

Tour and Travel Management System

By

BILAL AHMED

Bachelor of Science in Computer Science

Supervisor: Mr. Noman Mazher

Co-Supervisor: Mr. Khurram

Department of Computer Science

Chenab College Of IT, Gujrat

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Certificate

This is to certify that this report embodies the original work done by Bilal Ahmed during this project submission as a Final year project of BS (hons) in computer Science, University of The Punjab, Lahore.

Approved by . . . :

Supervisor: Mr Noman Mazher

Project Coordinator: Mr Noman Mazher

Head of the Department: Mr Syed Saqib

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ABSTRACT

As tourism is one of the fastest growing industries today, thus within the tourism industry events are getting more and more important. People have become more interested in events of all kinds, and will travel far away to participate in events that they find interesting. Events can offer various economical and social benefits for destinations, and therefore destination managers can and should employ events effectively in a tourism role.

It has become widely accepted that every community and destination needs to adopt a long-term, strategic approach to event tourism thereby planning and development in order to realise the full tourism potential of events. This study was launched as a response to the lack of studies on how Tours strategies are actually used in destinations. The study was directed to tours and travel management system and the aim was to explore Tour and Travel packages. We offer tour and travel services including ticket bookings, hotel reservations , rental car services, holiday tour packages, domestic tour packages. We provide the most suitably designed as well as the customized travel packages to the customers. We offer everything related to travelling services under one roof.

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Chapter # 1

CHAPTER 1. INTRODUCTION

Tour and Travel management system: This is an online project developed using Php and MySQL. The purpose of this project is to provide the complete information about the packages available for a tour. There are 2 different types of users. First the customer visits the site and enters the place from where to where he wishes to travel. He also provides the date as when he would like to travel. Then he sends these details to the travel and tourism agency. The employee of travel and tourism agency receives the mail or Enquiry and check which vehicle is available for that day and reverts back to the customer along with the quotation. If the customer agrees for any one of the quotation, he can reply back along with agreed quotation. Then the agency will take down all the details of the customer and will send a confirmation message to the customer. On the day of the tour, the customer first must show the confirmation message to the driver for clarity and only then he will agree to drive after looking at the confirmation message. This software is user friendly and helps in finding the vehicle sooner rather than wandering manually everywhere to find for vehicles. Before the tour starts, half payment has to be done. After the customer returns or reaches his final destination, he must pay full amount either through cash or through cards. After the travelling the customer can come back to the site and enter his feedback about the travel and tourism agency. If any good feedback will be taken positively and if any negative feedback too will be taken positively and try to improve what had lacked. The report is also generated periodically and the database will be cleared according to the time span for faster performance.

The Travel Management System team is currently developing and implementing an enterprise-wide travel system to replace the TAPS system. This system will be used for all All Kind of Person who have willing to travel they submit travel authorization documents and initiate reimbursement requests. The new system will allow for the automation of travel approvals and processing of reimbursement requests.

Currently, Travel Office staff manually enter travel authorization and reimbursement data. The system is slow and inefficient and leads to data entry errors and delays in processing travel reimbursements for University faculty, staff, Any kind of Person and students. The new system will speed up processing time and provide more accurate data.

This project development a website for Tour & Travel management system with HTML, CSS , JavaScript as front-end and PHP & MYSQL as back-end. Tour & Travel management system planning the tour for their customer. It is an application which decreases few efforts of planning of trip or making of yours holidays happy.

1.1. Motivation

The motivation for designing this travel application came because I love traveling rather than spending lot of time on computer games. Further, there is also the possibility of designing one's own customized travelling application from scratch because custom-designed platforms are expensive. Moreover, I value recent learning about the PHP and JavaScript programming languages as well as seeing how powerful and dynamic they are when it comes to web designing and developing the application. Apart from helping computer science students understand the concepts of web-application developing, it would be very easy to incorporate the idea of using programming techniques from the available visuals to understand how a piece of code appears on a user interface. The languages used to build this application are JavaScript, HTML, and PHP because I found them to be extremely useful while working on the technologies at my workplace.

1.2. Aim of the Software

This software is developed to help computer science students learn about application developing using JavaScript, HTML and PHP from their basic capabilities. This application allows the student to understand the basics about the appearance of a first web page and how a complete working application can be built from scratch. It allows students to understand the concept of user-integrated graphics and how JavaScript can be embedded into HTML. Further, it gives insight about how the client-side language interacts with the server-side language, PHP , and finally with the database. This travel application is designed, primarily, for computer science students to learn and understand the concept of application development, and can also be used to teach travel and web-application topics.

This application can be run online on different machines, and students can view the source code for all the different parts shown on the UI to visually understand how a particular piece of code works. This travel application is very versatile and can be enhanced by adding more functions and modified graphics for use with commercial purposes.

1.3. Existing System

In the present system a customer has to approach various agencies to find details of places and to book tickets. This often requires a lot of time and effort. A customer may not get the desired information from these offices and often the customer may be misguided. It is tedious for a customer to plan a particular journey and have it executed properly.

1.4. Proposed System

The proposed system is a web based application and maintains a centralized repository of all related information. The system allows one to easily access the relevant information and make necessary travel arrangements. Users can decide about places they want to visit and make bookings online for travel and accommodation.

1.5. Modules

The system is proposed to have the following modules:

Administrator module, travels module.

ADMINISTRATOR MODULE:

This module provides administrator related functionality. Administrator manages all information and has access rights to add, delete, edit and view the data related to category, subcategory, travels packages, enquiry etc.

TRAVELS MODULE:

This module provides the details of various parts of travel agency website. A user can select the appropriate package from different categories and send the enquiry to get related information about packages.

Chapter # 2

CHAPTER 2. OBJECTIVES

All the steps required in the software-analysis process related to this project (product function, user characteristics, functional and nonfunctional requirements and constraints for the tour and travel application) are described in the following sections.

2.1. Requirements Analysis

The requirements analysis and gathering processes are critical for the success of any software engineering project. Requirements analysis in software engineering is a process that determines the tasks that are required to determine the needs and conditions to design a new product or to make modifications in any existing product/application. This process considers all the stakeholders' conflicting requirements, and analyzes the documentation and validation of the system. The requirements should be actionable, measurable, testable, and related to the defined needs of the system design. From the software-engineering perspective, requirements analysis is a three-step process.

- 1. Requirements Elicitation:** Elicitation of requirements, also known as requirements gathering, includes the task of identifying various requirement types from stakeholders or from project documentation.
- 2. Requirements Analysis:** Analysis of requirements determines if the gathered requirements are clear, complete, and consistent. The analysis also handles any ambiguous requirements that do not clearly state what needs to be implemented, which could create a loss of resources and time if identified later in the development or testing phase. Requirement analysis requires identifying the stakeholders and taking their needs into account to help them understand the implications of designing the new system.

Along with what modules are worth implementing and which ones are more cost efficient, and then to create a software-requirement specification document. To clearly elicit the stakeholders' requirements, different processes, such as developing a scenario or user stories, and identifying the use case which is being used for the project, can be utilized.

Stakeholder analysis says that, to clearly gather the requirements of the project, analysis first need to identify the stakeholders. Stakeholders are people or organizations that have a valid interest or use in the system. The steps to identify the stakeholders are as follows:

- Anyone who operates the system.
- Anyone who benefits from the system.
- Anyone who is directly or indirectly involved in purchasing the system.
- People or organizations opposed to the system.
- Organizations responsible for the system design.
- Organizations that regulate the financial or safety aspects of the system.

Once the stakeholders are successfully identified, interviews are conducted through different processes, the needs and requirements of the system are identified, and a requirements specification document is prepared. The document is then discussed with the major stakeholders to identify any ambiguity with the requirements and understanding of the system.

3. Requirements Documentation: This step involves documenting the requirements in various forms, including summary lists, natural language documents, visual documents, use cases, user stories, or process specifications. A requirement

specification document is categorized in different ways according to the stakeholders' need, helping to create a clear contract between development and business.

The following sections include the different categories of requirements specification document that are essential for designing this application: the functional requirements, constraints, system requirements, etc.

2.1.1. Product Perspective

The tour & travel application is a web-based system. It can be accessed using Internet Explorer 8.0 and above, Mozilla Firefox 2.0, and Google Chrome.

2.1.1.1. User Interface

The two interface types found in the Tour & Travel application are as follows:

1. **User Interface:** Users are able to view the home page of the tour & travel application, browse the different categories, browse and enquiry any number of package from any categories, look for information about each package, enquiry the packages in the subcategories, viewing, check out or order package after choose the packages, and check out the packages by completing the required information in the enquiry form.
2. **Admin Interface:** The administrator is able to view the users' information that was entered during filling the enquiry form in the database, can update the information, price, add or remove categories, subcategories and packages from the main display.

2.1.1.2. Hardware Interface

The tour and travel application shall provide minimum hardware requirements. The following hardware configurations are required for a PC using the tour and travel application:

- Pentium processor
- 512 MB of free hard-drive space
- 512 MB of RAM

2.1.1.3. Software Interface

This section lists the requirements that are needed to run the system efficiently. The operating system needed for the system to run effectively, the interface to run the application, the driver for running web applications, the notepad development environment to develop the application, and the third-party tool used for editing purposes are as follows:

1. Operating System: Windows (Vista/Windows 7) or MAC OS.
2. Web Brower: Internet Explorer (8.0 and above), Mozilla Firefox (3.0 and above), or Google Chrome.
3. Development Environment: Notepad++ or sublime text.
4. Third-Party Tool: Microsoft Word or Paint software.

2.1.2. Product Function

The online travel application would have the following basic functions:

1. Display all the categories available for travelling on the system's Tour category page.
2. Display all the subcategory linked to each category listed on the Tour category page.
3. Allow the administrator to add new packages to the existing list of available packages.
4. Allow users to view the category, subcategory and packages and send the enquiry.
5. Allow the administrator to modify the price of each packages.

6. Allow the administrator to update the description about each packages.
7. Allow the administrator to view and edit information about each user that send the enquiry from the system.

2.1.3. User Characteristics

The users of the online travel application, based on their roles, are customers (users) and the administrator (owner). These users are identified based on their experience and technical expertise.

1. **Admin:** The administrator is the owner of this online travel application. One must have a basic understanding of computers and the internet as well as prior knowledge for operating the backend system. The administrator is responsible for maintaining all the training documents required for the system. The administrator can perform the following functions:
 - Assign or change the price of the packages, update the packages in the list, and delete the packages.
 - Update, Delete, View and Add new Categories, subcategories and packages.
 - View the history of the customers who enquiry the different packages.
2. **Users:** The users of this online travel application are all customers who would wish to buy the packages for his/her tour. These users are anyone with shopping experience and the know-how to browse through a categories from application Interface. They must have basic understandings about computers and the internet. The users should be able to perform the following functions using this system:
 - View, browse, and select a category on the tour category page.
 - Cancel packages and select his most promise package from category.
 - Enquiry about any kind of package.
 - Place the order by completing the enquiry form.

2.1.4. Constraints

1. **Hardware Limitations:** The minimum hardware requirement for the system is 128 MB of Ram and a 32-MB hard-disc drive.
2. **Accessibility:** Initially, the software should be available as a web application for a small set of users to test.
3. **Others:** The application should be built using PHP and JavaScript inscribed in HTML, and it should, initially, be accessible through the Notepad++ and later published on a server.

2.1.6. Specific Requirements

This section contains details about all the software that is required for designers to create a system to satisfy the users' requirements and for testers to test the given requirements. This section contains the interface description of each GUI for the different system users. These sections also give descriptions about all the system inputs, all the functions performed by the system, and all the system output (responses).

2.1.6.1. Functional Requirements

This section contains the requirements for the online travel application. The functional requirements, as collected from the users, have been categorized as follows to support the types of user interactions that the system shall have.

Educational Purpose: The main purpose of this online travel application is to teach computer science students the basics of the PHP, JavaScript, and HTML programming languages along with the concepts of web-application designing.

- The students shall be able to view the source code for the entire application.
- The students shall be able to, individually, view and understand the code for all pieces on the UI.
- The students shall be able to debug the application's source code using different tools, which is an online tools to inspect, edit, and monitor HTML, CSS, and JavaScript requests directly on the web page.

User: View Categories and Packages: The users shall be able to see the home page of the online travel application when they first run the program. The users shall be able to view the different categories, select categories, browse through the package in each category. The users shall be able to view and more information about each package.

- The users shall be able to view the categories on the application's home page.
- The users shall be able to view packages in different categories.
- The users shall be able to enquiry about any package.
- The users shall be able to view more information about the package before buying.

- The users shall be able to view the all kind of information available on the web.
- The users shall be able to browse through the available packages.

Admin: View User Information

- The administrator shall be able to view all the users' information that completes the Enquiry form and the order process.

Admin: Add/Update/Delete Packages

- The administrator shall be able to add new Package to the list of categories.
- The administrator shall be able to modify/update the Packages price and description.
- The administrator shall be able to delete package from the main page of the travel application in the backend Side.

Additional Functional Requirements

- The administrator shall be able to view the entire history of the Enquiries for different packages.
- The administrator shall be able to view the entire history for the users who successfully complete the order process.

2.1.6.2. Performance Requirements

This section lists the performance requirements expected from the online travel application.

1. The users shall be able to View the entire information about whole web application in fewer than 15 seconds.
2. The users shall be able to view information about the different packages in fewer than 15 seconds.
3. The users shall be able to order the Packages within 10 seconds after completing the order form or Enquiry form.
4. The navigation between pages shall take fewer than 5 seconds.

5. The application shall be able to do a validation check on the information provided in the user-authentication form and the Enquiry form to avoid false or incomplete Information.

2.1.7. Design Constraint

This section tells the design requirements for the online travel application.

The user interface (UI) must have specific fonts and font sizes. The system shall match the fonts and font sizes used for all the pages of the application.

2.1.8. Software System Quality Attribute

1. Integrity

- The authorized user shall be allowed to access the online travel application.
- Based on the user type, the online travel application shall provide a user-specific interface.

2. Correctness

- The assigned task should be received by the specified user.

3. Availability

- The system shall be made available to the user/administrator for whole period of time.

4. Robustness

- The system shall be able to perform the different operations to the application.

Chapter # 3

CHAPTER 3. IMPLEMENTATION

This chapter includes the detailed design used to build the online travel application. The system's design is used to create the functions and operations of the gathered requirements in detail, including screen layouts, business rules, process diagrams, and other documentation. The output of this chapter describes the new system which is defined as a collection of modules and subsystems. This design stage takes the initial input requirements that were identified in the approved requirements specification document. For each requirement, there is a set of one or more design elements that are produced using the different prototypes. These design elements describe the desired software features, in detail, including functional hierarchy diagrams, screen layouts, activity diagrams, and class diagrams. The intention of these diagrams is to describe the software in detail so that the system can develop the application with less additional design input. The system's mock screen shots are shown later in this chapter.

3.1. Detailed Scope

This project is supposed to be delivered in two phases, with each phase being an add-on to the project that makes it more usable and acceptable.

1. In the first delivery, the application must be able to Browse the Package from the Category and Home Page Design.

- Browse categories on the home page.
- Select a category and browse through the items.
- View more information about the whole Web application and Design the home page and its different Sections.

2. The application must be able to Enquiry about any Package Function available.

- Browse the different Packages.
- Shows the full information about Packages.
- Enquiry about any kind of Package due to the filling the form correctly.

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3.2. Static Decomposition and Dependency Description

This section contains the system use-case diagram for the online travel application and also has a explanation for each use case in the system.

3.2.1. High-Level Use Case Diagram

The system's use case shows the user a detailed view of the system and how the actors would interact with each other and with the system. The explanation for each use case is then provided below the system use case for the User (Figure 1) and the administrator (Figure 2), helping the user to understand who are the actors areas as well as giving the description for each use case along with its pre- and post-conditions that should be satisfied once the use case is implemented in the software.

Figure 1 demonstrates the use case of for an User where he or she has access to the application. The User can access the home page, select a category, or add/delete etc...

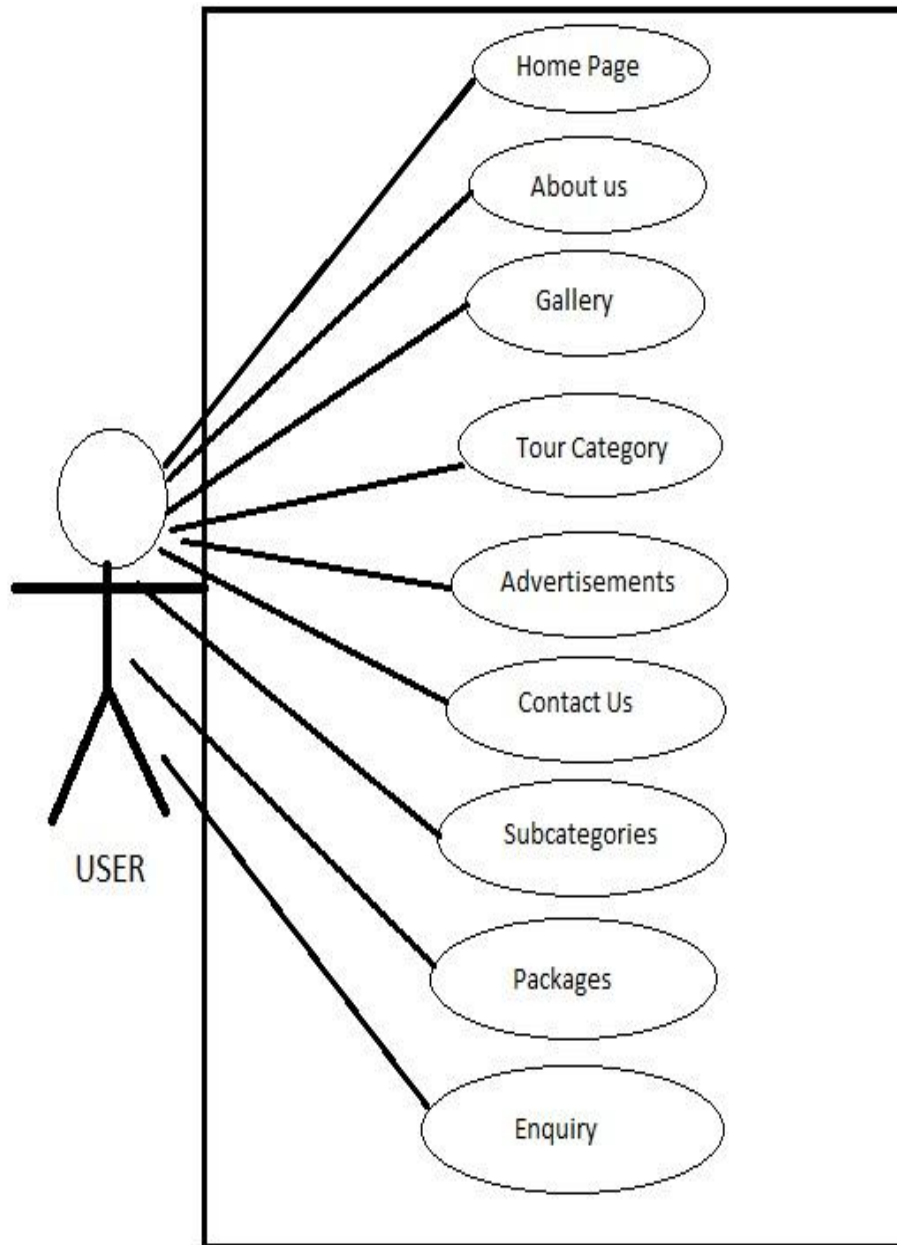


Fig. 1. Online Tour and Travel Application System Use-Case Diagram: User.

Figure 2 demonstrates the use case of for an Admin where he or she has access to the application. The Admin can access the login/logout, Add, Update, Delete, View the categories, subcategories. And different kind of packages etc...

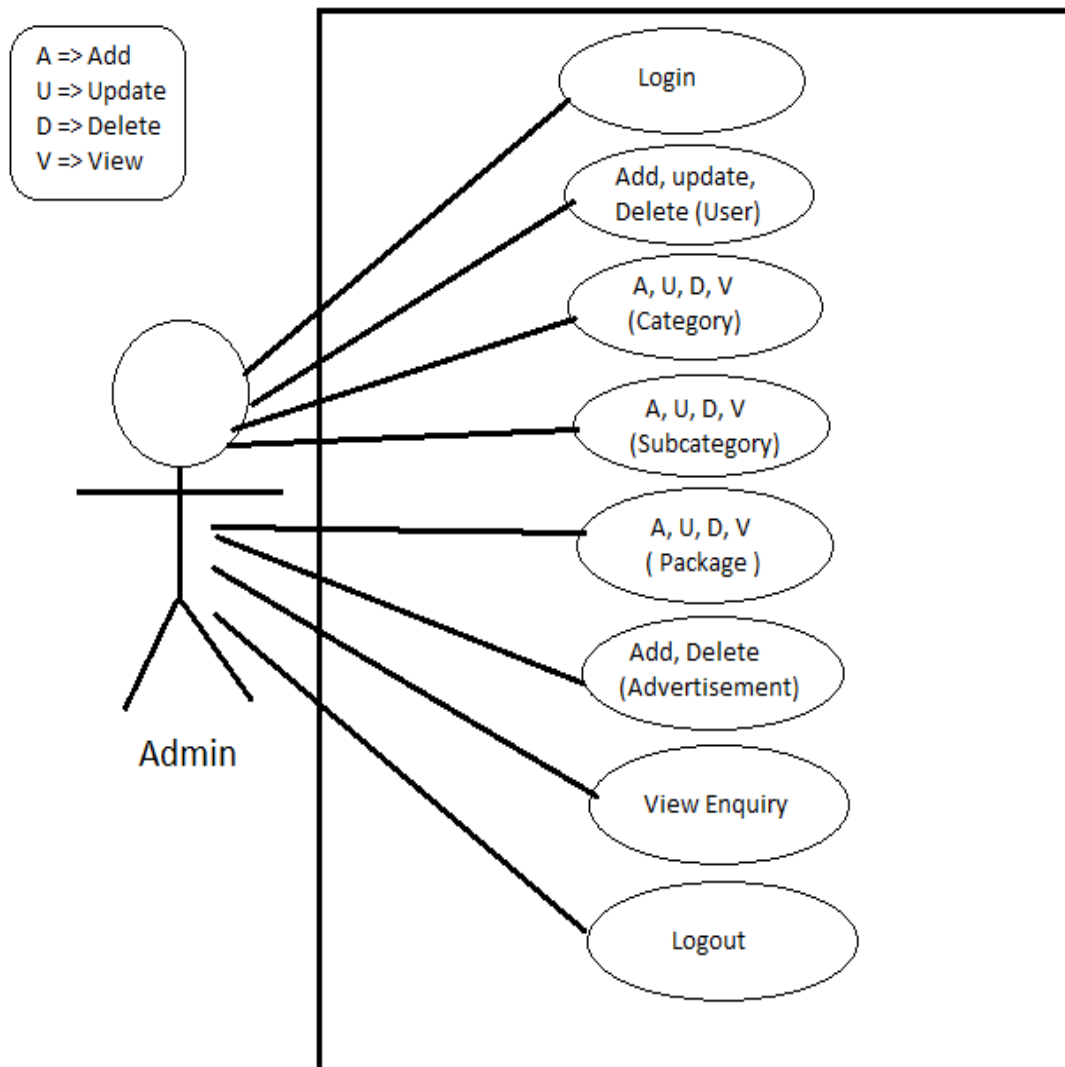


Fig. 2. Online Tour and Travel Application System Use-Case Diagram: Admin.

3.2.2. Component Diagram

Figure 3 demonstrates the Component Diagram of the travel application.

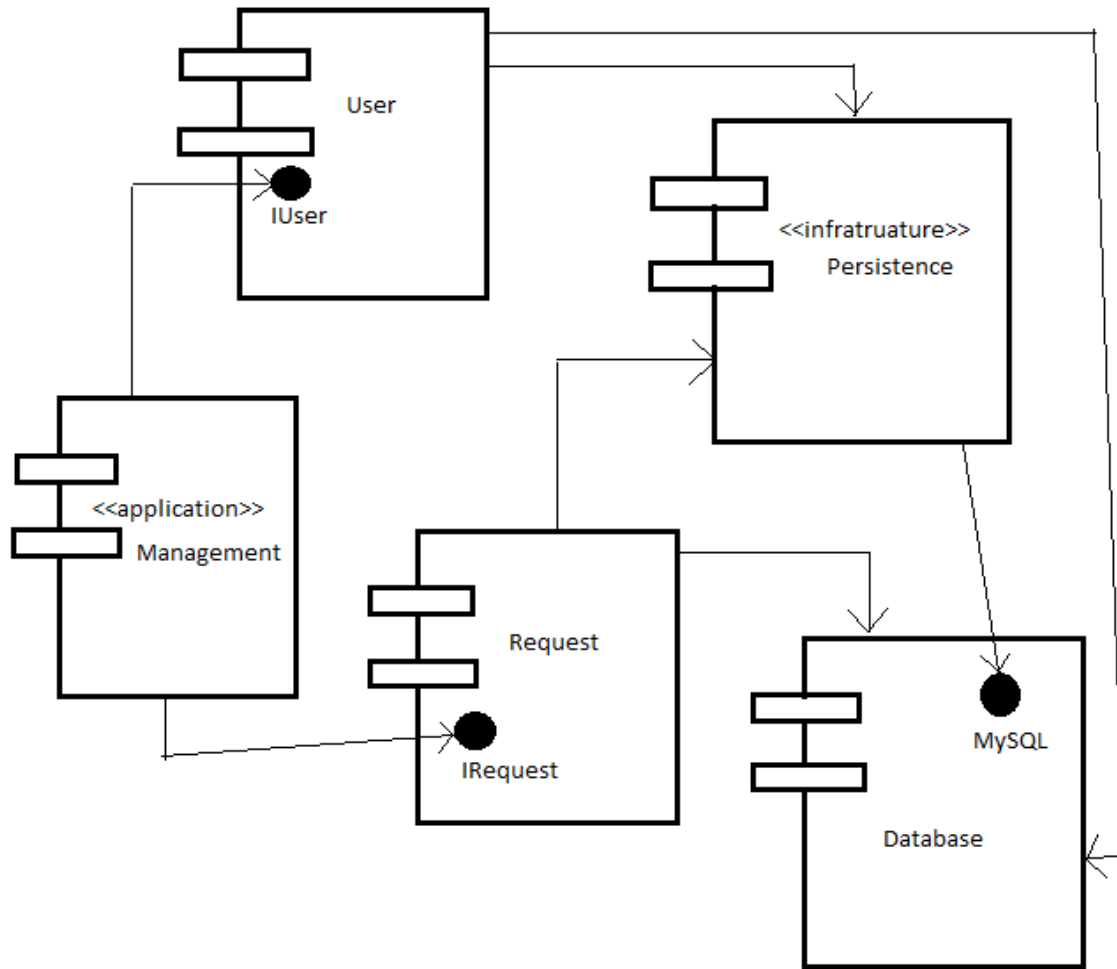


Fig. 3. Component Diagram for the Application.

3.2.3. Deployment Diagram

Figure 4 demonstrates the Deployment Diagram of the travel application.

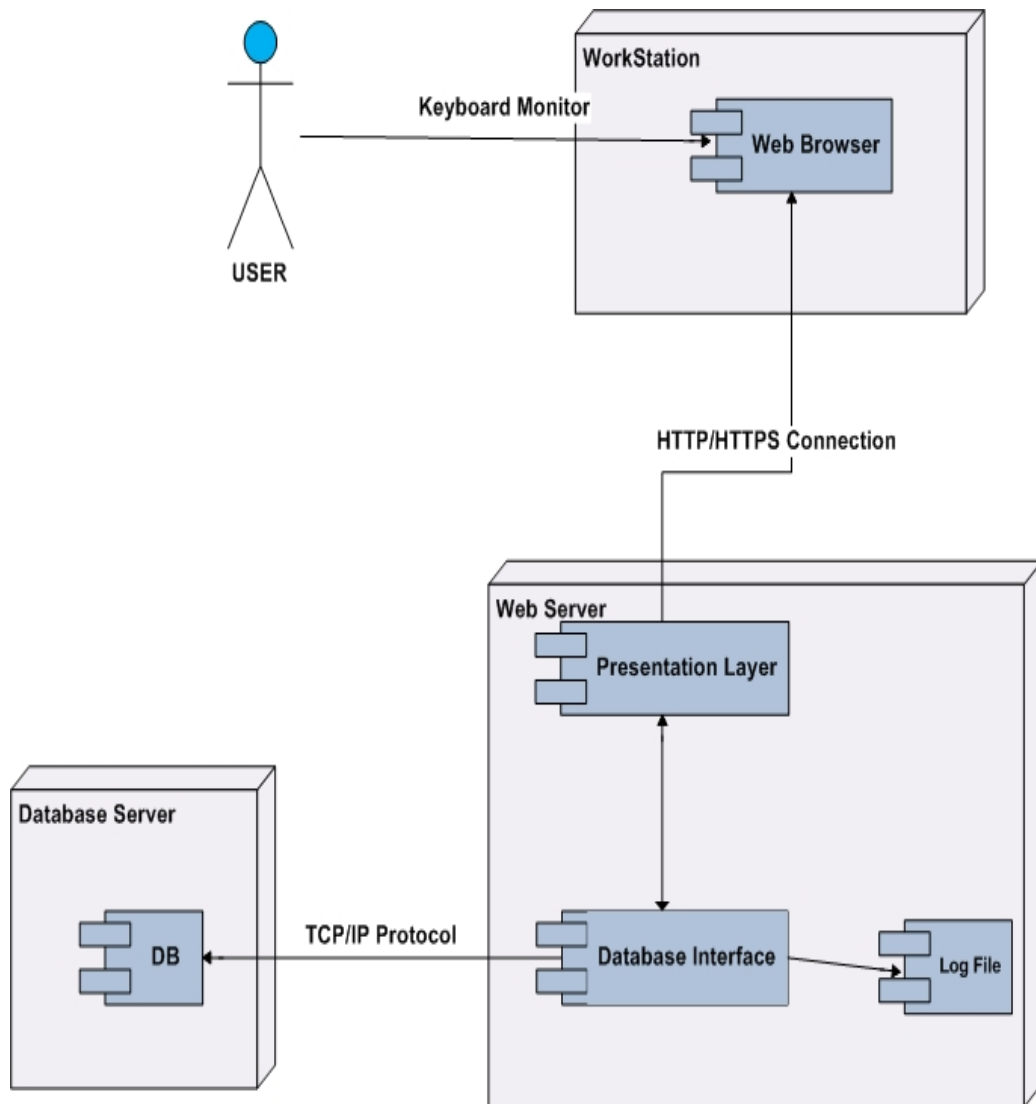


Fig. 4. Deployment Diagram for the Application.

3.4. The Tour & Travel Application Interface

This section describes the different interfaces for the application. It contains a detailed description about each interface along with a screen shot of the interface.

Home Page: The home page of the application (Figure 5) is common to all the system users.

This interface is available through the web application. At the time of Visiting the home page, the page shows the **About us, Gallery, Tour Category, Advertisement and Contact us** information available.

The tour category page shows the categories.

1. Family
2. Religious
3. Adventure
4. Special Events
5. National Parks
6. Theme Vacations
7. Small Group

Each category links to an individual page containing the subcategory related to the category to which it is assigned.

Each subcategory links to different packages which is related to the subcategory to which it is assigned.

Home Page Interface: The Screenshot below shows Home Page.

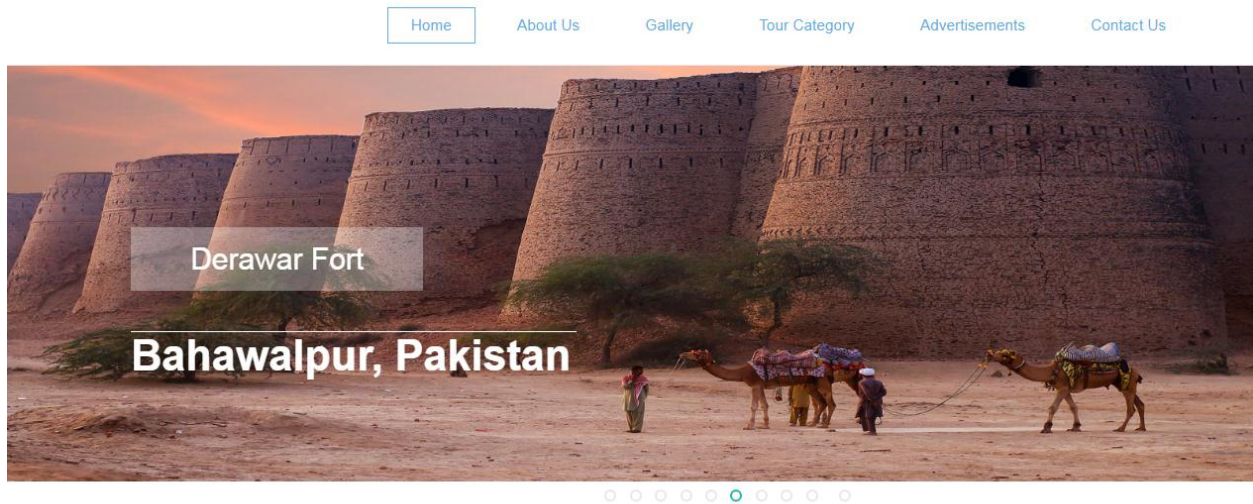


Fig. 5. Screenshot of the Home Page

Home Page Interface: The screenshot shows About Us Section.

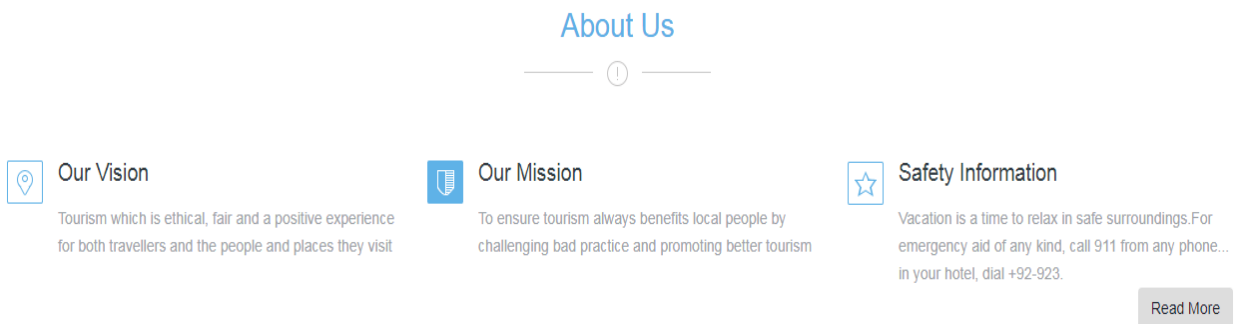


Fig. 6. Screenshot of About us Section.

Home Page Interface: The screenshot shows Gallery Section.

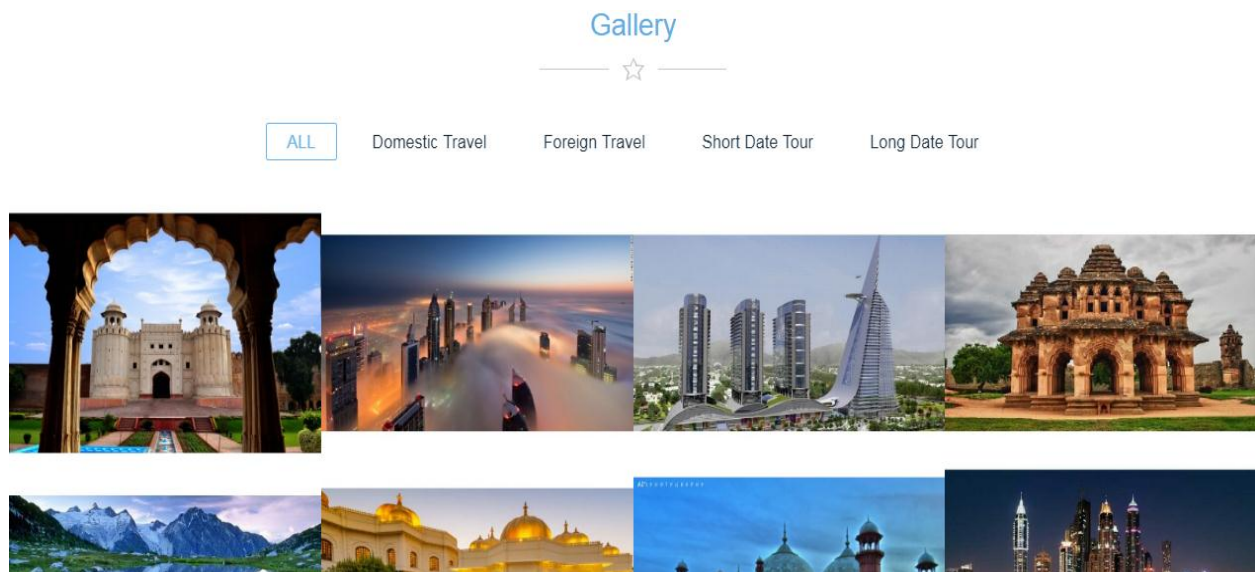



Fig. 7. Screenshot of Gallery Section.


Home Page Interface: The screenshot shows Advertisement Section.

Advertisements


My Tour guides are expensive, so first decide what you want to do, whether it's a general tour of a city, a day of hiking, or visiting remote villages in a third-world country. Have a ball-park time allotment in mind, whether it's a half-day, a full-day, or a multi-day experience. Once you have chosen a guide, you'll probably refine your ideas based upon the guide's knowledge.




Best Of GREECE



Bangkok Pattaya



Europe Tours



Dubai Tour

Fig. 8. Screenshot of Advertisement Section.

Home Page Interface: The screenshot shows Contact Us Section.

Contact Us

✉

Plan Your Trip Our travel experts can help you book now!


My Tour Gujrat Enterprise Ltd.

NEED HELP FOR BOOKING PACKAGE
For Fantastic Suggestions You May Also Call Our
Travel Expert.

☎ (+92) 300-0000000 - (+92) 300-0000001

✉ support@gujratenterprise.org

📍 Gujrat, Punjab, Pakistan



Message

✉

 Send message

Fig. 9. Screenshot of Advertisement Section.

Home Page Interface: The screenshot shows Tour Category Section.



Fig. 10. Screenshot of Tour Category Section.

Category Interface: The screenshot below shows Family Tours in the category.

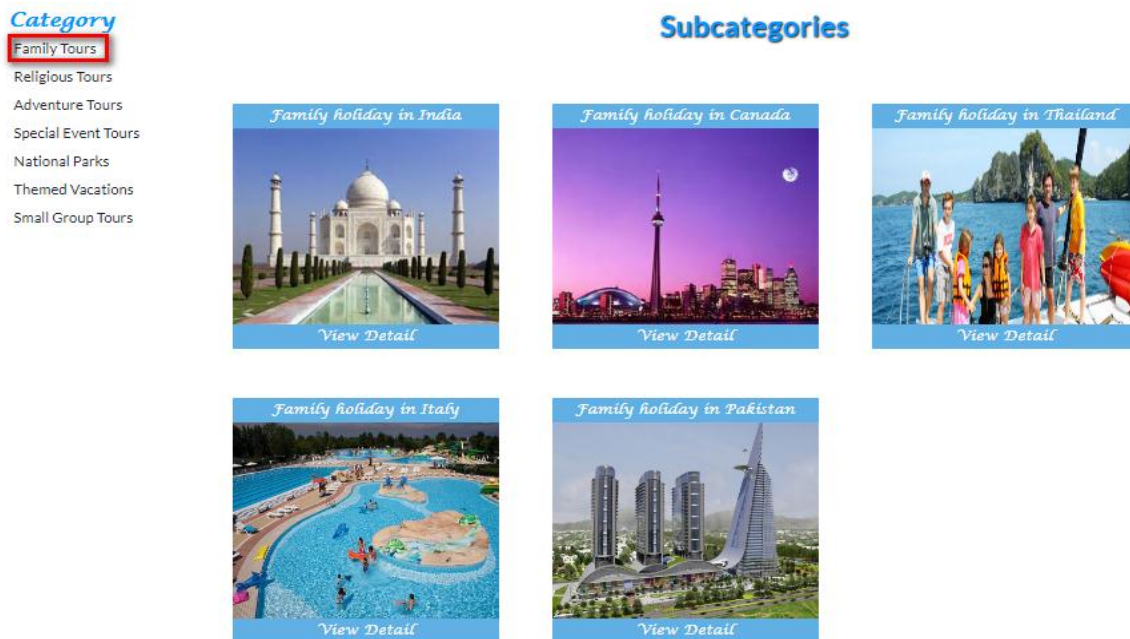


Fig. 11. Screenshot of the Family Category.

Category Interface: The screenshot below shows Religious Tours in the category.

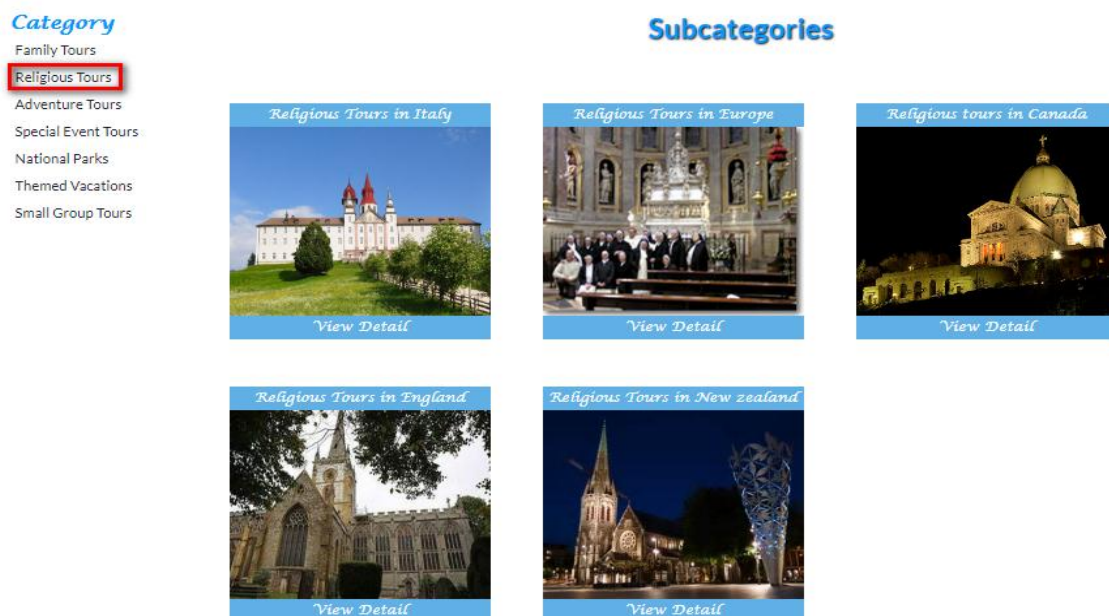


Fig. 12. Screenshot of the Religious Category.

Category Interface: The screenshot below shows Adventure Tours in the category.

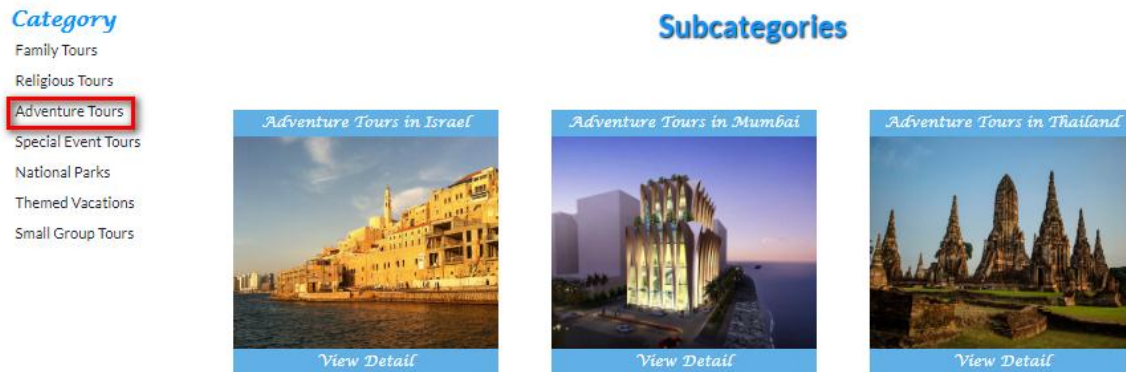


Fig. 13. Screenshot of the Adventure Category.

Category Interface: The screenshot below shows Special Event Tours in the category.



Fig. 14. Screenshot of the Special Event Category.

Category Interface: The screenshot below shows National Parks Tours in the category.

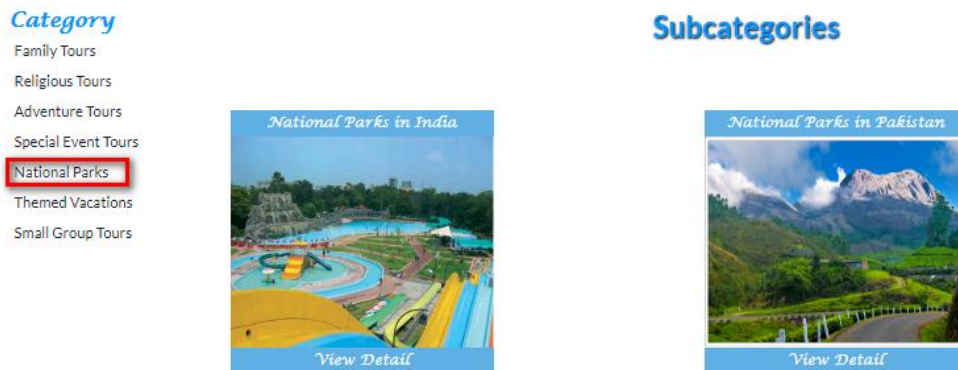


Fig. 15. Screenshot of the National Category.

Category Interface: The screenshot below shows Theme Vacations Tours in the category.



Fig. 16. Screenshot of the Theme Vacations Category.

Category Interface: The screenshot below shows Small Group Tours in the category.



Fig. 17. Screenshot of the Small Group Category.

View Packages Interface: The screenshot below shows the different Packages details.

View Packages

Pack Name: Canadian Religious Places



Category: Religious Tours
Subcategory: Religious tours in Canada
Price: 700000

Canada is more like a multi-cultural country. Christianity with Roman Catholics and Protestants are predominant in Canada as the main religion. Religious tours in Canada take you to sights of importance, which include St. Anne's Anglican Church, Frikirju Church and St. Norbert. Apart from Christianity, other religions like Hinduism, Buddhism, Islam and Sikhism too have gained grounds in the country.

[Enquiry](#)

Fig. 18. Screenshot of the View Packages Details.

Enquiry Form Interface: The screenshot below shows the Enquiry Form.

Enquiry

Package Id: 27

Pack Name: Travel in Israel

Name:

Gender: ☒ Male ☐ Female

Mobile No.

Email:

No.of Days:

No.of Children:

No.of Adults:

Enquiry Message:

Fig. 19. Screenshot of the Enquiry Form.

Admin Login Interface: The screenshot below shows the Login Page.



The screenshot displays a login page with a light blue background. At the top left, there is a circular image of a family (a man, a woman, and a child). To the right of this image, the word "LOGIN" is written in bold blue capital letters, followed by the text "Head this way to the correct login page." in a smaller font. Below the family image is a large, 3D-style blue sphere with a white key icon inside. To the right of the sphere, the text "User Name" is followed by a white rectangular input field. Below the "User Name" field, the text "Password" is followed by another white rectangular input field. At the bottom right of the form area, there is a grey rectangular button with the word "LOGIN" in white capital letters.

Fig. 20. Screenshot of the Login Page

Admin Control Panel: The screenshot below shows the Admin Control Panel Area.

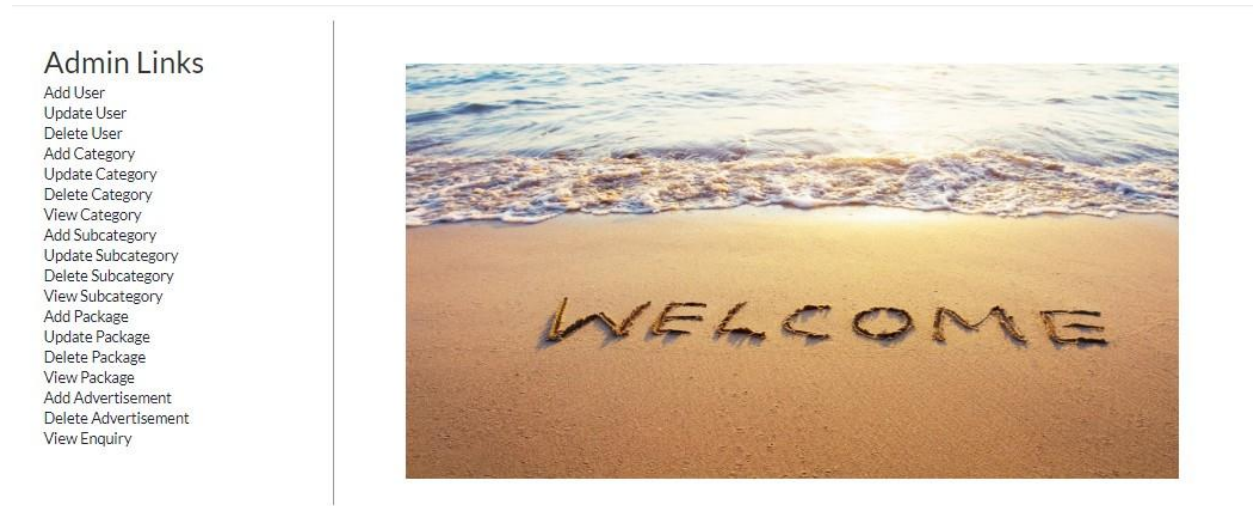


Fig. 21. Screenshot of the Control Panel.

View Enquiry Control Panel: The screenshot below shows the View Enquiry Area.

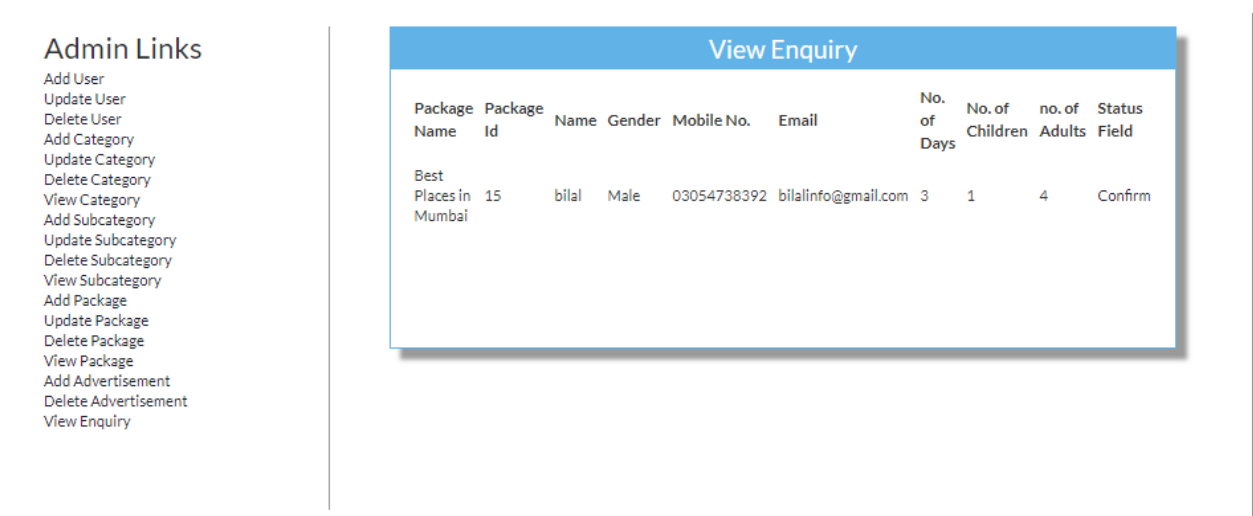


Fig. 22. Screenshot of the View Enquiry.

Package Add, Update, Delete, View Control Panel: The screenshot below shows the Packages Details.

Admin Links

Add User

Update User

Delete User

Add Category

Update Category

Delete Category

View Category

Add Subcategory

Update Subcategory

Delete Subcategory

View Subcategory

Add Package

Update Package

Delete Package

View Package

Add Advertisement

Delete Advertisement

View Enquiry

Update Package

Select Package

Main attraction in Thailand

Show

Package Name

Main attraction in Thailand

Select Category

Family Tours


Select Subcategory

Family holiday in Thailand

Package Price

400000

Old Pic




Upload Pic1

Choose File

No file chosen

Old Pic




Upload Pic2

Choose File

No file chosen

Old Pic



Upload Pic3

Choose File

No file chosen

Details

Fascinating cultures, a nation that adores

Update

Fig. 23. Screenshot of the Packages Details.

Category Add, Update, Delete, View Control Panel: The screenshot below shows the Category Details.

The screenshot displays a web interface with a sidebar on the left and a main content area on the right. The sidebar, titled "Admin Links", contains a list of actions: Add User, Update User, Delete User, Add Category, Update Category, Delete Category, View Category, Add Subcategory, Update Subcategory, Delete Subcategory, View Subcategory, Add Package, Update Package, Delete Package, View Package, Add Advertisement, Delete Advertisement, and View Enquiry. The main content area features a modal window titled "Update Category". Inside this modal, there is a "Selected Category Name" dropdown menu currently showing "Religious Tours" with a "Show" button next to it. Below this is a "Category Name" text input field containing the text "Religious Tours". At the bottom of the modal is an "Update" button.

Fig. 24. Screenshot of the Category Details.

Subcategory Add, Update, Delete, View Control Panel: The screenshot below shows the Subcategory Details.

The screenshot displays a web interface similar to the previous one. The sidebar "Admin Links" is identical. The main content area features a modal window titled "Update Subcategory". This modal contains several fields: a "Select Subcategory" dropdown menu showing "National Parks in Pakistan" with a "Show" button; a "Subcategory Name" text input field with the text "National Parks in Pakist"; a "Select Category" dropdown menu showing "National Parks"; an "Old Pic" section displaying a landscape image of a mountain and a lake; an "Upload Pic" section with a "Choose File" button and the text "No file chosen"; and a "Details" section with a text area containing the text "national parks in pakistan is really". An "Update" button is located at the bottom of the modal.

Fig. 25. Screenshot of the subcategory Details.

User Add, Update, Delete, Control Panel: The screenshot below shows the User Details.

Admin Links

Add User

Update User

Delete User

Add Category

Update Category

Delete Category

View Category

Add Subcategory

Update Subcategory

Delete Subcategory

View Subcategory

Add Package

Update Package

Delete Package

View Package

Add Advertisement

Delete Advertisement

View Enquiry

Update User

Select User

bilal

Show

Password

.....

Confirm Password

.....

Type of User

General

Update

Fig. 26. Screenshot of the User Details.

Advertisement Add & Delete, Control Panel: The screenshot below shows the Advertisement Details.

Admin Links

Add User

Update User

Delete User

Add Category

Update Category

Delete Category

View Category

Add Subcategory

Update Subcategory

Delete Subcategory

View Subcategory

Add Package

Update Package

Delete Package

View Package

Add Advertisement

Delete Advertisement

View Enquiry

Add Advertisement

Title

Company Name

Upload Pic

Choose File

No file chosen

Details

SAVE

Fig. 27. Screenshot of the Advertisement Details.

View Database Structure : The screenshot below shows the Database.

| Table | Action | Rows | Type | Collation | Size | Overhead |
|-----------------|------------|-----------|---------------|--------------------------|----------------|------------|
| advertisement | | ~11 | InnoDB | latin1_swedish_ci | 16 KiB | - |
| category | | ~7 | InnoDB | latin1_swedish_ci | 16 KiB | - |
| contactus | | ~6 | InnoDB | latin1_swedish_ci | 16 KiB | - |
| enquiry | | ~1 | InnoDB | latin1_swedish_ci | 16 KiB | - |
| package | | ~26 | InnoDB | latin1_swedish_ci | 16 KiB | - |
| subcategory | | ~24 | InnoDB | latin1_swedish_ci | 16 KiB | - |
| users | | ~2 | InnoDB | latin1_swedish_ci | 16 KiB | - |
| 7 tables | Sum | 77 | InnoDB | latin1_swedish_ci | 112 KiB | 0 B |

Fig. 28. Screenshot of the Database Structure.

Database Contact us Details : The screenshot below shows the Contact Us Details.

| contactid | Name | Phno | Email | Message |
|-----------|----------|----------------|-----------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1 | Mehar | 00971501065206 | mehar@gmail.com | We have read about the interest your advertisement in the times of India about the vacation trip. We will appreciate, if you kindly send the detailed information about the cost of the trip, the luggage weight, economy class and first class and etc. . The above information is required for our managing director who will like to enjoy the holiday trip along with his family. |
| 3 | saba | 9815724956 | saba12@gmail.com | We have read about the interest your advertisement in the times of India about the vacation trip. We will appreciate, if you kindly send the detailed information about the cost of the trip, the luggage weight, economy class and first class and etc. . The above information is required for our managing director who will like to enjoy the holiday trip along with his family. |
| 4 | Sahil | 9814532456 | Sahil@yahoo.com | We have read about the interest your advertisement in the times of India about the vacation trip. We will appreciate, if you kindly send the detailed information about the cost of the trip, the luggage weight, economy class and first class and etc. . The above information is required for our managing director who will like to enjoy the holiday trip along with his family. |
| 5 | Varinder | 9812345234 | vinnysharma@gmail.com | We have read about the interest your advertisement in the times of India about the vacation trip. We will appreciate, if you kindly send the detailed information about the cost of the trip, the luggage weight, economy class and first class and etc. . The above information is required for our managing director who will like to enjoy the holiday trip along with his family. |
| 6 | bilal | 03054738392 | bilalinfo@gmail.com | We have read about the interest your advertisement in the times of India about the vacation trip. We will appreciate, if you kindly send the detailed information about the cost of the trip, the luggage weight, economy class and first class and etc. . The above information is required for our managing director who will like to enjoy the holiday trip along with his family. |
| 7 | noman | 03069242322 | nomann@gmail.com | We have read about the interest your advertisement in the times of India about the vacation trip. We will appreciate, if you kindly send the detailed information about the cost of the trip, the luggage weight, economy class and first class and etc. . The above information is required for our managing director who will like to enjoy the holiday trip along with his family. |

Fig. 29. Screenshot of the Database Contact Us Details.

Database Category Details : The screenshot below shows the Category Details.

The screenshot displays the 'category' table details in a database management tool. The interface includes a top navigation bar with tabs for Browse, Structure, SQL, Search, Insert, Export, Import, Operations, and Triggers. A status bar indicates 'Showing rows 0 - 6 (7 total, Query took 0.0010 sec)'. The SQL query editor shows the query: `SELECT * FROM `category` LIMIT 0 , 30`. Below the query editor, there are controls for 'Show' (Start row: 0, Number of rows: 30, Headers every: 100 rows) and 'Sort by key' (None). A '+ Options' section is visible. The main table displays the following data:

| | Cat_id | Cat_name |
|-------------------------------------------|--------|---------------------|
| <input type="checkbox"/> Edit Copy Delete | 1 | Family Tours |
| <input type="checkbox"/> Edit Copy Delete | 2 | Religious Tours |
| <input type="checkbox"/> Edit Copy Delete | 3 | Adventure Tours |
| <input type="checkbox"/> Edit Copy Delete | 4 | Special Event Tours |
| <input type="checkbox"/> Edit Copy Delete | 5 | National Parks |
| <input type="checkbox"/> Edit Copy Delete | 6 | Themed Vacations |
| <input type="checkbox"/> Edit Copy Delete | 7 | Small Group Tours |

Below the table, there are controls for 'Check All' and 'With selected:' (Change, Delete, Export). Another 'Show' control is present (Start row: 0, Number of rows: 30, Headers every: 100 rows). At the bottom, a 'Query results operations' section includes links for 'Print view', 'Print view (with full texts)', 'Export', 'Display chart', and 'Create view'.

Fig. 30. Screenshot of the Database Category Details.

Database View Enquiry Details : The screenshot below shows the Enquiry Details.

Showing rows 0 - 0 (1 total, Query took 0.0010 sec)

```
SELECT *
FROM enquiry
LIMIT 0, 30
```

Profiling [Inir

Show : Start row: 0 Number of rows: 30 Headers every 100 rows

+ Options

| | Enquiryid | Packageid | Name | Gender | Mobileno | Email | NoofDays | Child | Adults | Message | Statusfield |
|---------------------------------------------------------------------------------------------|-----------|-----------|-------|--------|-------------|---------------------|----------|-------|--------|------------------|-------------|
| <input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete | 13 | 15 | bilal | Male | 03054738392 | bilalinfo@gmail.com | 3 | 1 | 4 | i want this tour | Confirm |

↑ ☐ Check All With selected: ☐ Change ☐ Delete ☐ Export

Show : Start row: 0 Number of rows: 30 Headers every 100 rows

Query results operations

☐ Print view ☐ Print view (with full texts) ☐ Export ☐ Display chart ☐ Create view

Fig. 31. Screenshot of the Database View Enquiry Details.

Chapter # 4

CHAPTER 4. TESTING

This chapter includes the methods that were used for testing, validating, and evaluating the system. The Conclusion and the Future Work for the software are also given.

4.1. Methodology

With this testing approach, all the specs were ready for a prototype, and a plan was already built to be shown; the tester started writing his or her code and saw if he or she could obtain the same results that the specs mentioned. This way, the specs were tested on each prototype, and continuous testing was applied. This also helped to minimize the testing that would have to be implemented at the end of the software lifecycle. In the process, all aspects of the software were tested. Steps to follow while implementing the methodology are as follows:

1. Start with a base function that you want to implement.
2. Create a document with the detailed requirement definition, diagram with a description of the flow, database tables to be used, a component diagram, and a description of each component with the precondition and tables that would be affected by the component.
3. Give the document to the tester, and work with the tester while he or she writes the code to check if the steps in the document can be implemented and if the result of each use case can be achieved.
4. If the tester finds a step difficult to implement or thinks he or she is missing additional information to implement the functionality, then go to step 2; otherwise, go to step 3.
5. Ask the tester to log on all the errors and difficulties he or she encountered while working on the prototype implementation.
6. Once the prototype is done and the results between the developer's prototype and tester's prototype match, work on the other requirement, and expand the prototype to final software.

7. When the testing approach was implemented, the following pros and cons regarding the testing approach were realized.

Pros of using the methodology

- Helps give a better understanding about the requirements.
- Better design at the end of the cycle.
- Reduced testing to be performed at the end of the cycle.
- Documents produced would be of higher quality.

Cons of using the methodology

- The person working on the document should be experienced.
- There are increased time and money involved with testing.
- Different viewpoints for the same problem can lead to varying results.

4.2. Interface Testing

This section lists the functional requirements used for creating the test-case table, the test cases that were used to verify the interface table, and the results for the test-cases table.

Table 1 lists the functional requirements for the interface built for the travel application, along with a short description of each requirement.

Table 1. List of Functional Requirements.

| Functional Requirement Number | Functional Requirement Short Description |
|-------------------------------|---------------------------------------------------------------------------------------------------------------------|
| FR01 | The travel application shall have two types of authentication: User authentication and Admin authentication. |
| FR02 | The travel application shall be accessible to all the users to browse all the categories and the Packages. |
| FR03 | The users shall be able to view the Packages and Send the enquiry. |
| FR04 | The Admin shall be able to upload new/revised Packages as well as to add/modify the categories. |
| FR05 | The Admin shall be able to view all the users in the system. |
| FR06 | The Admin shall be able to view all the information about users who Enquiry about different packages. |
| FR07 | The users shall not be able to place an order without providing valid information for all rows in the enquiry form. |
| FR08 | The users shall not be able to place an order if any of the columns in the enquiry form are left empty. |

4.3. Test Cases

Table 2 shows the functional requirements used to write the test cases along with the test-case numbers for each test case and a short description of the test cases.

Table 2. List of Test Cases.

| Functional Requirement No. | Test Case No. | Test-Case Short Description |
|----------------------------|---------------|------------------------------------------------------------------------------------------------------------------|
| FR01 | TC01 | To test the Login/Authentication interface for the Admin. |
| FR02 | TC02 | To test the Login/Authentication interface for the users. |
| FR03 | TC03 | The users shall be able to view the Packages and Send the Enquiry. |
| FR04 | TC04 | To test, Admin can upload new/revised categories. |
| | TC05 | To test, Admin can upload new/revised Packages. |
| FR05 | TC06 | To test, Admin can view all the users registered in the system. |
| FR06 | TC07 | To test, Admin can view the information about all the users who Enquiry about different packages. |
| FR07 | TC08 | To test that users are not able to submit an enquiry form if the Information in any of the fields is not valid. |
| FR08 | TC09 | To test that users are not able to submit an enquiry form if the Information in any of the fields is left blank. |

4.4. Results

This section lists the results that were produced by running the test cases. Table 3 lists the test cases that were used while testing the interface along with the expected result and the actual results for each test case.

Table 3. List of Test-Case Results.

| Test Case Number | Expected Result | Actual Result |
|------------------|-----------------|---------------|
| TC01 | Pass | Pass |
| TC02 | Pass | Pass |
| TC03 | Pass | Pass |
| TC04 | Pass | Pass |
| TC05 | Pass | Pass |
| TC06 | Pass | Pass |
| TC07 | Pass | Pass |
| TC08 | Pass | Pass |
| TC09 | Pass | Pass |

Chapter # 5

CHAPTER 5. CONCLUSION/FUTURE WORK

This chapter includes the Conclusion reached after creating the current version of the software to meet the system objectives. The comparison is done between the system that was built and original requirements that were designed at the beginning of the project. It also describes the Future Work that is intended to be accomplished with later versions of the software.

5.1. Conclusion

The main objective of the application is to help computer science students understand the basics of JavaScript, PHP & MySQL and HTML & CSS. By browsing through the application and looking at the code for each graphical interpretation, students should be able to easily understand the implementation. The following results have been achieved after the completing the system and relate back to the system's objective.

1. **Should allow Users/computer science students to browse through the code and**

application: This is achieved when users, i.e., computer science students, are able to run and install the application. When they run the application, they can browse through the implementation of different objects.

2. **Should allow users to browse through different product categories:** This is achieved when the user first runs the application and is directed to a home page that has categories available for all the different item types that can be purchased with this online travel application. The user can browse and click on any category to view the packages listed for that particular category.

3. **Should allow users to view detailed information about a particular package:** The users can enquiry about any number of package from the listed categories by simply clicking the links. Users can view a detailed description of the package and price by clicking on the links.
4. **Should allow users to select and Enquiry about any package:** This is achieved when users select the package and send the enquiry about any package by filling the complete enquiry form.
5. **The user should see a success message after placing an order:** This is achieved when a user successfully places an order by completely filling in all the rows after which he or she can place the order. The user receives a message that the order has been successfully placed by message from the travel agency via email or phone number that is given at the time of placing the order or by completing the enquiry form.

5.2. Future Work

The following section discusses the work that will be implemented with future releases of the software.

1. **Detailed categories:** Future work could involve adding more categories which are more detailed and have additional items.
2. **Enhanced User Interface:** Work on enhancing the user interface by adding more user - interactive features.
3. **Enhanced back-end Interface:** Work on enhancing the back-end interface by adding more friendly and attractive interface for the admin use.
4. **Recommended Packages:** Add a bar that would display the most-recommended packages which would depend on the number of times the package has been purchased by any users.
5. **Payment Options:** Add different payment options, such as Visa, MasterCard, PayPal, etc., where a user can pay the amount for the selected package online.
6. **Recent History:** Display the user's recently browsed packages in the recent-history tab.

APPENDIX:

Definitions, Acronyms & Abbreviations:

| | |
|-------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Browser | Software used to view hypertext documents. Internet Explorer and Google chrome are examples of browsers. |
| Click or Command Click | Refers to the user pressing a mouse button to select an object or cause some action to occur. On right-handed mouse with more than one button, it usually means to press the leftmost button. |
| HTML | Hypertext Markup Language is a specification for graphical layout of a document. The specification calls for the document to be stored as text containing a series of tags that contain formatting information. |
| PHP | A programming language used to implement source code of the project. |
| User Friendly | Designed to be easy to use. Simple, practicable, accommodating, understandable and accessible. |
| MySQL | MySQL database is a database management system. Database is a collection of data treated as a unit. The purpose of a database is to store and retrieve related information. |
| Bootstrap | Bootstrap is the most popular HTML, CSS, and JS framework for developing responsive mobile first projects on the web. |
| CSS | CSS stands for Cascading Style Sheets. CSS describes how HTML elements are to be displayed on screen, paper, or in other media. CSS saves a lot of work. It can control the layout of multiple web pages all at once. External Style sheets are stored in CSS files. |

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