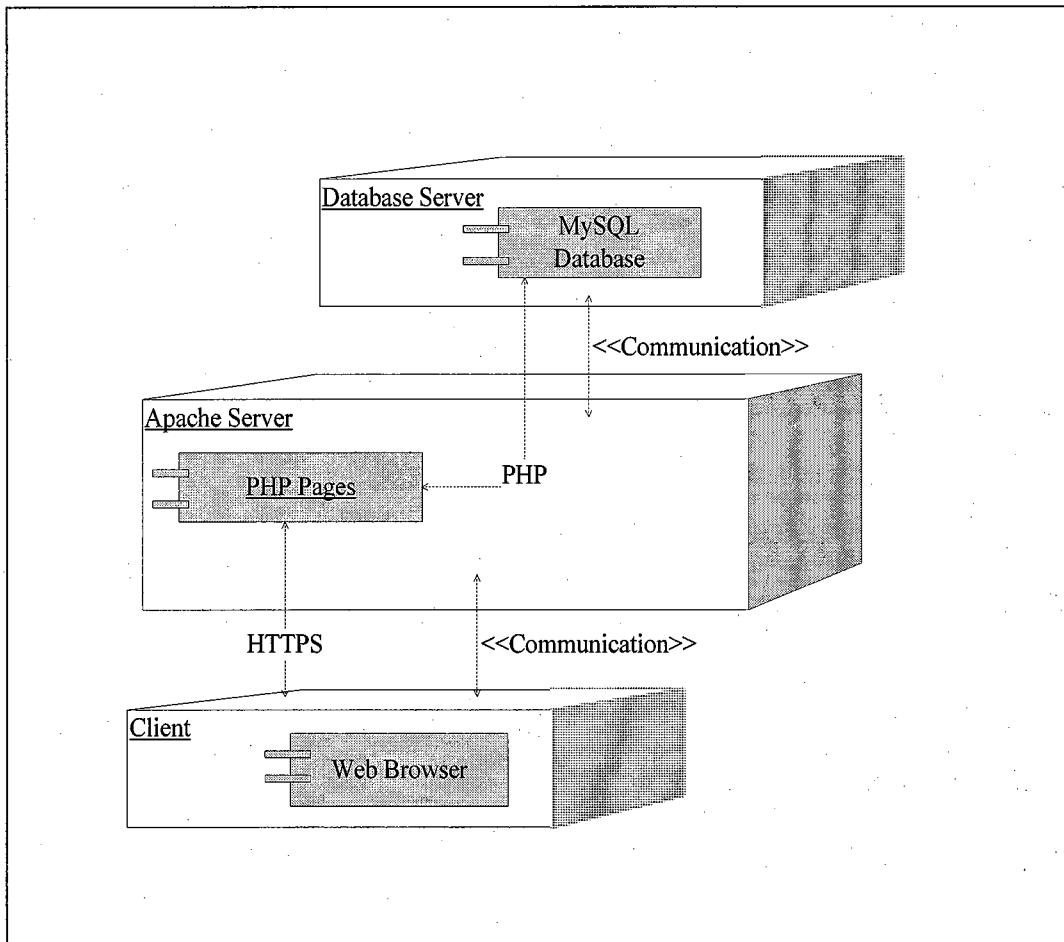


Figure 4. Deployment Diagram of Online Hotel Booking System

CHAPTER FOUR

DATABASE DESIGN

4.1 Data Analysis

The data for designing and implementing the schema of the database depends on properties of client and administrator. In designing the schema for the OHBS database, four main distinct parts have been identified and used in both user and administrator parts, and two main parts used in administrator part for modifying the hotel information pages.

For tables used in storing users' data, first one is table "clients" which includes clients ID, clients title, clients name, clients address, clients telephone, clients email, and clients password. The second one is table "bookings" which includes bookings part which including bookings ID, bookings clientID, arrival date, departure date, number of adults, number of children, room type, room options, requirements, and credit card information. The third part are tables from "2005oct" to "2006dec" include all data about room price and quantity sorted in month from October 2005 to December 2006. The last one includes states details in United States.

For tables used by administrator only, the first one is table "users" in storing data about administrators. The other ones are small tables used to store data in some information pages.

All the entities and attributes are detailed in Figure 5. In Figure 5, the "CC" is abbreviated from Credit Card.

This Entity Relationship (ER) Diagram is for both administrators and users. Some tables about administrator may not be shown in the ER Diagram, and I will explain more. The tables "aboutus", "contactus", "customercare", "hoteldetails", "privacypolicy", "properties", "roominfo", and "travelshopping" are stored data regarding some static pages about hotel information.

4.2 Database Schema Logical Model

The conceptual model ER diagram maps into the following relational table design. In the following tables, underlined fields indicate the primary key. Please refer to Figure 6 and 7.

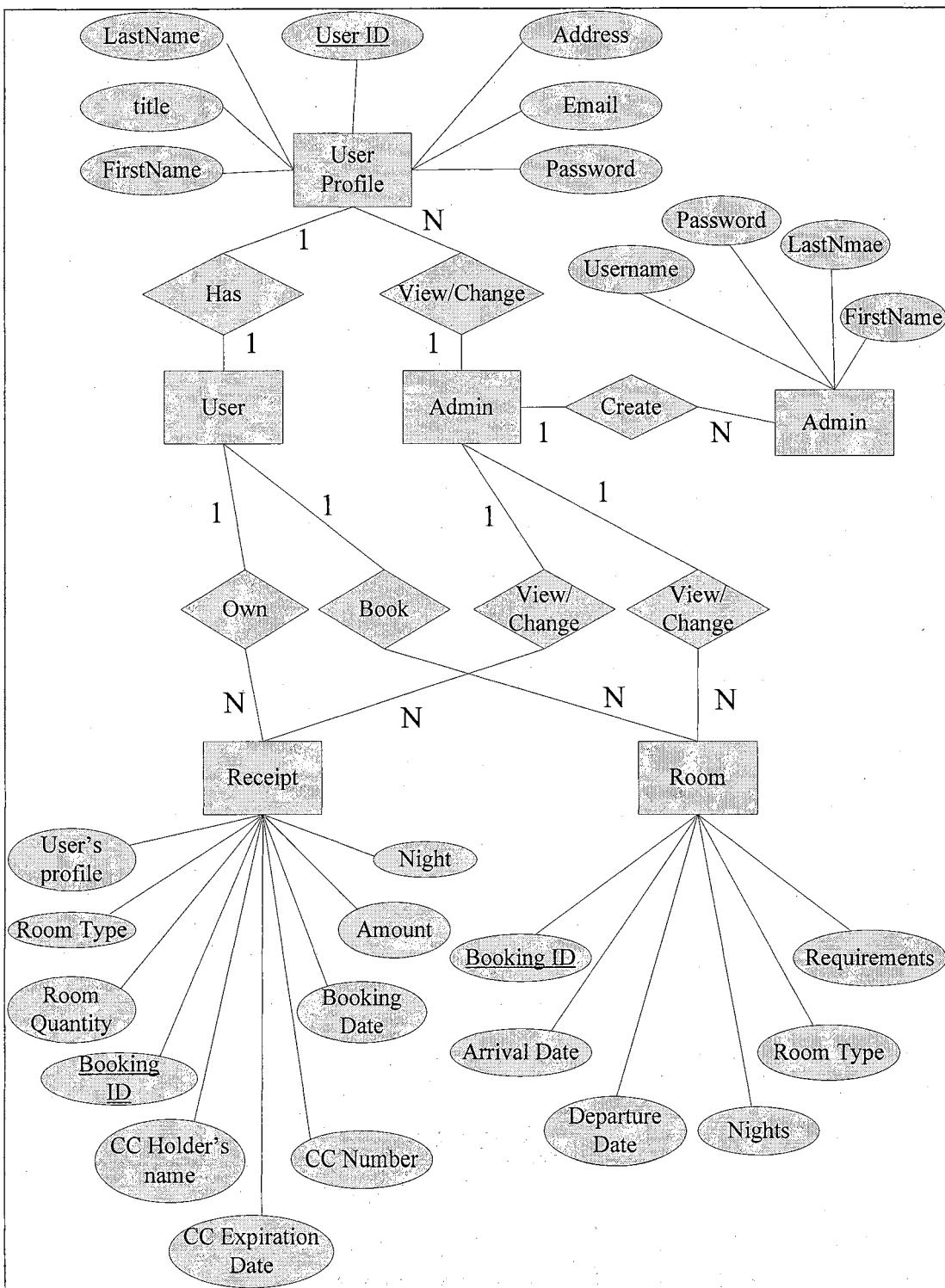


Figure 5. Entity Relationship Diagram

Field Names of Table CLIENTS			
<u>ID</u>	TITLE	FIRSTNAME	LASTNAME
ADDRESS1	ADDRESS2	CITY	PROVINCE
COUNTRY	POSTCODE	TEL	EMAIL
PASSWORD	STATUS		

Field Names of Table BOOKINGS			
<u>ID</u>	ROOMID	CLIENTID	BOOKING_ID
STARTYEAR	STARTMONTH	STARTDAY	ENDYEAR
ENDMONTH	ENDDAY	ADULTS	CHILDREN
ROOMTYPE	ROOMOPTIONS	NETWORK	REQUIREMENTS
CARDTYPE	CARDNO	EXPIREYEAR	EXPIREMONT
ROOMQUANT			

Field Names of Table USERS			
<u>ID</u>	USERNAME	PASSWORD	FIRSTNAME
LASTNAME	STATUS		

Field Names of Table STATEINUSA	
ID	STATE

Figure 6. Database Relational Schema (Part I)

Field Names of Table 2005OCT - 2006DEC

<u>DAY</u>	QUANTITYA	PRICEA	QUANTITYB
PRICEB	QUANTITYC	PRICEC	QUANTITYD
PRICED			

**Field Names of Table ABOUTUS, CONTACTUS,
HOTELDETAILS, PROPERTIES**

<u>NUMBER</u>	DESC
---------------	------

Field Names of Table ROOMINFO

<u>NUMBER</u>	TYPE	DESC
---------------	------	------

Field Names of Table CUSTOMERCARE, PRIVACYPOLICY

<u>NUMBER</u>	QUESTION	ANSWER	ANSWER2
---------------	----------	--------	---------

Field Names of Table TRAVELSHOPPING

<u>NUMBER</u>	NAME	LINK	ADDRESS
CITY	STATE	ZIPCODE	PHONE

Figure 7. Database Relational Schema (Part II)

4.3 Data Type and Details

The logical model established the following detailed design in MySQL database. The following tables describe data type, length, primary key, and null or non-null keys.

Table 1. Structure of Table CLIENTS

Filed	Type	Null	Key	Default	Extra
ID	INT (11)		PRI		AUTO_INCREMENT
TITLE	VARCHAR (10)				
FIRSTNAME	VARCHAR (30)				
LASTNAME	VARCHAR (30)				
ADDRESS1	VARCHAR (50)				
ADRESS2	VARCHAR (50)	YES		NULL	
CITY	VARCHAR (50)				
PROVINCE	VARCHAR (50)				
COUNTRY	VARCHAR (40)				
POSTCODE	CHAR (20)				
TEL	CHAR (20)				
EMAIL	CHAR (50)				
PASSWORD	VARCHAR (20)				
STATUS	VARCHAR (5)				

Table 2. Structure of Table BOOKINGS

Field	Type	Null	Key	Default	Extra
ID	INT(11)		PRI		AUTO_INCREMENT
ROOMID	INT(11)	YES			
CLIENTID	INT(11)				
BOOKING_ID	INT(15)				
STARTYEAR	VARCHAR(4)				
STARTMONTH	VARCHAR(9)				
STARTDAY	CHAR(2)				
ENDYEAR	VARCHAR(4)				
ENDMONTH	VARCHAR(9)				
ENDDAY	CHAR(2)				
ROOMQUANT	CHAR(2)				
ADULT	CHAR(2)			1	
CHILDREN	CHAR(2)				
ROOMTYPE	VARCHAR(30)				
ROOMOPTIONS	INT(8)				
NETWORK	INT(8)				
PC	INT(8)				
REQUIREMENTS	VARCHAR(250)	YES			
CARDTYPE	VARCHAR(15)				
CARDNO	VARCHAR(20)				
EXPIREYEAR	CHAR(2)				
EXPIREMONT	VARCHAR(4)				

Table 3. Structure of Table USER

Field	Type	Null	Key	Default	Extra
ID	INT (8)		PRI		AUTO_INCREMENT
USERNAME	VARCHAR (15)				
PASSWORD	VARCHAR (12)				
FIRSTNAME	VARCHAR (30)				
LASTNAME	VARCHAR (30)				
STATUS	VARCHAR (10)				

Table 4. Structure of Table STATEINUSA

Field	Type	Null	Key	Default	Extra
ID	INT (2)				
STATE	CHAR (2)		PRI		

Table 5. Structure of Table 2005OCT - 2006DEC

Field	Type	Null	Key	Default	Extra
DAY	INT (2)		PRI		
QUANTITYA	CHAR (2)				
PRICEA	VARCHAR (5)				
QUANTITYB	CHAR (2)				
PRICEB	VARCHAR (5)				
QUANTITYC	CHAR (2)				
PRICEC	VARCHAR (5)				
QUANTITYD	CHAR (2)				
PRICED	VARCHAR (5)				

Table 6. Structure of Table ABOUTUS

Field	Type	Null	Key	Default	Extra
NUMBER	INT (2)		PRI		
DESC	VARCHAR (255)				

Table 7. Structure of Table ROOMINFO

Field	Type	Null	Key	Default	Extra
NUMBER	INT (2)		PRI		
TYPE	CHAR (2)				
DESC	VARCHAR (5)				

Table 8. Structure of Table CUSTOMERCARE

Field	Type	Null	Key	Default	Extra
NUMBER	INT (2)		PRI		
QUANTITY	VARCHAR (255)				
ANSWER	LONGTEXT				
ANSWER2	LONGTEXT				

Table 9. Structure of Table TRAVELSHOPPING

Field	Type	Null	Key	Default	Extra
NUMBER	INT (2)		PRI		
NAME	VARCHAR (50)				
LINK	VARCHAR (250)				
ADDRESS	VARCHAR (50)				
CITY	VARCHAR (50)				
STATE	VARCHAR (20)				
ZIPCODE	VARCHAR (9)				
PHONE	VARCHAR (15)				

CHAPTER FIVE

PROJECT IMPLEMENTATION

The Online Hotel Booking system is designed to perform 5 distinct logon-required functions for users. Refer to Figure 3 is the Use Case Diagram of this project.

5.1 Graphical User Interface Requirement

User interfaces for the Online Hotel Booking System are designed as HTML pages. The contents are generated dynamically by PHP in executing requests from users. OHBS GUI is an easy-to-use interface. The GUI is written using Hyper Text Markup Language (HTML) Version 6.0 forms. The OHBS GUI is executable under Internet Explorer 5.0 or greater. The following sub-section Figure 8 explains the GUI functions and details.

HTML

UserPages

aboutus.php
add_user_record.php
booking_cancelled.php
booking_completed.php
booking_details.php
booking_updated.php
cancel_booking.php
cancel_booking_details.php
cancel_booking_determine.php
change_booking.php
change_booking_details.php
change_user_record.php
check_availability.php
confirm_booking.php
customercare.php
customerservice.php
footer.php
index.php
index_login.php
options.php
payment.php
price_details.php
privacypolicy.php
promotion.php
result_availability.php
roominfo.php
roominfo_popup.php
roomquant_popup.php
travelshopping.php
user_login.php
user_record_updated.php
view_booking.php
view_booking_details.php

AdminPages

2005dec.php
2005nov.php
2005oct.php
2006apr.php
2006aug.php
2006dec.php
2006feb.php
2006jan.php
2006jun.php
2006mar.php
2006may.php
2006nov.php
2006oct.php
2006sep.php
admin_login.php
admin_menu.php
cancelbooking.php
changeaboutus.php
changebooking.php
changecontactus.php
changecustomercare.php
Changedaymodify.php
changeprivacypolicy.php
changeprofile.php
changeroominfo.php
changetravelshopping.php
Create_user.php
editbookingcancelled.php
editbookingcompleted.php
editbookingupdated.php
editcancelbooking.php
editchangebooking.php
editcontactus.php
editcustomercare.php
Editdaymodify.php
editpayment.php
editprivacypolicy.php
editprofile.php
editroominfo.php
editroominfo2.php
editroominfo3.php
edittravelshopping.php

Figure 8. System Architecture Pages

5.2 Graphical User Interface Website

5.2.1 Home of ChunHsien Wang's Project

The page is the main page of my project. I offer 6 quick links in this page. There are three options on the left hand side. First one "Online Hotel Booking Hotel" is a link to my project - Online Hotel Booking System (OHBS); second one "My Documents" is a link to some documents related to my project including proposal and document in both Web page and PDF formats; third one "Source Files" is a link to view all my source files about this project. The other three are on the right hand side. First one "CSUSB Home" is a link to the home page of CSUSB Website; second one "Computer Science Department" is a link to the home page of Computer Science Department of CSUSB; third one is an email link if visitors have any comment and would like to send their suggestion to me. They can use this link.

Please refer to Figure 9.

Before redirecting to the main page of OHBS, my system will require users to accept the security alert of Hyper-Text Transfer Protocol by SSL (HTTPS). If users do not accept the request, the page will not be linked to next one. They can retry and accept it, then the page will redirect to the main page of OHBS. Under the environment of HTTPS, users can enter their information more confident

such as personal profile or credit card information and all data they input in GoodLuck would get more security. Please refer to Figure 10.

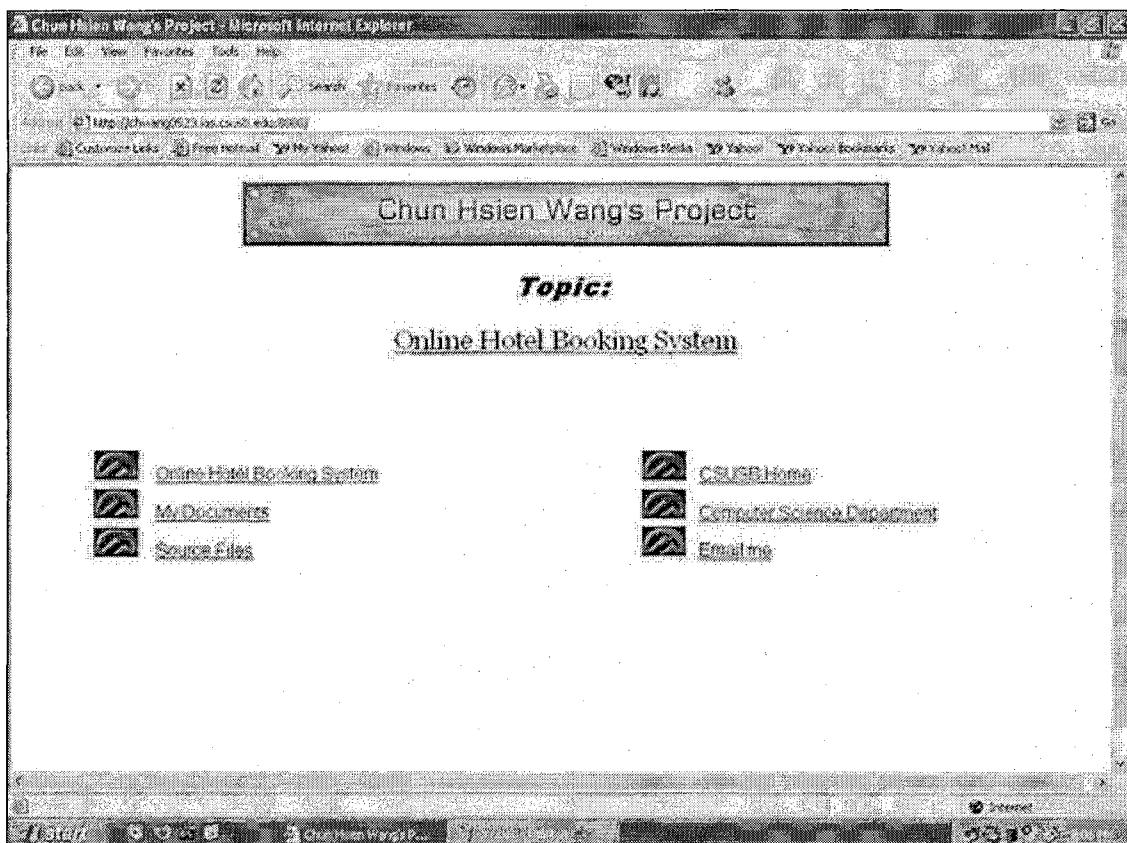


Figure 9. Main Page of Chun Hsien Wang's Project

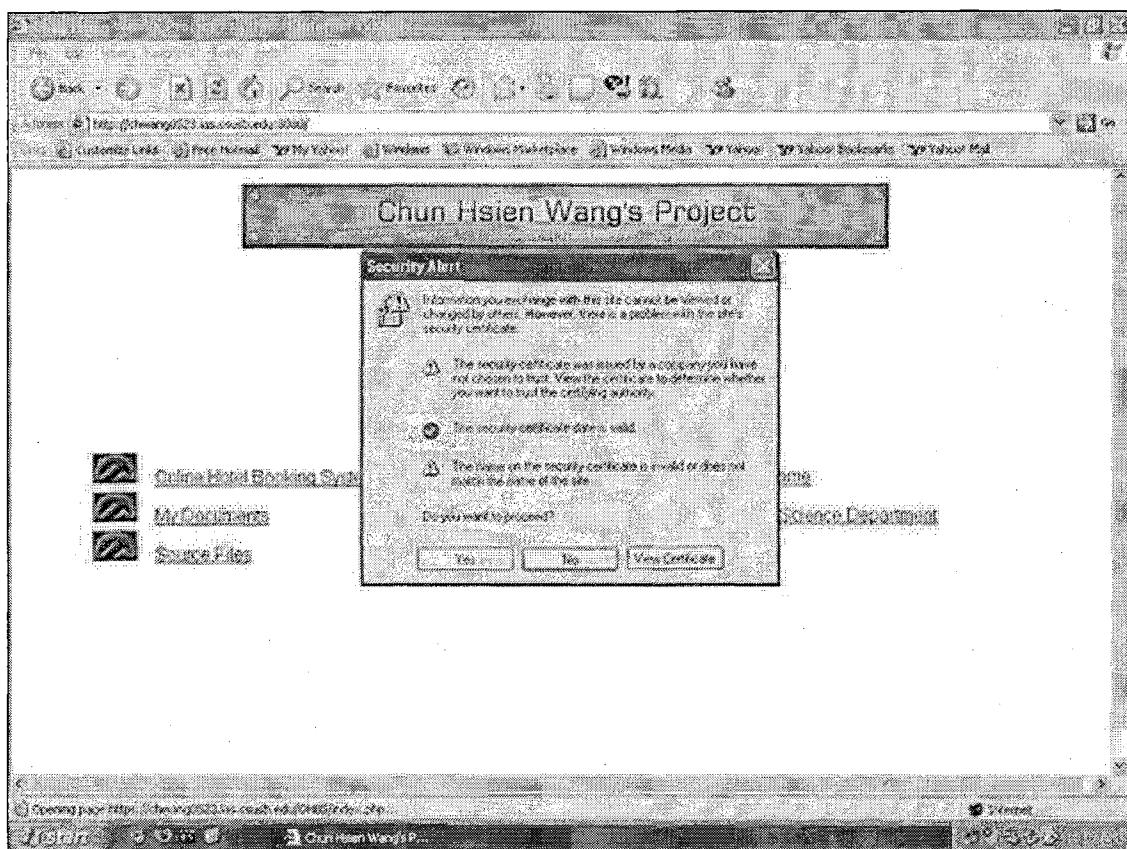


Figure 10. Hyper-Text Transfer Protocol by Secure Socket Layer

5.2.2 Home of GoodLuck Hotel

This page is the Main (Home) page of GoodLuck Hotel. Please refer to Figure 11. This page offers the following links:

- (1) Book a room: If users would like to book a room in GoodLuck, they can click this button for a start. When they click it, the page will be linked to User Login page to let users enter both email and password in order to login their

personal account. If users are first time in visit GoodLuck Hotel, they need to register themselves as a new user. After logon, users can start to book.

- (2) View Booking: After logon, users can view all their booking history in GoodLuck. From the booking history, they can change or cancel the specific booking records they have been booked before and they are not expired.
- (3) Change Booking: After logon, users can view their booking history first. This page is the same as the View Booking History page. They can choose the specific booking and start to change the specific booking details.
- (4) Cancel Booking: After logon, users can view their booking history first. They can choose the specific booking and start to cancel the specific booking details. In the next page, it will display the basic booking information again and has options "Yes" or "No" to choose. If they choose "No", it will return to previous page. They can view the booking history again. If they choose "Yes", this specific booking will be

deleted forever and the confirmed information will be shown in the next page.

- (5) Check availability: All visitors in GoodLuck can check its room availability for all information about room price and quantity for their specific arrival date and departure date. No logon required. Here users can check the room availability within one year from the current date (system time).
- (6) Room Information: All visitors in GoodLuck can check the room information. No logon required. After clicking this button, the "roominfo" page will display basic introduction for all four types of rooms in GoodLuck.
- (7) Register: If users are first time to visit GoodLuck Hotel, they can register themselves as a new user.
- (8) My Profile: Users can view their personal profile and modify it if they needs. They need to login first and then they can start to modify the profile.
- (9) Other links: In the bottom of this page, there are seven buttons for linking options. First five are "About GoodLuck", "Customer Care",

"About Us", "Travel & Shopping", and "Privacy Policy" for hotel information. The sixth is "ADMIN". It is a quick link used for administrators, not for regular users. The last one "Project" is a link to go back to the main page of my project.

If users have not logged in, when they click buttons "Book a Room", "View Booking", "Change Booking", "Cancel Booking", and "My Profile", page will be linked to user login page. They cannot view details of these pages without logon.



Figure 11. Main Page of GoodLuck Hotel

5.2.3 Register Page

If users click the button "Register" in the main page of GoodLuck, the page will be linked to Add User Record page. Please refer to Figure 12.

In this page users need to fill out all fields except field "Address2". If any field is blank, after users click "Submit" button, the page will pop up a small window showing the specific field you missed and remind you to input the data in order to finish this form.

In the field "County/State", if users choose "United States" in country, they need input the 2-letter abbreviation from US states in either uppercase or lowercase. If users do not input an abbreviation from states in US, it will show error message "Invalid state" and then users need to re-input. Please refer to Figure 13.

In the field "Telephone Number", users need to input data in all digits, no space or dash is allowed; otherwise the page will display the error message. Please refer to Figure 14.

In the field "Email", if users have been registered in GoodLuck already and database finds the record, it will display error message "Email is in use already". Users cannot finish the registration until they change another substitute email address. Please refer to Figure 15.

In the field "Password", users need to input a password whose length is between 6 and 12 characters; otherwise the page will display the error message. Please refer to Figure 16.

The registration form cannot be finished if this page has any warning message displayed. After the registration is successful, page will be linked to "User Login" page.



Figure 12. Register Page (Users)

Add user record - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Stop Refresh Stop Go Home

Address : http://www.techno-hotel.com/techno/2002/02/add_new_user.asp?*

Links Address Book Favorites Windows Marketplace Windows Media TV Video Search Services Bookmarks Yahoo! Mail

Techno Hotel

Register as a New User

Please fill in the form in English below with all required * fields to add your record into our system.

*First Name:	Johnson
*Last Name:	Lee
*Address:	1235 Foothills Dr
Address:	Folsom
*City:	San Bernardino
*Country/State:	XX "Invalid state"
(For US states, please use abbreviation, e.g. AZ or CA)	
*Country:	United States
*Postcode:	91746

Figure 13. Error Message in State (Users)

Add user record - Microsoft Internet Explorer

Favorites Back Stop Search Favorites Help

http://www.abc.com/abcweb/abcweb/add_user_record.asp

View Booking Change Booking Cancel Booking Check Availability Room Info Register My Profile Log in

Please fill in the form in English below with all required * fields to add your record into our system.

*Title:	Mr.
*FirstName:	Jackson
*LastName:	Lee
*Address1:	1235 Kendall Dr
*Address2:	#114
*City:	San Francisco
*State:	CA
*Country: Offer US states, please use abbreviations, e.g. AZ, or CA)	
*Postcode:	
*Telephone Number:	
*Email:	
*Password:	

For US states, please use abbreviations, e.g. AZ, or CA)

Please enter valid digits. No space & dots!

12345
0000000000
john.doe@mail.com
1234567890

Figure 14. Error Message in Telephone (Users)

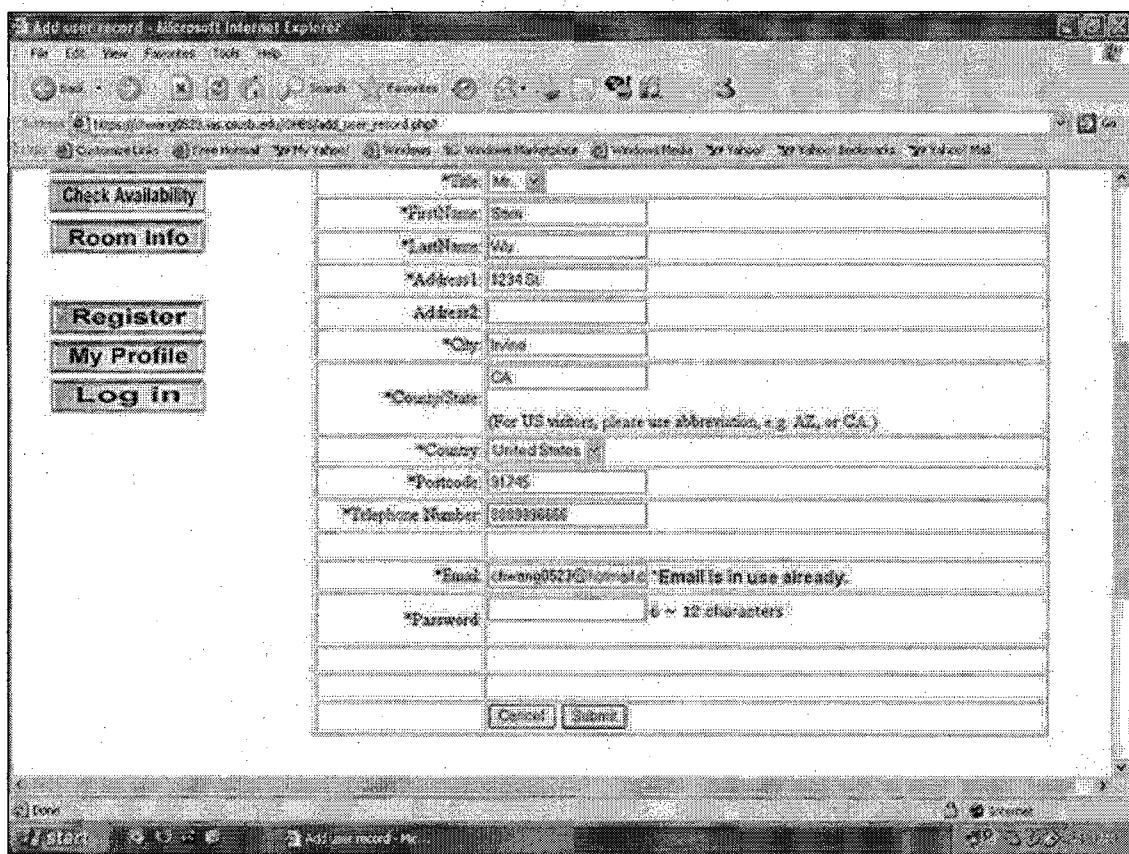


Figure 15. Error Message in Email (Users)

The screenshot shows a registration form titled "Add user record - Good Luck". The form includes fields for First Name, Last Name, Address, Major, City, State, Country, Zipcode, Telephone Number, Email, and Password. The "Password" field contains the error message "6 ~ 12 characters".

First Name:	Johnn
Last Name:	Lee
Address:	1234 Kendall Dr.
Major:	EDUT
City:	San Jose
State:	(For US users, please use abbreviations, e.g. AZ, or CA)
Country:	United States
Zipcode:	95141
Telephone Number:	9333456000
Email:	Johnn@gmail.com
Password:	6 ~ 12 characters *Password should be 6 characters or more.
	<input type="button" value="Cancel"/> <input type="button" value="Submit"/>

Figure 16. Error Message in Password (Users)

5.2.4 User Login Page

In the User Login page users can input their registered email and password in order to login. Please refer to Figure 17.

If the email and password cannot be matched, it will display error message and users need to re-input again until they succeed. Please refer to Figure 18.

If users have not registered in GoodLuck and go to this page, I offer a link "register" above the form to let users register themselves as a new user.



Figure 17. User Login Page (Users)



Figure 18. Error Message in Login Page (Users)

5.2.5 Main Page - Login Already

After users login successfully, they will be redirected to this page. Please refer to Figure 19.

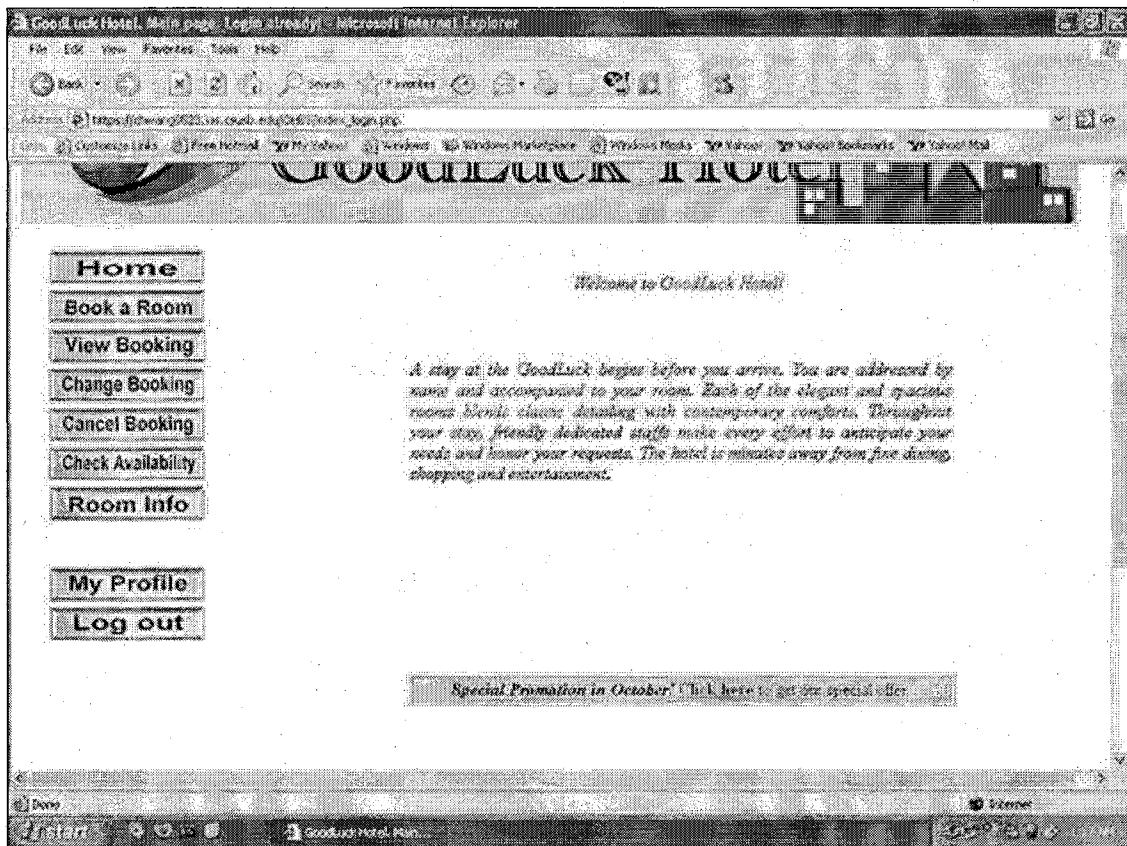


Figure 19. Main Page – Login Already (Users)

5.2.6 Booking Details Page

In this page users will start to fill out the booking information. They need to choose the arrival year, arrival month, arrival day, departure year, departure month, and departure day, room quantity, room type, extra required in Network and PC, number of adults, number of children, room options, and enter the special requirement in the required field if they need. Please refer to Figure 20.

In these fields, if users choose wrong value in either of arrival year, arrival month, arrival day,

departure year, departure month, or departure day, the page will display error message and users need to re-choose the correct value to continue the booking. The page will not skip to next one until these fields are chosen in appropriate values. Please refer to Figure 21.

If users choose a specific date which there is no quantity left in some specific room type, the page will display error message and then users need to re-choose the alternative date or change other room types until the page does not display the error message.

In the field "Room Quantity" and "Room Type", every room type requires the limited number of occupants.

Corresponding to the room quantity chosen by users, it has a limited number of total occupants. The page will display error message if users cannot match its requirements.

Please refer to Figure 22.

This page will not skip to next one until all fields are chosen in appropriate values. After clicking the "Booking" button and all fields are correct, the page will be linked to "Confirm Booking" page.

Booking Details - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Forward Stop Search Favorites

Address: <http://www.bookingdetails.com/2005/CheckBookingDetails.asp>

Go

Conference Call Page History My Yahoo! Windows Marketplace Windows Media Yahoo! Yahoo! Bookmarks Yahoo! Mail

GoodLuck Hotel 

Thank you, Mr. Wilson Wang, please enter your booking details below.

Your registered email is: dwang923@gmail.com

Home

Book a Room

View Booking

Change Booking

Cancel Booking

Check Availability

Room Info

My Profile

Log out

Arrival Date: March 10 Day 11 Year 2005

* Same Day reservation is not available.

Departure Date: March 10 Day 13 Year 2005

* Reservation can't be over 7 days.

Room Type: Standard 1~2 People Check Room Info for details

In Room Extra required: Internet Connection TV

Number of Adults: 1 Smoking Non Smoking

Number of Children: 0

Room Option: Smoking Non Smoking

Book Now

Booking Details - Nov. 2007

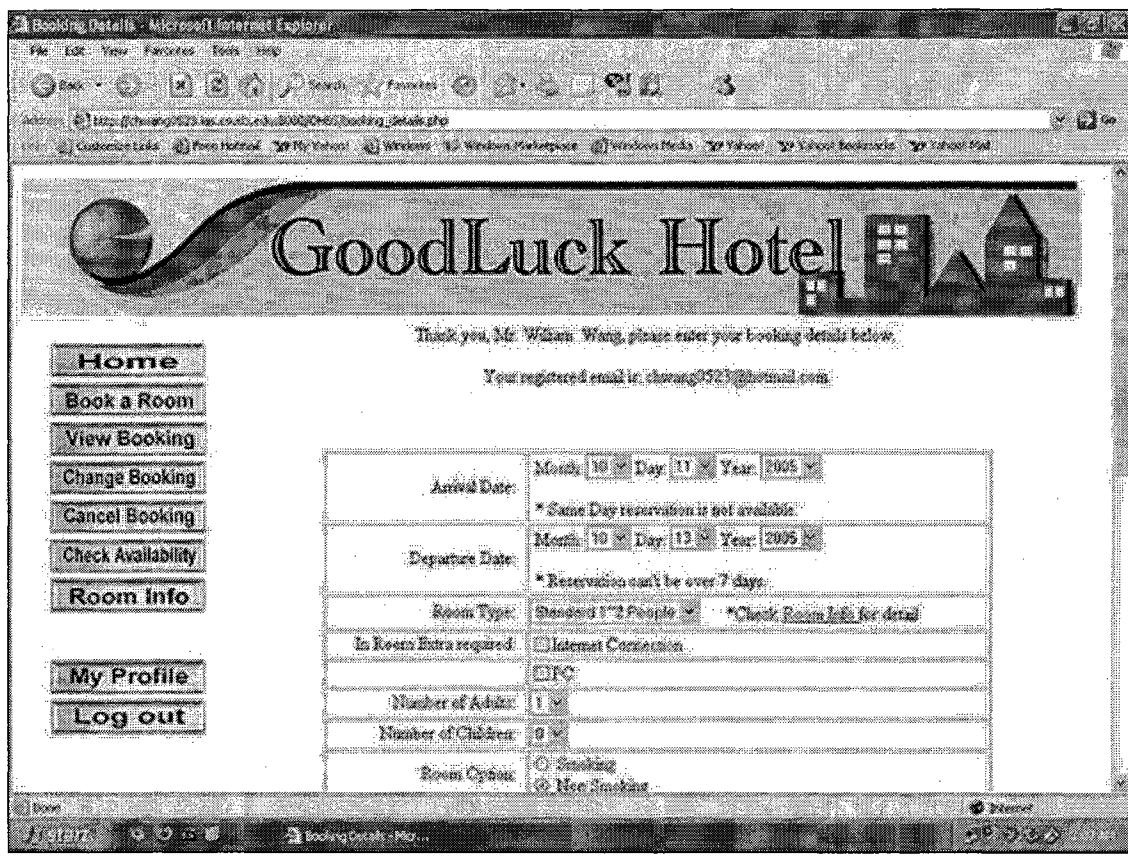


Figure 20. Booking Details Page (Users)

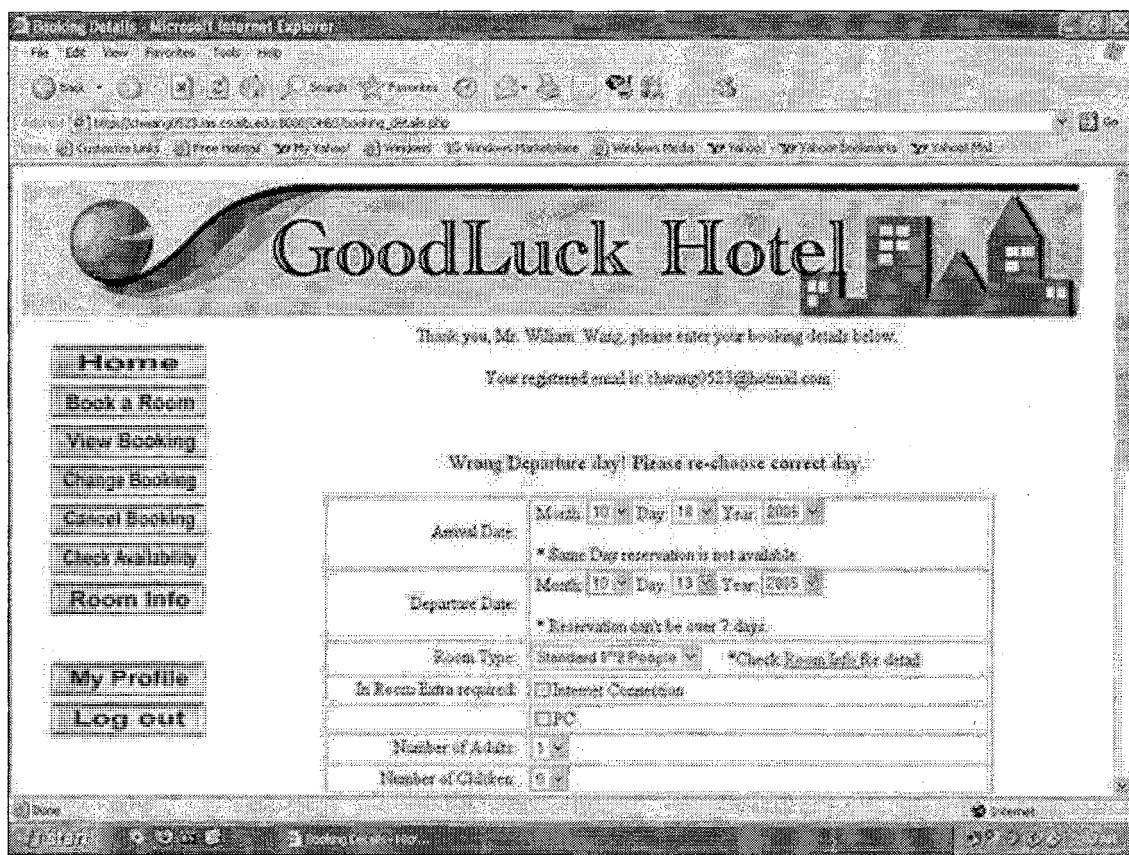


Figure 21. Error Message in Wrong Date (Users)



Figure 22. Error Message in Room Types (Users)

5.2.7 Confirm Booking Page

In this page users can see all details of their booking details including personal profile. If these booking details are correct, they can click the button "Next" to next page; otherwise they can click "Change" to change their booking information. Please refer to Figure 23.

The personal profile cannot be modified here.

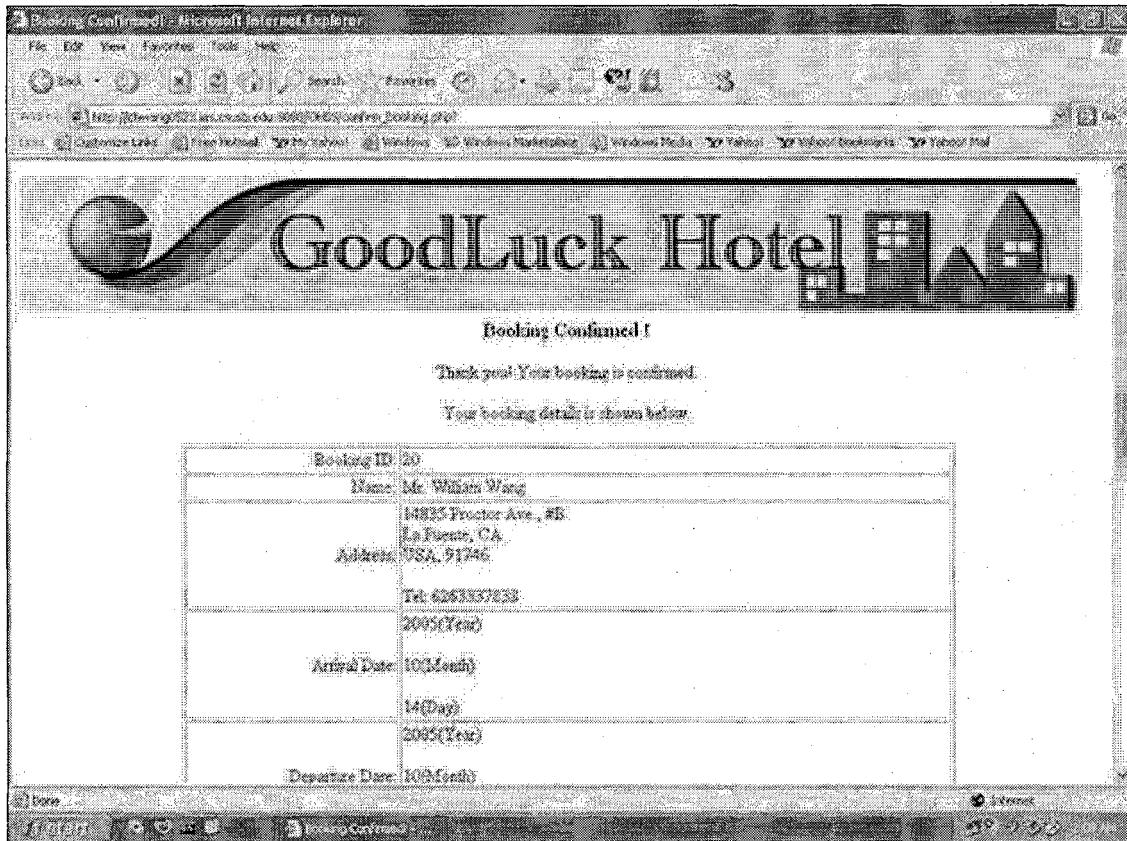


Figure 23. Confirm Booking Page (Users)

5.2.8 Change Booking Details Page

If users click "Change" in the "Confirm Booking" page, the page will be linked to this page. Please refer to Figure 24.

The same as the "Booking Details" page, if users choose wrong value in either arrival date or departure date, the page will display error message and users need to re-choose the correct value to continue the booking.

If users choose a specific date which there is no quantity left in some specific room type, the page will display error message and then users need to re-choose the alternative date or change other room types until the page doesn't display the error message.

In the field "Room Quantity" and "Room Type", every room type requires the limited number of occupants. So it also has limited number of total occupants corresponding to the required quantity of rooms. The page will display error message if users cannot match its requirements.

This page will not skip to next one until all fields are chosen in appropriate values.

After users click the "Confirm" button, the page will be linked to "Booking Updated" page.

Change Booking Details Microsoft Internet Explorer

File Edit View Favorites Tools Help

Address: http://127.0.0.1:8080/Project/ChangeBookingDetails.aspx?BookingID=22

Connexion Help Free Format Go To Yahoo! Windows Windows Marketplace Windows Media My Yahoo! My AOL My AOL Networks My AOL Mail

BOOKING DETAILS PAGE

Home

Book a Room

View Booking

Change Booking

Cancel Booking

Check Availability

Room Info

My Profile

Log out

Please enter your booking details below.

Booking ID: 22

Arrival Date: 2005 (Year) 14 (Month) 21 (Day)

Departure Date: 2005 (Year) 15 (Month) 25 (Day)

Room Type: Standard 3 People

In Room Extras Required: Network Connection
 PC

Number of adults: 2

Number of Children: 1

Room Options: Smoking Non Smoking

Special Requirements:
Next

Previous Next

Figure 24. Change Booking Details Page (Users)

5.2.9 Booking Updated Page

In this page it will show all booking details after users had changed. This page is almost the same as the "Confirmed Booking" page. Users cannot modify any booking details again in this page. Please refer to Figure 25.

After users click the "Next" button, the page will be linked to "Price Details" page.

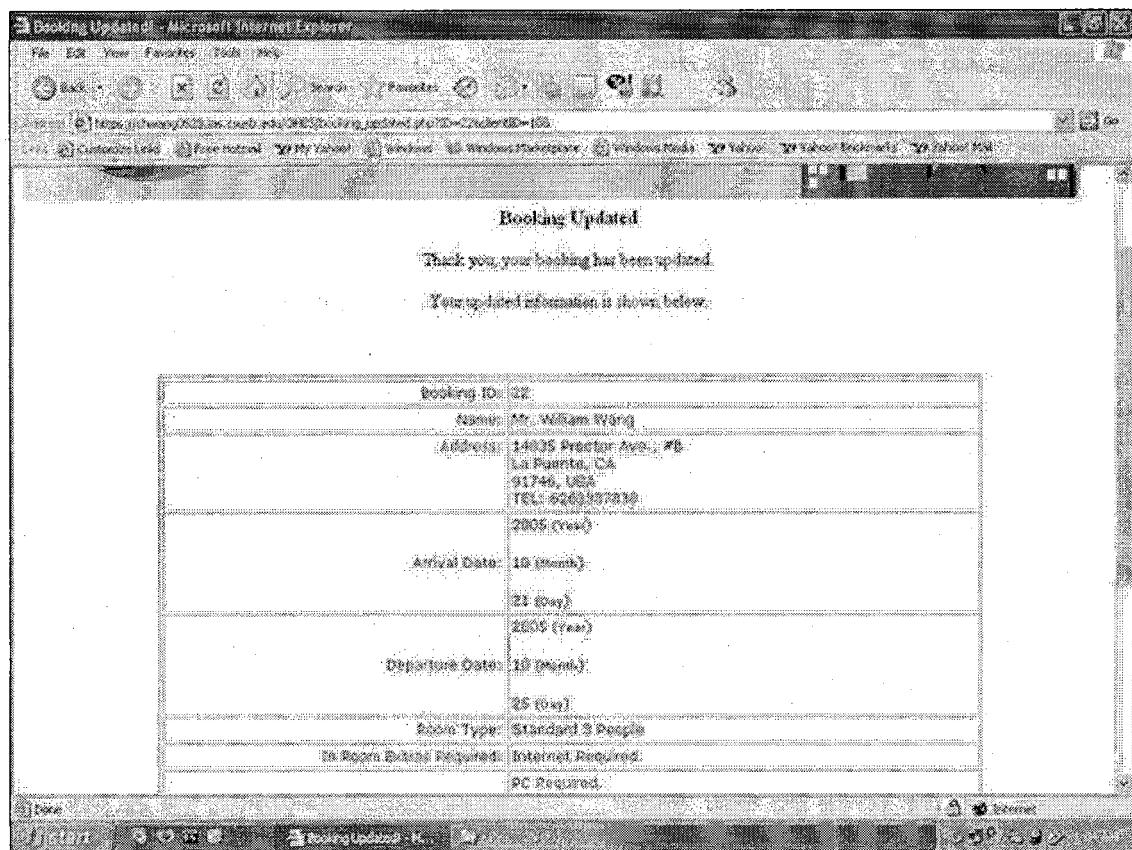


Figure 25. Booking Updated Page (Users)

5.2.10 Price Details Page

This page will show all booking details from booking ID, personal profile, arrival year, arrival month, arrival day, departure year, departure month, departure day, room quantity, room type, number of adults, number of children, a small table in the middle showing the details of user's booking dates and their corresponding prices, total nights of order, total price, if the tax is applied or not, and the final price. Users cannot change any details shown on this page. Please refer to Figure 26.

After users click the "Next" button, the page will be linked to "Payment" page.

The screenshot shows a Microsoft Internet Explorer window titled "Price Details - Microsoft Internet Explorer". The URL in the address bar is "http://www.goodluck.com/priceDetails.asp". The page displays a form for booking a room. The user has selected "2003 (Year)", "10 (Month)", "28 (Day)", "Room Type: Standard 1 People", "Adults: 2", and "Children: 1". A note says "Special Requirements: None". Below this is a table showing room rates:

Year	Month	Day	Room Price
2003	10	21	\$318
2003	10	22	\$318
2003	10	23	\$318
2003	10	24	\$318

Below the table, it says "Your total booking nights: 4 nights" and "Your cost: \$318". A tax of "\$24.07" is added, making the "Your total cost: \$342.07". At the bottom, there is a link "Click Here for payment details".

Figure 26. Price Details Page (Users)

5.2.11 Payment Page

Users need to input their credit card information at this page. At present, the GoodLuck payment system only accepts credit card types in Visa, Master card, Discover, or American Express. Sorry no other types of cards will be accepted. Please refer to Figure 27.

When users input card number, the length of card number should match between 15 and 16. The 15-digit option is for American Express card only. The rest of cards are all in 16-digit. If users do not match the requirement here, the page will display corresponding error messages.

Please refer to Figure 28.

In the option "expiration date", users cannot choose date before the current month; otherwise the page will display the error message. Please refer to Figure 29.

This page will not skip to next one until all fields are chosen in appropriate values.

After users click the "Done" button, the page will be linked to "Booking Completed" page.



Figure 27. Payment Page

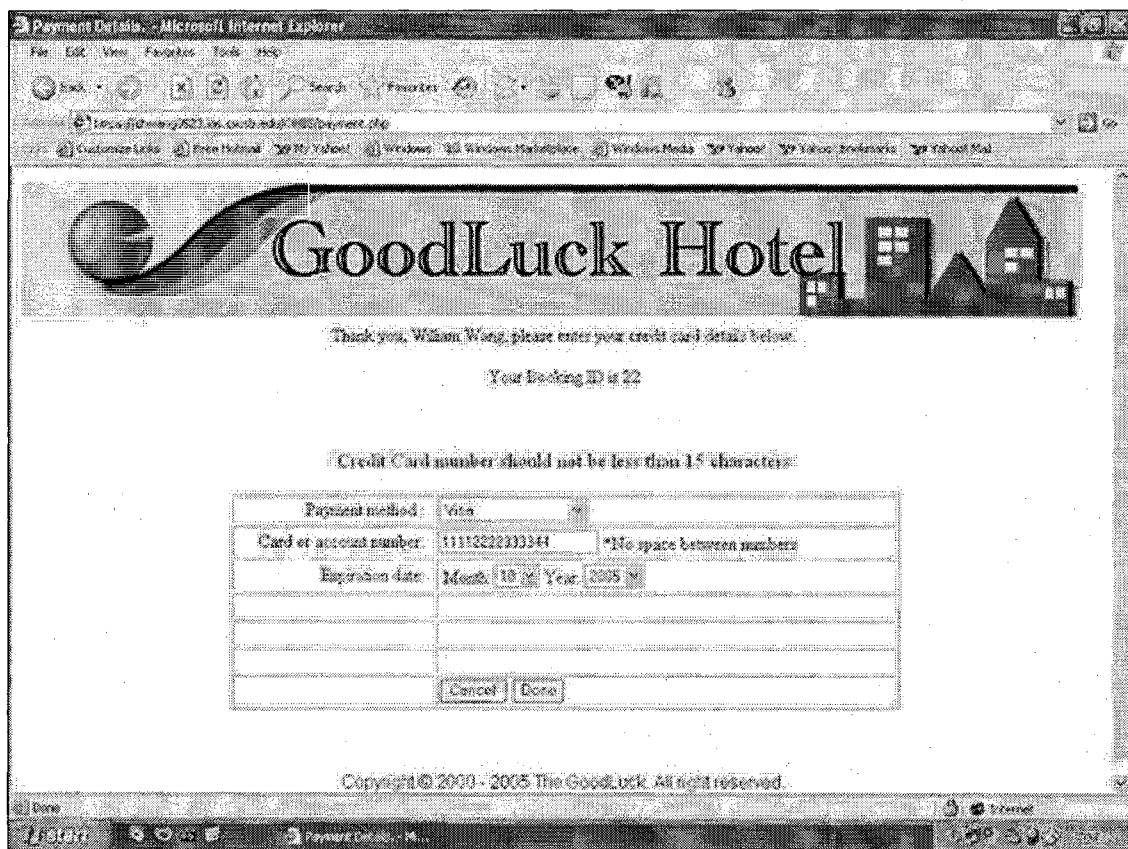


Figure 28. Error Message in Card Number (Users)

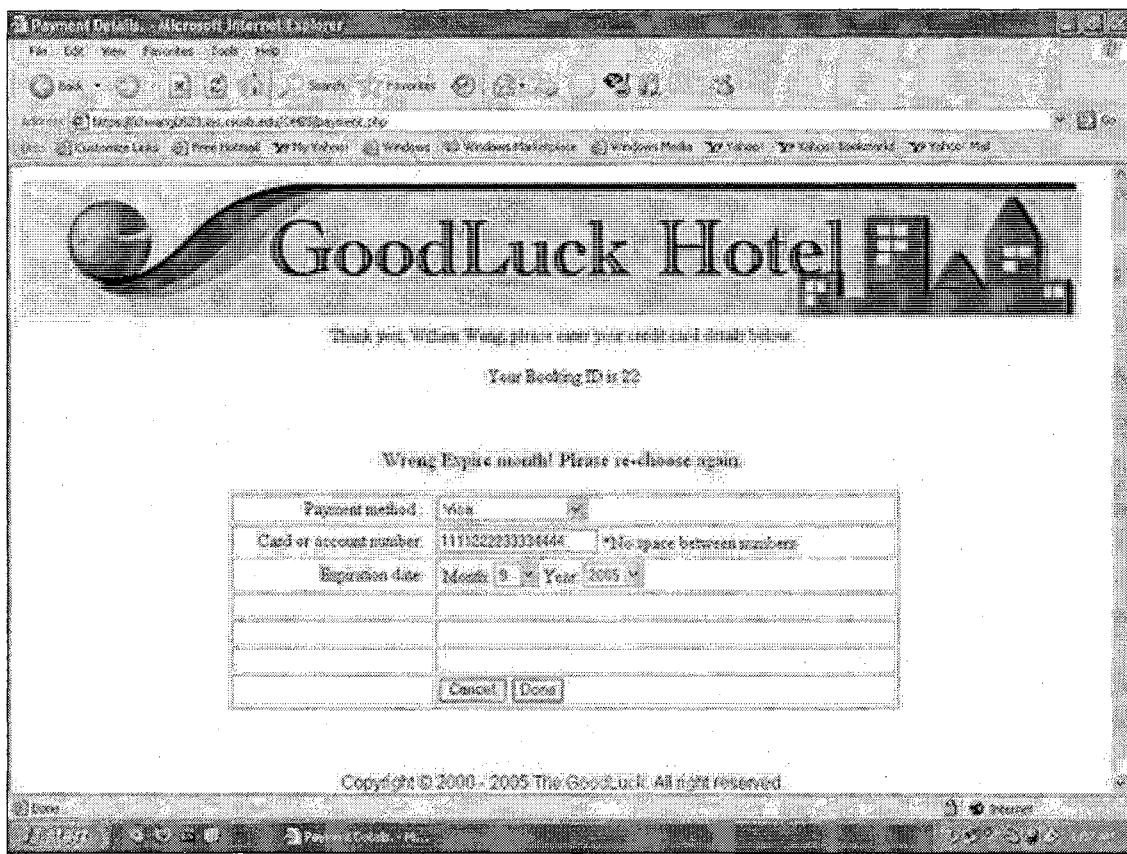


Figure 29. Error Message in Card Date (Users)

5.2.12 Booking Completed Page

After users finish the payment page, the page will be linked to this one for displaying the final confirmation details. Users can view all details for their booking. In this page they only can click "Homepage" to back to home page of GoodLuck Hotel. Please refer to Figure 30.

At the same time, system will send out a confirmed email to their registered email address. They can check all details inside the confirmed email to make sure if the booking information is correct.

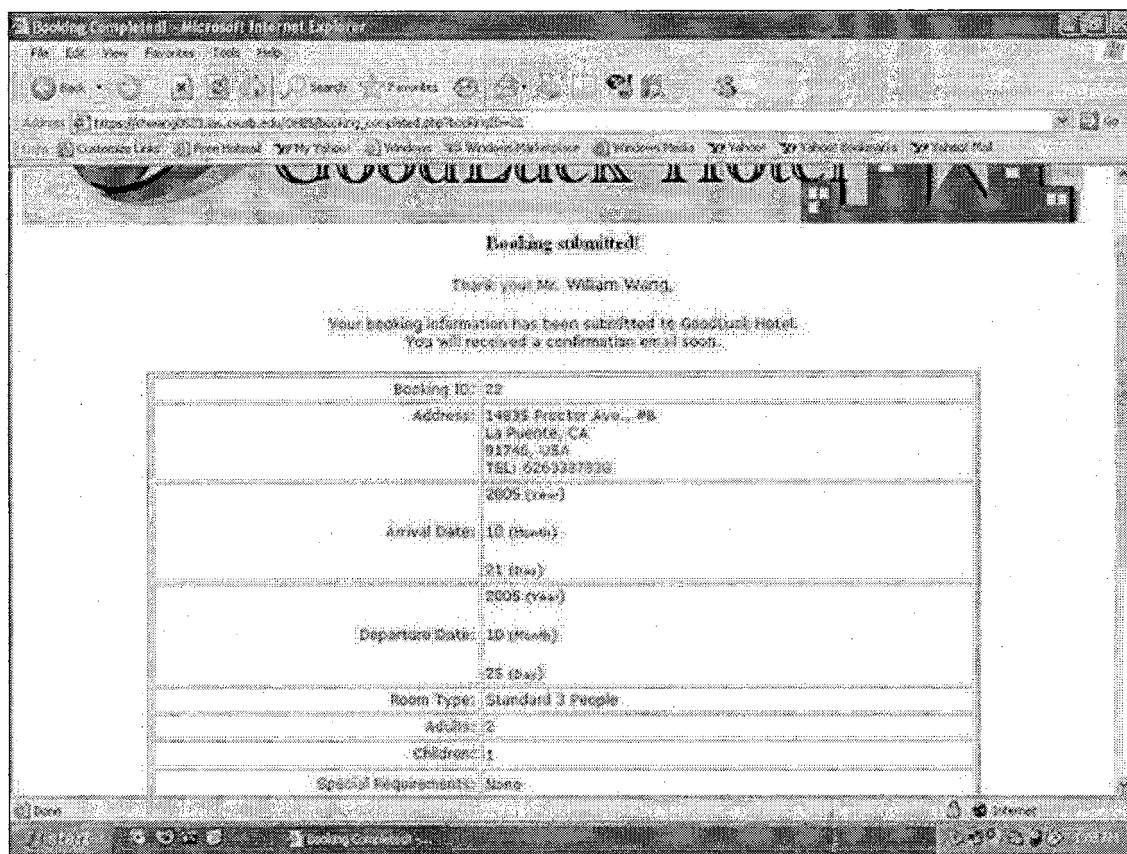


Figure 30. Booking Completed Page (Users)

5.2.13 View Booking Details Page

After logon, when users click in either of "View Booking", "change booking", or "Cancel Booking" button, they will see this page. In this page, users can view all their booking history in GoodLuck. If the Edit field displays "No", it means the specific booking has been expired or the arrival date is less than 3 days from today. They cannot change or cancel this specific booking. If it has options "Change" and "Cancel" on it, it means users

can change or cancel this specific booking. Please refer to Figure 31.

If users click the option "Change", the page will be linked to Change Booking Details page. The same page as we mentioned in Figure 24.

If users click the option "Cancel", the page will be linked to the "Cancel Booking Determined" page.

The screenshot shows a Microsoft Internet Explorer window titled "Booking Details". The address bar displays the URL "http://www.hotel.com/booking/bookingdetails.asp". The title bar has the text "BOOKING DETAILS". The main content area shows a table of booking details for user "Mr. William Yang".

Booking Details

Thank you, Mr. William Yang.
Your booking history is shown below.

Booking ID	Customer ID	Arrival Year	Arrival Month	Arrival Day	End Year	End Month	End Day	RoomType	Adults	Children	Total Price	Action
22	16	2003	10	21	2003	10	23	Standard 3 People	2	1	342.07	Change
23	10	2003	11	12	2003	11	14	Standard 1-2 People	1	1	125.32	Cancel
21	16	2003	11	29	2003	11	30	Standard 1-2 People	1	1	244.65	Change
24	19	2003	12	9	2003	12	13	Standard 1-2 People	1	2	186.71	Cancel

Figure 31. View Booking Details Page (Users)

5.2.14 Cancel Booking Determined

If users click option "Cancel" in the "View Booking Details" page, the page will be linked to this one. In this page user can review both arrival and departure date and the booking ID for this specific booking.

If they choose "YES" and submit, this booking will be cancelled forever and cannot be recovered.

If they choose "NO" and submit, this page will be linked back to "View Booking Details" page.

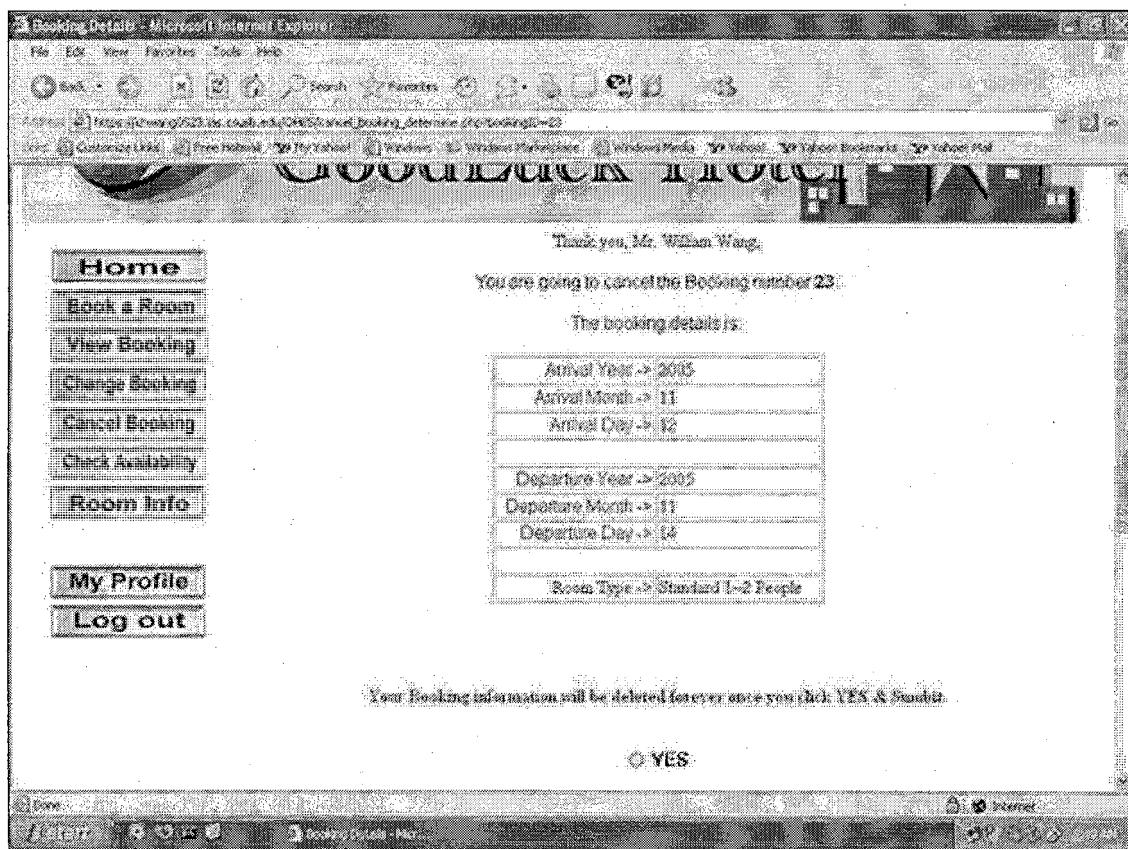


Figure 32. Cancel Booking Decided Page (Users)

5.2.15 Booking Cancelled Page

In this Page users will see the information shown the specific booking has been cancelled.



Figure 33. Booking Cancelled Page (Users)

5.2.16 Change my Profile Page

In this page users can view their registered information in GoodLuck. They can change any fields here except the email address. If users do not want to change anything, just click "Update" and the page will be linked to next one. Please refer to figure 34.

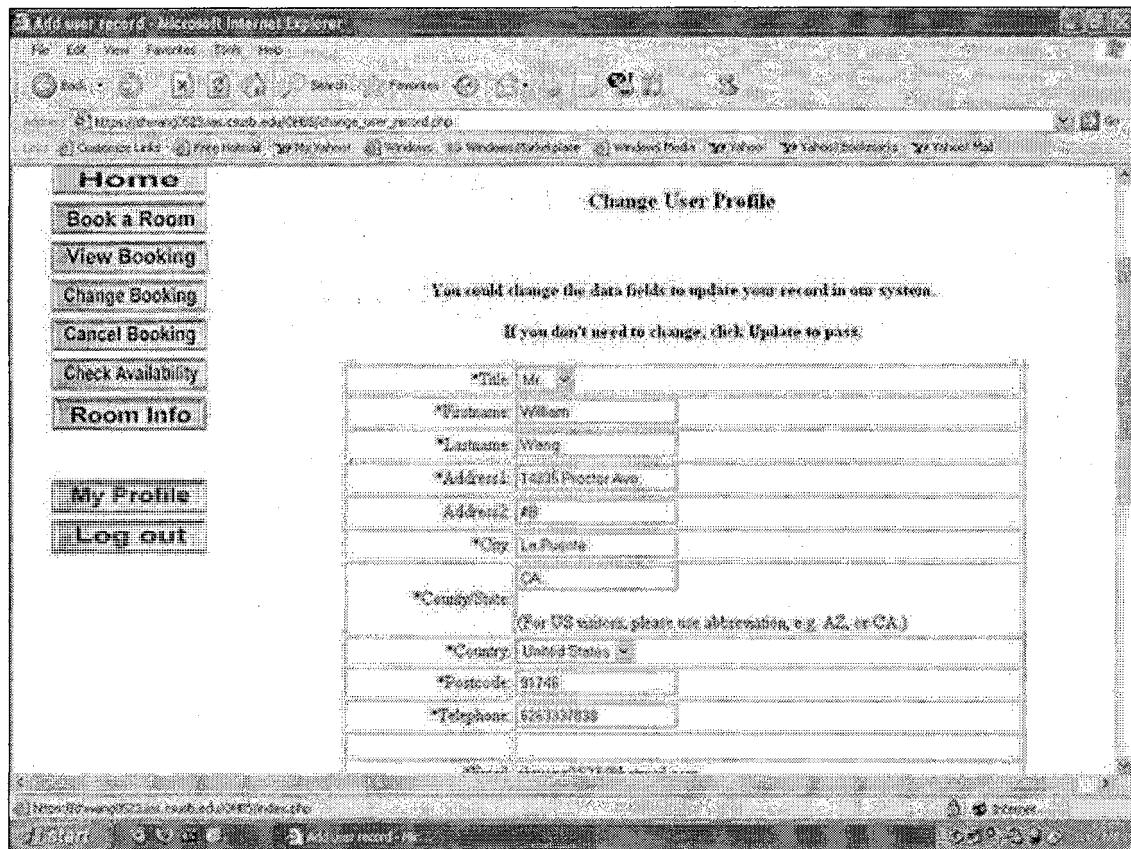


Figure 34. Change my Profile Page (Users)

5.2.17 User Profile Updated Page

After users click "update" from "Change User Record" page, the page will be linked to this one and shown all information. If users find any error in data, they can click the "My Profile" button again and re-modify until the information is correct. Please refer to Figure 35.

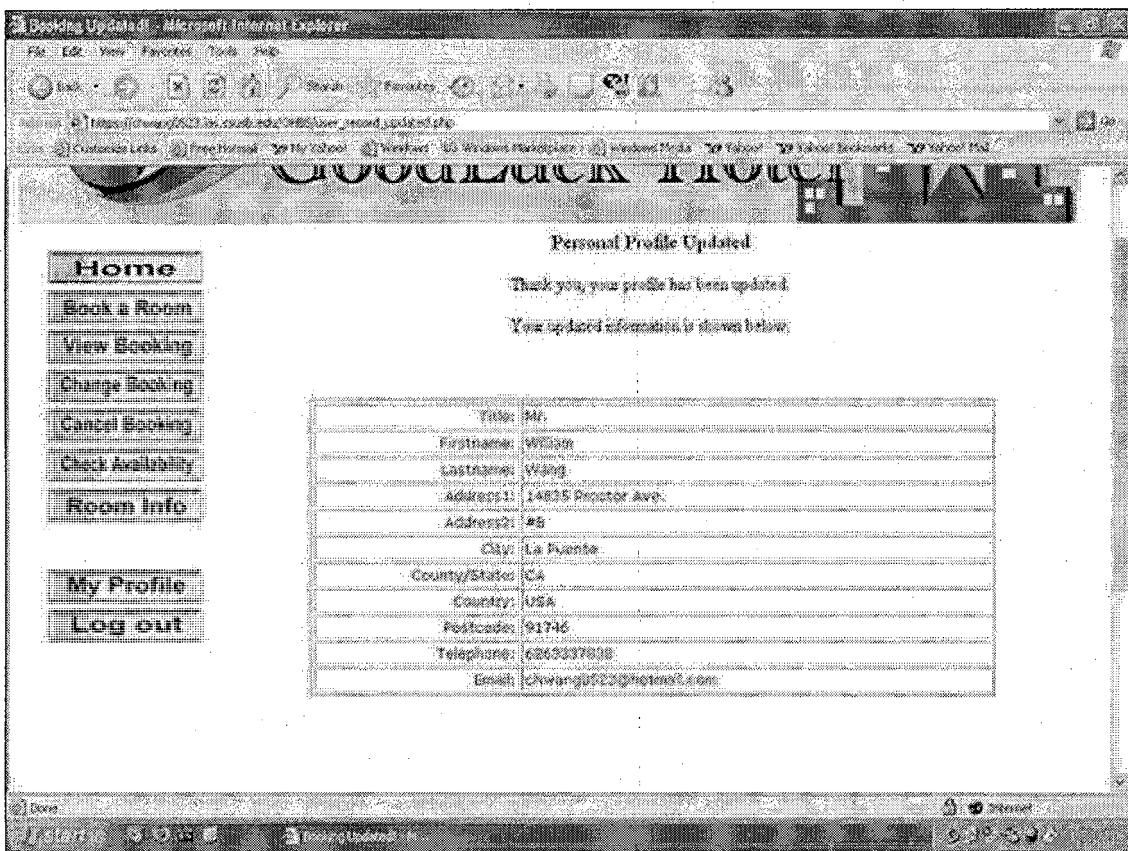


Figure 35. User Profile Updated Page (Users)

5.2.18 Check Availability Page

In this page users can check the room availability in GoodLuck. All visitors in GoodLuck can use this function. No logon required in this page. Please refer to Figure 36.

The same function as the Booking Details Page, users cannot choose the inappropriate arrival or departure date; otherwise the page will display the error message.

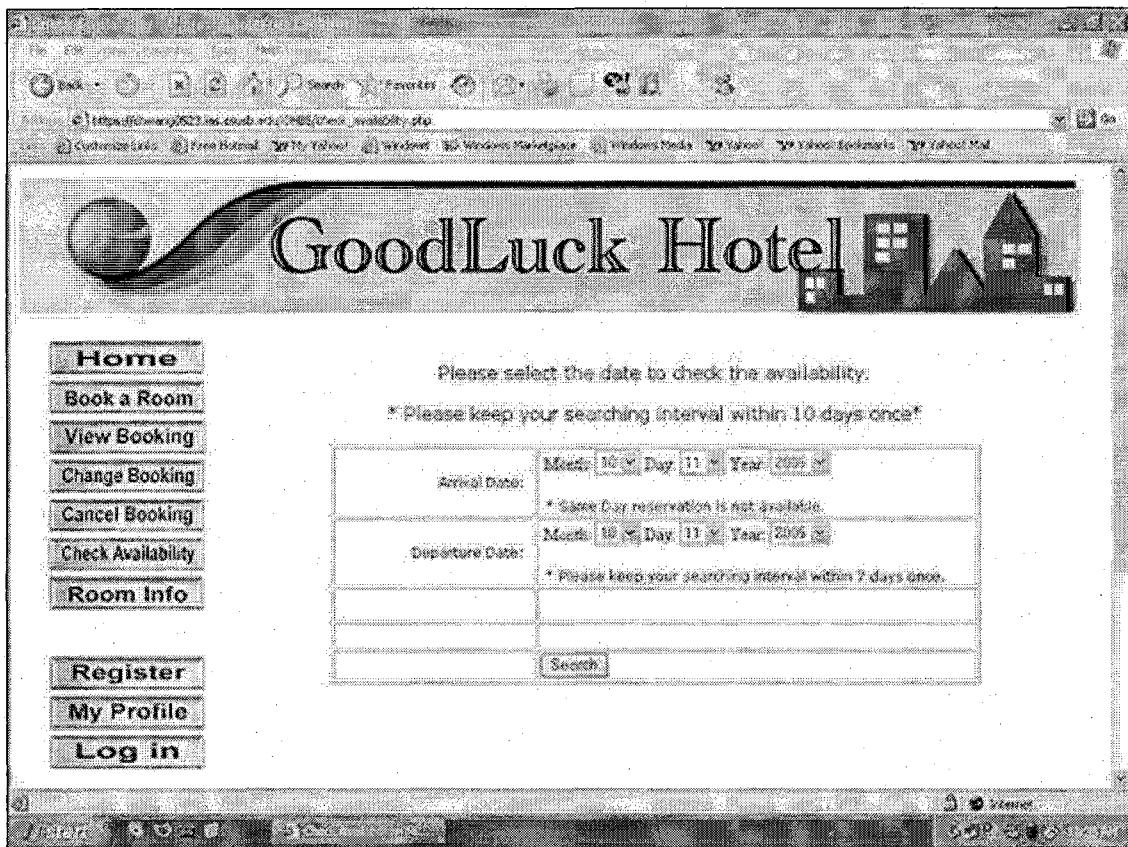


Figure 36. Check Availability Page (Users)

5.2.19 Result Availability Page

After users select the date in checking room availability, the page will be linked to this one and display the result. No logon required in this page. Please refer to Figure 37.

Result of Room Availability - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Stop Refresh Stop Search Favorites

Address: http://www.goodluck.com/room/availability.asp

Customer Care Home Hotel The Good Luck Windows Macintosh Windows Help 3D Screens 3D Screensaver 3D Screensaver Help

GoodLuck Hotel

Thanks! Your searching result is shown below.

Year	Month	Day	Standard 1~2 People		Standard 3 People		Deluxe Suite		Luxury Room	
			Qty Left	Price	Qty Left	Price	Qty Left	Price	Qty Left	Price
2005	10	13~29	49	45	69	55	99	15	149	
2005	10	20~29	49	58	69	55	99	12	149	
2005	10	21~21	69	44	69	55	139	12	159	
2005	10	22~29	69	38	69	32	1139	15	159	
2005	10	23~29	49	58	69	55	99	15	149	
2005	10	24~21	32	43	69	55	99	15	149	
2005	10	25~29	49	58	69	55	99	12	149	
2005	10	26~29	50	44	69	35	99	12	149	

Click [\[back\]](#) to re-check the room availability again.

Figure 37. Result Availability Page (Users)

5.2.20 Room Information Page

Users can view all room types in GoodLuck and their basic introduction. No logon required in this page. Please refer to Figure 38.



Figure 38. Room Information Page (Users)

5.2.21 Special Promotion Page

This page displays the current promotion in GoodLuck.

Please refer to Figure 39.



Figure 39. Special Promotion Page (Users)

5.2.22 About GoodLuck Page

This page displays basic introduction about GoodLuck Hotel. Please refer to Figure 40.

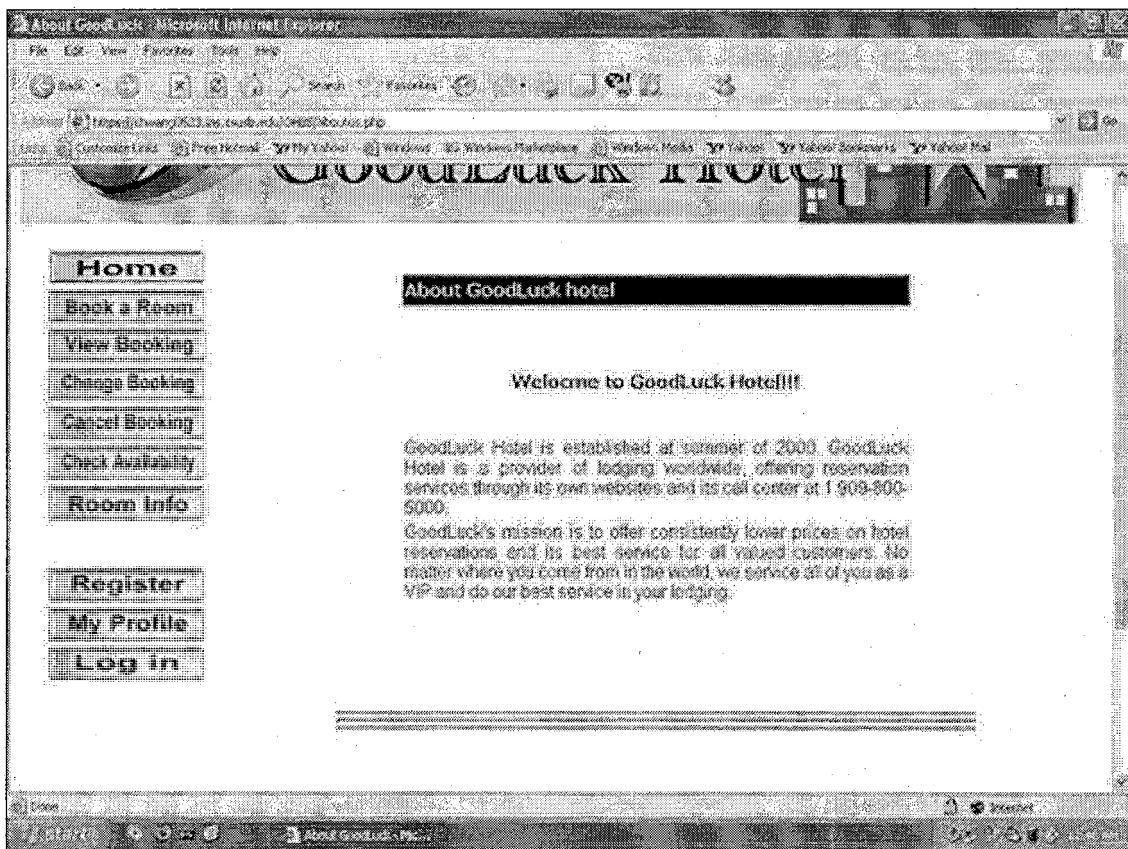


Figure 40. About GoodLuck Page (Users)

5.2.23 Customer Care Page

This page displays some frequently asked Q&A. If users still cannot get the answer on the page, they can call Customer Service Department for help. Please refer to figure 41.

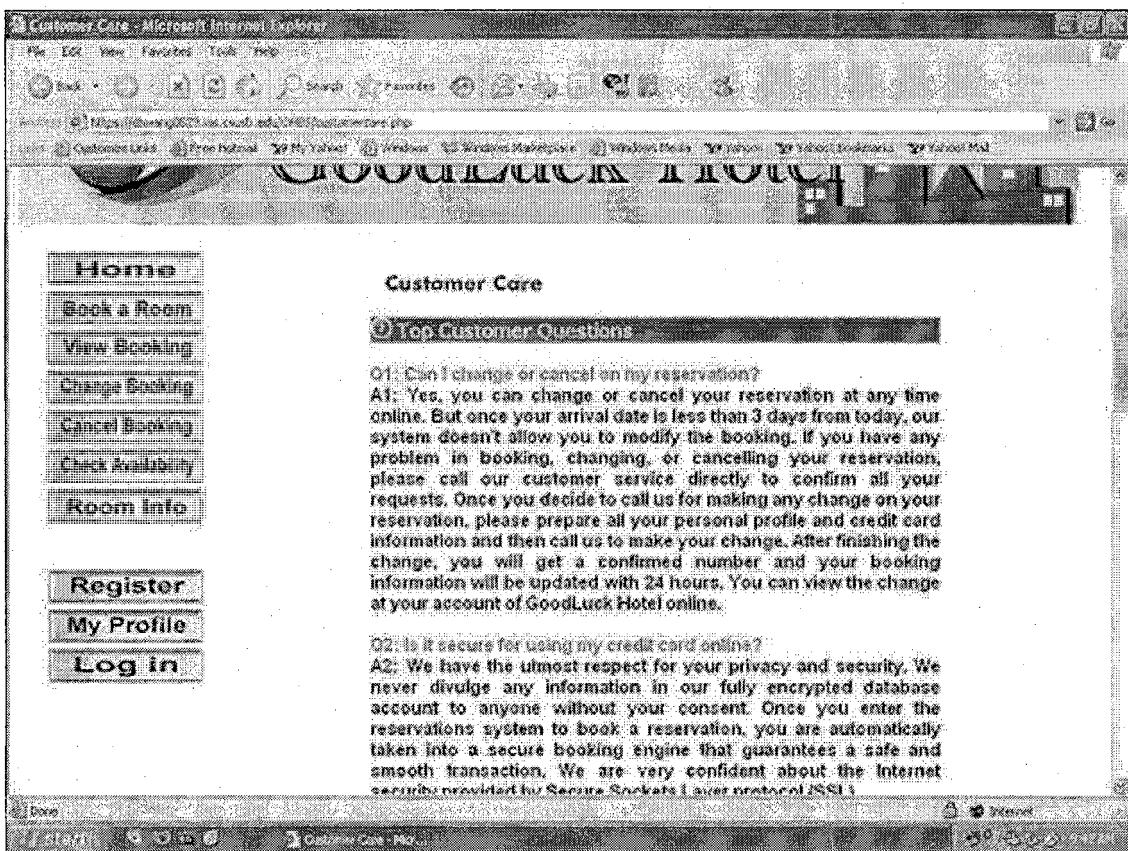


Figure 41. Customer Care Page (Users)

5.2.24 Contact us Page

This page displays basic contacting information and service options in GoodLuck. Please refer to Figure 42.

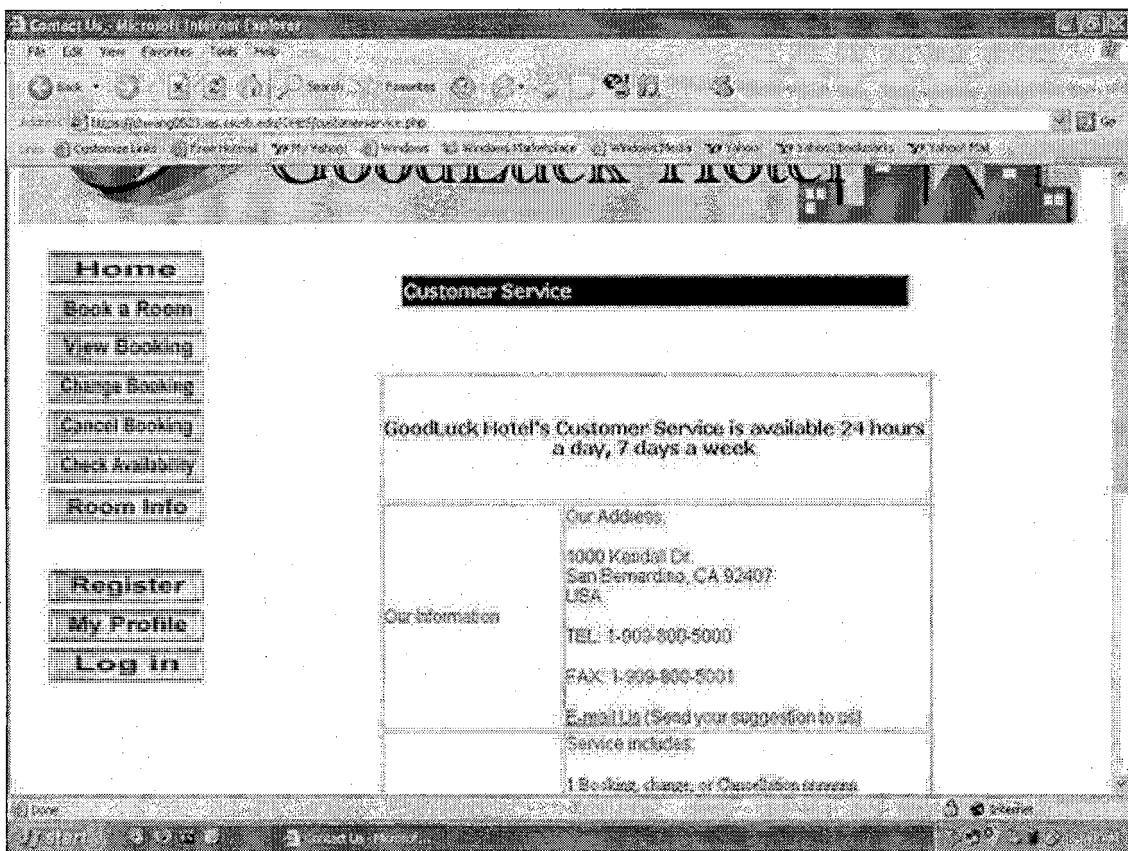


Figure 42. Contact us Page (Users)

5.2.25 Travel and Shopping Page

This page displays some basic traveling introduction and shopping information in local areas of GoodLuck Hotel. Please refer to Figure 43.

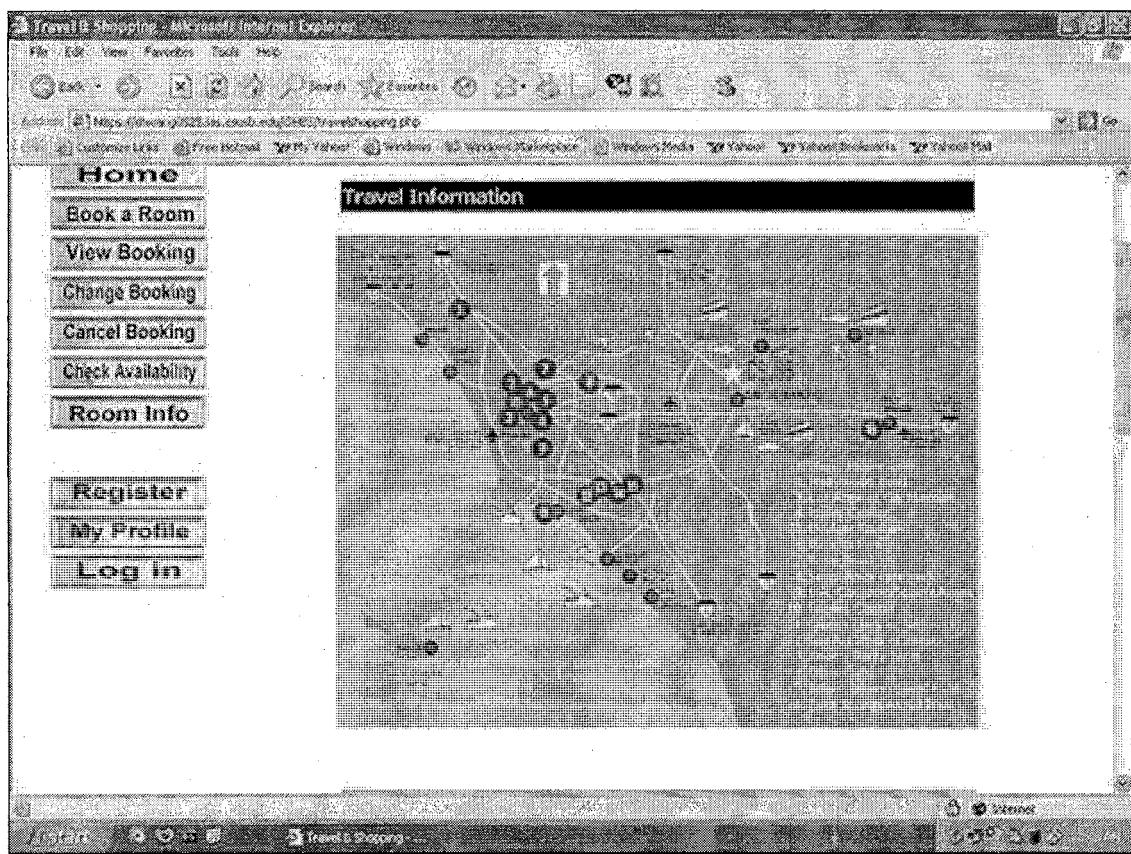


Figure 43. Travel and Shopping Page (Users)

5.2.26 Privacy Policy Page

This page displays some basic Q&A in privacy policy part. If users still cannot get the answer on the page, they can call Customer Service Department for help. Please refer to Figure 44.

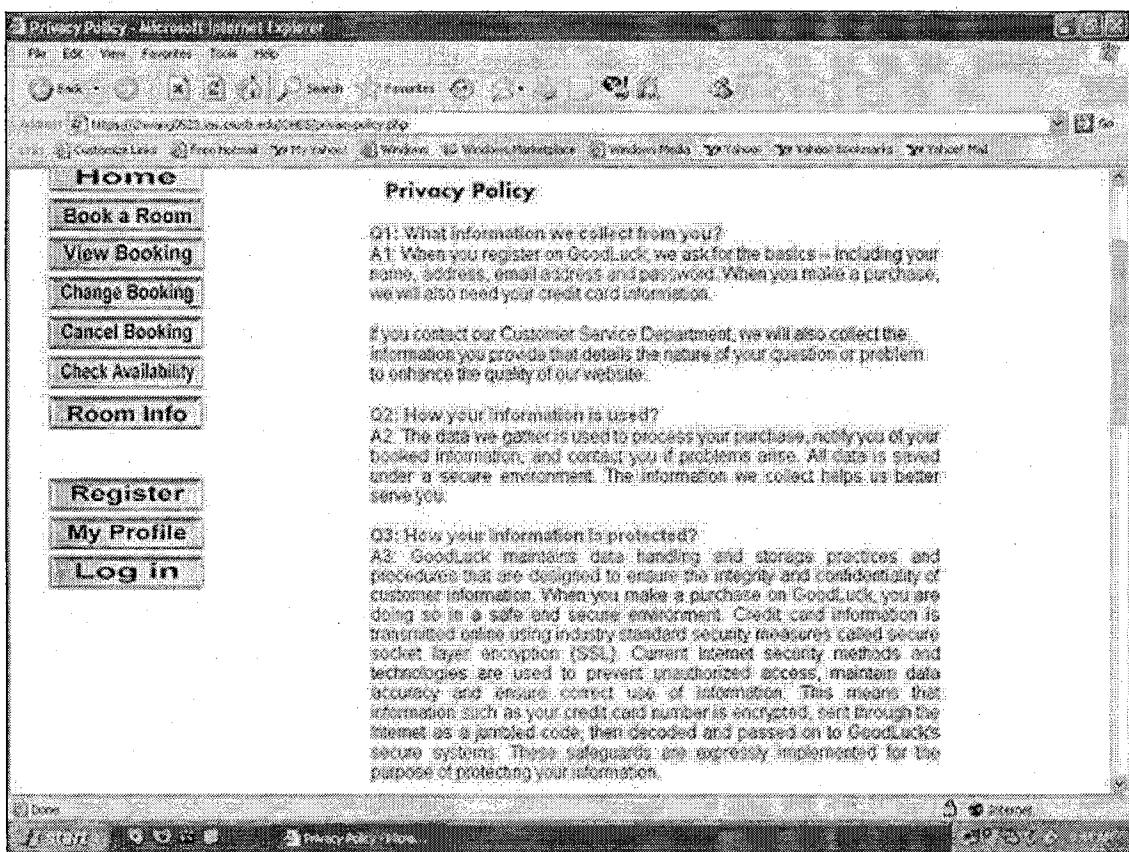


Figure 44. Privacy Policy Page (Users)

5.2.27 Admin Login Page

After clicking "Admin" button on main page, the page will be linked to Admin Login Page. The page is for administrators in GoodLuck only, not for the regular users or visitors.

The same as the User Login page, it requires administrators to enter the username and password in order to login. Please refer to Figure 45.

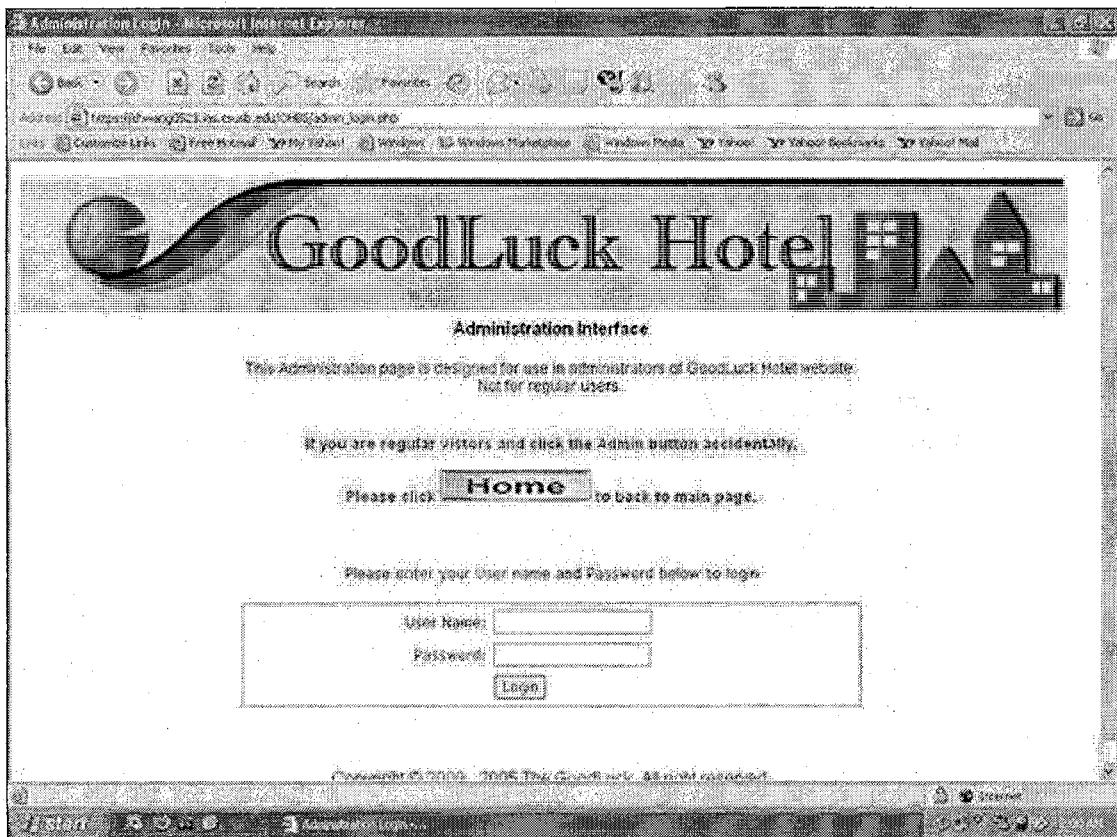


Figure 45. Admin Login Page (Admin)

5.2.28 Admin Menu Page

After administrators login, they will see this page. In this page, first part is "Modify Room Price and Quantity". They can modify data in room price or quantity sorted by month. Second part "View Users' Profiles or Create New Administrator", they can view users' profiles and change them if it needs, or create a new administrator. Third part "Booking Management", they can change or cancel users' booking record if it needs. Last one is "Files Management". Here they can modify some information pages.

It is very useful for administrators to manage the system in an efficient and fast way.

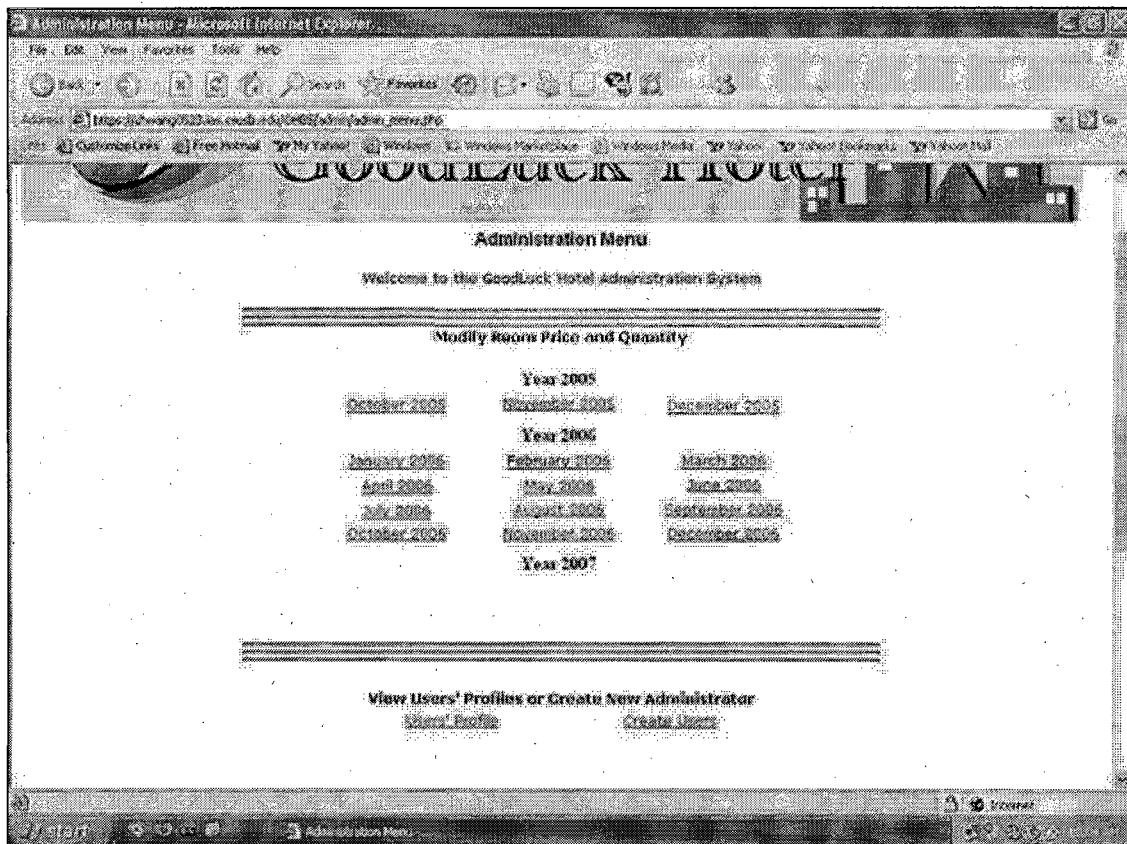


Figure 46. Admin Menu Page (Admin)

5.2.29 Change Price and Quantity Page

In the "Modify Room Price and Quantity" part, administrators can access the database to change room price or quantity sorted by month. Please refer to Figure 47.

Day	Standard 1~2		Standard 3		Deluxe Suite		Luxury Room		Price D	Last details
	Quantity Left	Price								
1	99	89	50	119	35	109	15	229	Eat	
2	99	69	50	89	35	109	15	199	Eat	
3	99	49	50	69	35	99	15	149	Eat	
4	99	49	50	69	35	99	15	149	Eat	
5	99	49	50	69	35	99	15	149	Eat	
6	99	69	50	89	35	109	15	199	Eat	
7	99	69	50	89	35	109	15	199	Eat	
8	99	49	50	69	35	99	15	149	Eat	
9	99	49	50	69	35	99	15	149	Eat	
10	99	49	50	69	35	99	15	149	Eat	
11	99	49	50	69	35	99	15	149	Eat	
12	99	49	50	69	35	99	15	149	Eat	
13	99	69	50	89	35	109	15	199	Eat	
14	99	69	50	89	35	109	15	199	Eat	
15	99	69	50	89	35	109	15	199	Eat	
16	99	49	50	69	35	99	15	149	Eat	
17	99	49	50	69	35	99	15	149	Eat	
18	99	49	50	69	35	99	15	149	Eat	
19	99	50	50	69	35	99	15	149	Eat	

Figure 47. Room Price and Quantity Page (Admin)

5.2.30 View Users' Profiles Page

In this page administrators can view all registered users in GoodLuck and make any necessary modification in all fields except field "clientID". Please refer to Figure 48.

ID	Title	First name	Last name	Address1	Address2	City	Province	Country	PostCode	TEL	Email	Password	
10	Mr.	William	Wang	14835 Proctor	#8 Ave.	La Puente	CA	USA	91740	5263337633	dwwang0523@hotmail.com	CWdM43mOU	
11	Mr.	Johnson	Lee	1205 Kendall	Dr.	#4134	San Bernardino	CA	USA	91740	9098005000	jph@hotmail.com	DAWRk44J4Y

Figure 48. View Users' Profiles Page (Admin)

5.2.31 Create New Administrators Page

In this page administrators can add a new administrator after fill out required form. All fields are required in this form. Please refer to Figure 49.

The username cannot be the same with previous created one; otherwise the page will display the error message.



Figure 49. Create New Admin Page (Admin)

5.2.32 Change Users' Records Page

In this page administrators can view all booking history and change the specific one if it is necessary. Please refer to Figure 50.

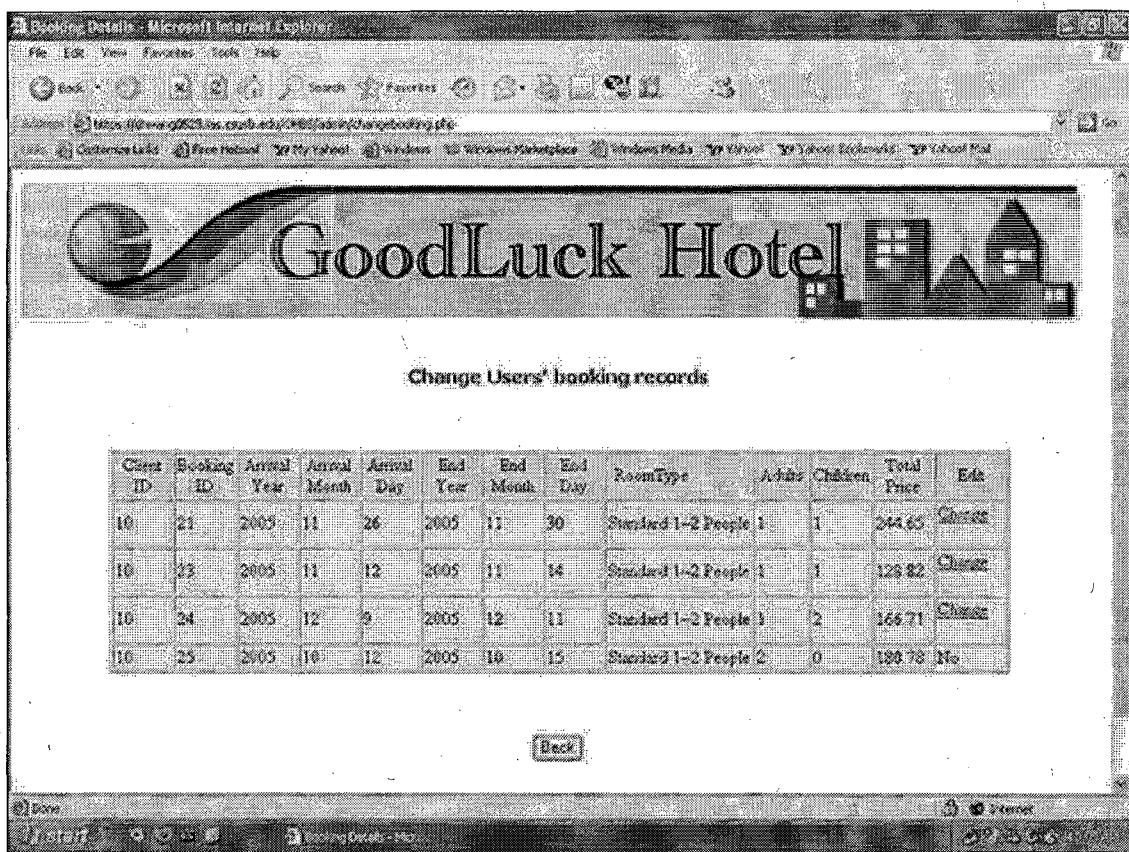


Figure 50. Change Users' Records Page (Admin)

5.2.33 Cancel Users' Records Page

In this page administrators can view all booking history in GoodLuck and cancel the specific booking. Please refer to Figure 51.



Figure 51. Cancel Users' Records Page (Admin)

5.2.34 Change About GoodLuck Page

Administrators can modify all information shown in the About GoodLuck page. After modifying, they can check and view the change immediately from the Web page. Please refer to Figure 52.

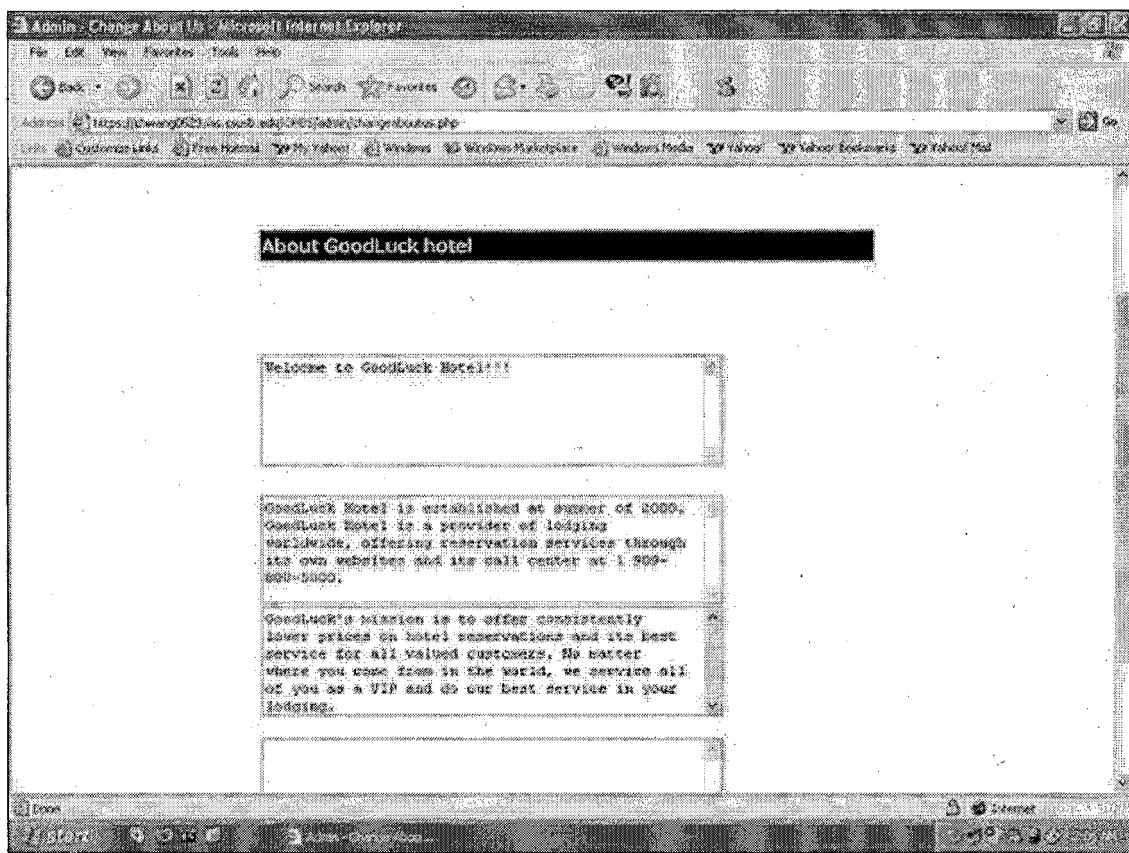


Figure 52. Change About us Page (Admin)

5.2.35 Change Customer Care Page

Administrators can modify all information shown in the Customer Care page no matter in question or answer part. After modifying, they can check and view the change immediately from the Web page. Please refer to Figure 53.

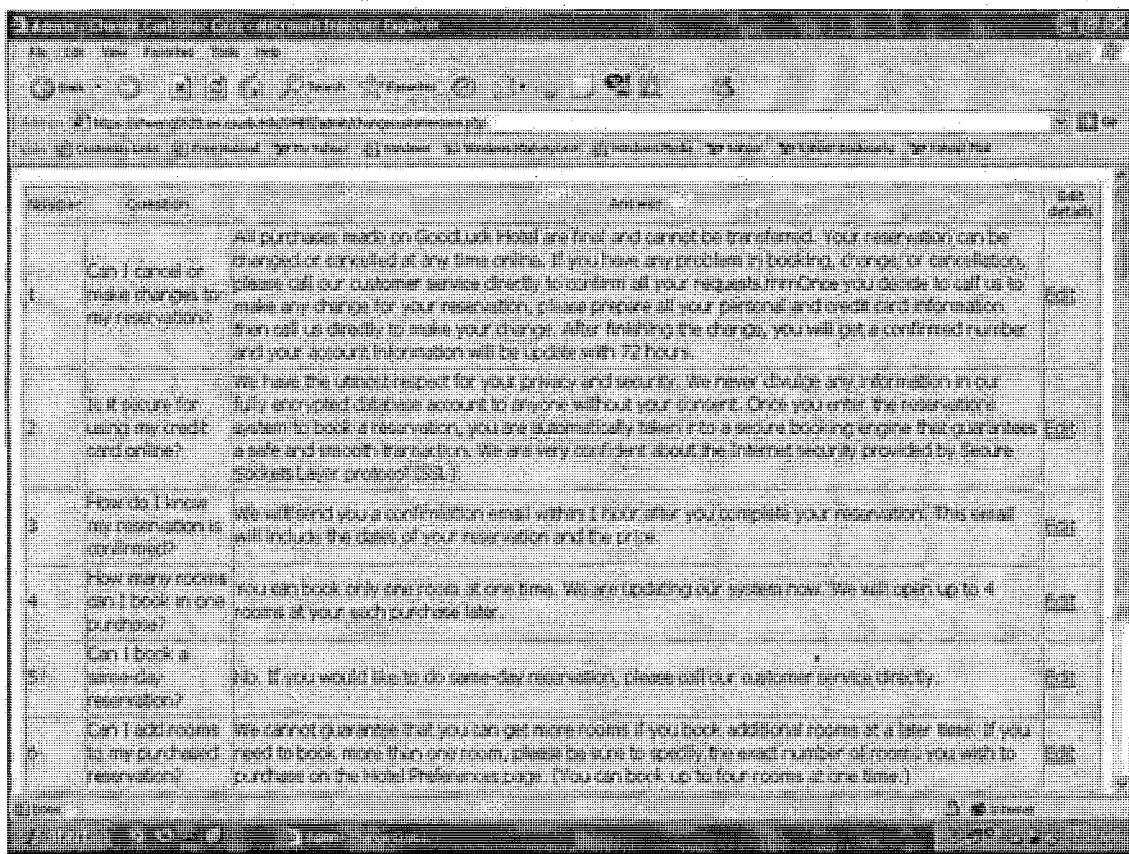


Figure 53. Change Customer Care Page (Admin)

5.2.36 Change Contact us Page

Administrators can modify description part shown in the Contact Us page. After modifying, they can check and view the change immediately from the Web page. Please refer to Figure 54.

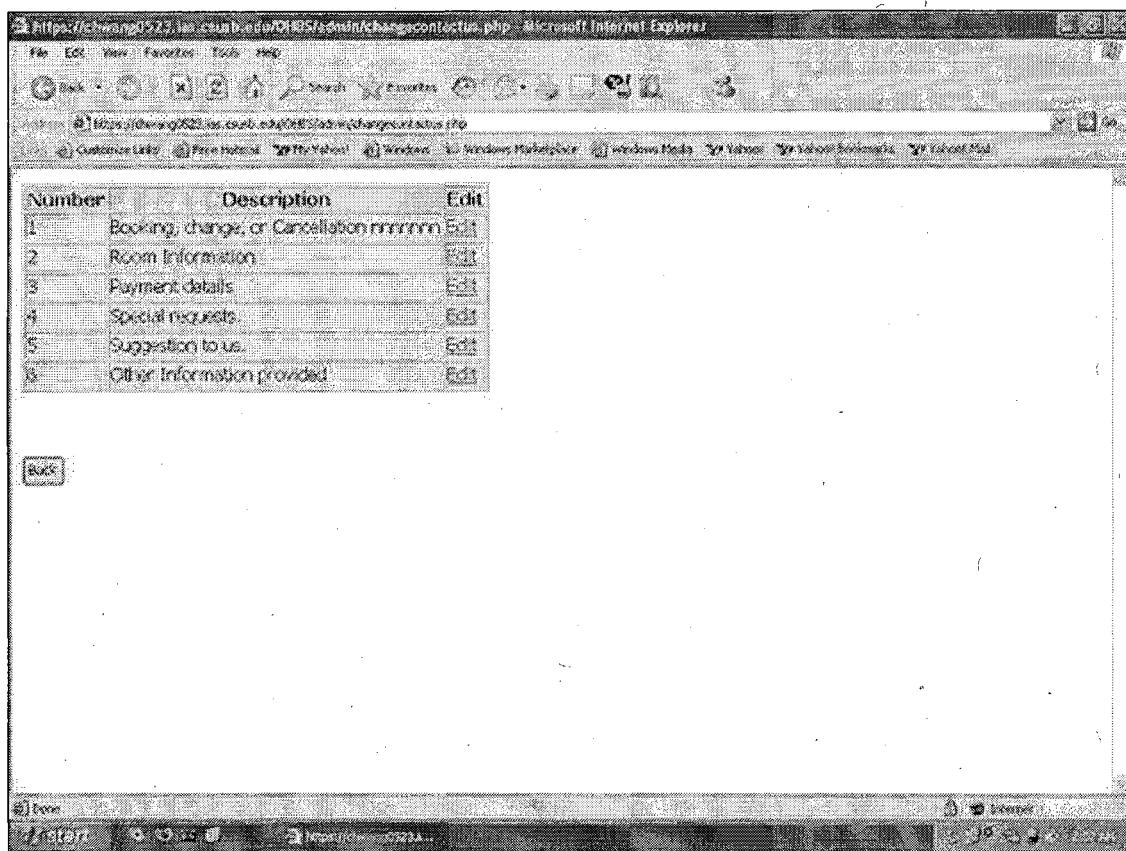


Figure 54. Change Contact us Page (Admin)

5.2.37 Change Travel and Shopping Page

Administrators can modify all fields shown in the Travel & Shopping page. After modifying, they can check and view the change immediately from the Web page. Please refer to Figure 55.

Number	Name	URL	Address	City
1	Inland Center Mall	http://www.inlandcenter.com/	500 Inland Center Drive	San Bernardino
2	Ontario Mills Outlets	http://www.ontariomills.com/static/home.aspx?sessionId=urn\$faUNw24	One Mills Circle, Suite 1	Ontario
3	Dessert Hills Premium Outlets	http://www.premiumoutlets.com/outlets/outlet.aspx?id=6	49400 Seminole Cabazon Drive	Cabazon
4	http://www.southcoastplaza.com http://www.southcoastplaza.com		3333 Bristol Street	Costa Mesa

Figure 55. Change Shopping Page (Admin)

5.2.38 Change Privacy Policy Page

Administrators can modify all information shown in the Privacy Policy page no matter in question or answer part. After modifying, they can check and view the change immediately from the Web page. Please refer to Figure 56.

Privacy Policy Page	
Question	Answer
What information we collect from you?	When you register on Goodcard, we will ask for the basic information such as name, email address and password. When you make a purchase, we will also need your full or delivery information. If you contact our Customer Service department, we will also collect the information you provide that clarifies the nature of your question or problem to enhance the quality of our website.
How your information is used?	The information is used to process your purchase, notify you of your booked information, and contact you if problems arise. All data is stored in a secure environment. The information we collect helps us better serve you.
How your information is protected?	Goodcard maintains data handling and storage practices and procedures that are designed to ensure the integrity and confidentiality of customer information. When you make a purchase on Goodcard, you are doing so in a safe and secure environment. Credit card information is transmitted order-to-order through standard security measures called secure socket layer encryption (SSL). Current Internet security methods used by Goodcard are designed to prevent unauthorized access, maintain data accuracy and ensure privacy of information. This means that information such as your credit card number is encrypted both through the Internet as it is handled internally and passed on to Goodcard's service providers. These safeguards are expressly implemented for the purpose of protecting your information.
With whom your information may be shared?	When you book on Goodcard, the personal information you provide will be shared with the third parties necessary to ensure the completion of your purchase. This includes the hotel, car rental, or cruise partner with whom you directly booked, as well as any third parties responsible for facilitating the transaction (e.g., credit card authorisation company, etc.). The personal information provided to these third parties will not be used for any purpose other than the purchase of your hotel arrangements. Goodcard will also share your information with business partners contracted to provide specific services to you, in accordance with our Privacy Policy. In instances such as this where your data is shared with third parties, these firms are contractually required to protect your personal data for the purpose for which the relationship exists, and these firms do not have the right to share your data with

Figure 56. Change Privacy Policy Page (Admin)

5.2.39 Change Room Information Page

Administrators can modify all information shown in the Room Information page. For each room type and its corresponding description, hotel details, and properties, administrators can change all details here. After modifying, they can check and view the change immediately from the Web page. Please refer to Figure 57.

http://192.168.0.57:80/admin/editRoomInfo.php Microsoft Internet Explorer

File Edit Favorites Tools Help

Search Favorites

192.168.0.57:80/admin/editRoomInfo.php

① Cookies List ② Print Preview ③ My Yahoo! ④ Windows ⑤ Windows Marketplace ⑥ Windows Vista ⑦ Yahoo! ⑧ Yahoo! Local ⑨ Yahoo! Mail

Number	Room Type	Description	Edit details
1	Standard 1~2 People	Standard room for 1 ~ 2 people comes with one Queen size bed or two Full size beds.	Edit
2	Standard 3 People	Standard room for 3 ~ 4 people comes with two Queen size beds or three Full size beds. It is a good choice for family or group to stay.	Edit
3	Deluxe Suite 1~2 People	Deluxe room for 1 ~ 2 people comes with one Queen size bed or two Full size beds. In room refrigerator, Free high speed internet, deluxe living room, and Jacuzzi are standard equipments.	Edit
4	Luxury Room	Luxury room for couple or family comes with one King size bed or two Queen size beds. In room refrigerator, Free high speed internet, Luxury living room, in room Jacuzzi are standard equipments. Special request is available in reservation via phone call.	Edit

Hotel Details

Located at San Bernardino county, Goodluck features more than 400 guestrooms built during the summer of 2000. Guests pass through a wide porte-cochere into a massive lobby filled with ponds, waterfalls, and numerous seating areas. Two escalators lead to meeting rooms, and the lobby is surrounded by shops, services, and restaurants. The expansive fitness center offers a basketball court, indoor pool and spa, sunbeds, sauna, steam room, weight-training and cardiovascular equipment, private tanning beds, and spa services. A separate outdoor pool features spa, sunbeds, and a poolside bar. Guests can take care of business in the staffed business center (offering equipment rental and computer, secretarial, and notary services) and the U.S. post office near the hotel (only 2 miles). Other services include a limousine rental, photo shop, and florist. The California State University, San Bernardino is only one mile from hotel.

Figure 57. Change Room Information Page (Admin)

CHAPTER SIX

CONCLUSION AND FUTURE DIRECTIONS

6.1 Conclusion

The Online Hotel Booking System provides an environment for users to book hotel rooms, perform booking activities, and manage personal account at GoodLuck Hotel with a Web browser. The system uses Apache Web Server running on Linux platform. The database server is MySQL. To implement the system, the developer has used JavaScript, HTML, and PHP. All dynamic contents are handled by PHP. Persistent data are saved in the database.

Online Hotel Booking System is a user-friendly and easy-to-use system of a Web-based application. Everyone who knows how to use a Web browser can register and then login to book a room, change booking details, cancel booking, and view or modify personal profile online. It is easy and fast to make a reservation.

There can still be improvements for the Online Hotel Booking System. First, users can only make a reservation that date is within one year from today (system time). Second, if the customer arrival date is less than specific days (this number is decided by administrators) from today, they cannot change or cancel it.

6.2 Future Enhancements

The possible improvements that can be made for the Online Hotel Booking System include:

I can make the graphical user interface friendlier and more functional in the next development. The Online Hotel Booking System aims to provide a user-friendly interface and more functions for real world hotels. But there is still some room for improvements. For example, I can change the settings and functions of some options in the Web pages to make them more professional and artistic.

I can also use more pop-up windows so that users can choose the value from them directly. This applies to "arrival date" and "departure date" options. In this way the users can avoid many possible mistakes caused by inappropriate input.

This online system only allows users to make a reservation that date is within one year and reserve up to four rooms per visit. These limitations can be removed in the future.

In future improvements, the Online Hotel Booking System can offer more services such as car rental, flight ticket purchase, and the vacation package advising. These services have been offered already on some real world online booking systems. More hotels will add these

services on their online systems. In this way, people can make all their requests at once no matter they are business trip arrangement, shopping, travel, or vacation.

REFERENCES

- [1] IEEE Std. 830-1998 IEEE Recommended Practice of Software Requirements Specifications.
- [2] Gareth Downes-Powell, Tim Green, and Bruno Mairlot. "Dreamweaver MX-PHP Web Development", First Edition, Wiley Publishing Inc, July 2002.
- [3] Paul DuBois and Michael Widenius. "MySQL", First Edition, New Riders Publishing, December 1999.
- [4] Kevin Yank. "Build Your Own Database Driven Website Using PHP & MySQL", First Edition, SitePoint Pty Ltd, September 2001.
- [5] Larry Ullman. "PHP and MySQL for Dynamic Web Sites: Visual QuickPro Guide", First Edition, Peachpit Press, March 2003.
- [6] Martin Fowler and Kendall Scott. "UML Distilled - A brief guide to the standard object modeling language", Second Edition, Addison-Wesley, July 2001.
- [7] Hugh E. Williams and David Lane. "Web Database Applications with PHP & MySQL", First Edition, O'Reilly & Associates, Inc., March 2000.
- [8] Rasmus Lerdorf and Kevin Tatore. "Programming PHP", First Edition, O'Reilly & Associates, Inc., March 2002.

- [9] Shelly Cashman Woods. "HTML Complete Concepts and Techniques", Second Edition, Thomson Course Technology, 2002.
- [10] Jennifer Niederst. "Learning Web Design", First Edition, O'Reilly & Associates, Inc., 2001.
- [11] Tim Converse and Joyce Park, "PHP 4 Bible", IDG Books worldwide, Inc., 2000.