

ASSIGNMENT ON SOFTWARE ENGINEERING

SOFTWARE REQUIREMENT SPECIFICATION

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SOFTWARE REQUIREMENT SPECIFICATION FOR E-TRAVEL AGENCY

1. INTRODUCTION

1.1. PURPOSE

The main purpose of this project is to develop most cost-effective and user friendly ticket booking system with huge features of latest web development technology. This e Travel Agency web portal provides customer an option to book the bus, train, flight tickets online and to check the confirmation online. Also it provides an option of hotel room booking and tour package reservation.

1.2. SCOPE

Here is a list of features supported by the e Travel Agency System.

- ❖ The system provides the user friendly environment for the customers to maintain their profile information.
- ❖ The customers do not have to personally go to the counter or contact representatives through the telephone, but they have to only access this website to book tickets.
- ❖ Ticket reservation which include checking availability, booking tickets and payment options.
- ❖ Customers who wish to travel across may reserve their air flights operated by any airline among all available airports through this website.

- ❖ By using this app, user can not only save time but also get much larger search space from which they have higher chance to find a suitable flight, bus, train, tour package, hotels.
- ❖ User friendly administrator dashboard to manage company details, hotels, room types, rooms, flight details, tour package details, etc.

1.3. DEFINITIONS, ACRONYMS AND ABBREVIATIONS

The following table explains the terms and abbreviations used in the document.

- ❖ GUI - Graphical User Interface
- ❖ XAMPP - A server that is running Linux, Apache, My-SQL and PHP
- ❖ DBMS - Database Management System

1.4. References

- ❖ <https://phpgrid.com/example/build-project-management-application-scratch>
- ❖ Software engineering a practitioner's approach by Roger Pressman

1.5. Overview

The purpose of this document is to identify unambiguously the user requirements and clearly define both functional and nonfunctional requirements of E Travel Agency. In addition, this document is intended to cover technical goals as well as objectives of the proposed System.

2. OVERALL DESCRIPTION

2.1. PRODUCT PERSPECTIVE

The users are provided with a graphical interface through which they can interact with the system. The website helps users to list searched results, process booking, payment, modification and cancellation to existing reservations. Unless like in the previous stage people as to walk into travel agency company to buy the tickets and also to check the timings. This problem is overcome introducing e Travel Agency web portal. This project will provide an option to customers to book the tickets online and to check the confirmation online. Using this system customer can book flight tickets, Bus tickets, Train tickets and they can book or reserve hotels.

2.2. PRODUCT FUNCTIONS

2.2.1. Supported Functions

- ❖ *Manage bookings.*
- ❖ *View and track booking.*
- ❖ *View payment details.*

2.2.2. Use Case Diagram



2.3. USER CHARACTERISTICS

The system provides access to Visitors, Customers and Administrators.

2.3.1. Visitor: Users who are currently not logged in and have not registered to the website are visitors. Visitors can check availability of the flight reservations. In order to book the ticket the visitor will need to login with the valid username and password else register with the app and create an account.

2.3.2. Customer: Customers can check availability of the flight reservations and also book tickets by making payment online. They can also view their booking details, payment details etc.

2.3.3. **Administrator:** Administrator can manage company details, hotels, room types, rooms, flight details, tour package details, etc. Also admin can view and print transaction report, booking report, cancellation report, etc.

2.4. GENERAL CONSTRAINTS

- ❖ Customer not has any rights to edit or delete booking and payment records
- ❖ The online payment gateway is virtual payment gateway for testing purpose.
- ❖ This system is not support distributed database Facility.
- ❖ System is limited to HTTP/HTTPS Protocols.
- ❖ Basic computer knowledge must required.
- ❖ Internet connection required.

2.5. ASSUMPTIONS AND DEPENDENCIES

2.5.1. Assumptions

- ❖ *The code should be free with compilation errors/syntax errors.*
- ❖ *The product must have an interface which is enough to understand.*

2.5.2. Dependencies

- ❖ *All necessary hardware and software are available for the implementation*
- ❖ *The proposed system would be designed, developed, and implemented based on the software requirement specification document.*
- ❖ *End user should have basic knowledge of computer.*

3. SPECIFICATION REQUIREMENT

3.1. EXTERNAL INTERFACE REQUIREMENT

3.1.1. User Interfaces

Web based user interface with ease of use Developed in PHP.

3.1.2. Hardware Interfaces

- ❖ *Processor* : *Intel Pentium 3 or above*
- ❖ *Hard Disk* : *50 GB or above*
- ❖ *RAM* : *1GB or above*
- ❖ *Monitor* : *LCD Monitor*

3.1.3. Software Interfaces

- ❖ *Operating System* : *Windows XP or higher.*
- ❖ *Client End Language* : *HTML 5*
- ❖ *Server-Side Language* : *PHP*
- ❖ *Database* : *MySQL*
- ❖ *Webserver* : *XAMPP*
- ❖ *Web Browser* : *Google Chrome*

3.1.4. Communication Interfaces

- ❖ *Internet connection (wired/wireless)*

3.2. FUNCTIONAL REQUIREMENT

3.2.1. **Flight ticket booking:** In this module the customer can search source-destination, check flight timings and book a ticket through online.

- Search flight ticket
- View flights and flight schedules
- Flight information
- Make a ticket booking online
- Cancellation

3.2.2. **Bus ticket reservation module:** In bus ticket reservation module there has been a collection of buses, customer can book the ticket by selecting agency, date and departure time of the bus.

- Search bus type
- Advance bus ticket booking
- Check Departure time and arrival time
- Print E- Ticket
- Cancellation

3.2.3. **Train ticket reservation module:** In train reservation module customer can check train scheduled timings and the can book tickets through online by entering Place, date and time.

- Check seat availability
- Fare enquiry
- Online reservation
- Search Train/Fare availability details
- Train schedule details
- Train type information
- Cancellation

3.2.4. **Hotel reservation:** After booking train ticket, bus ticket or flight ticket the system will provide option to search hotels. Customer can reserve the hotels by selecting check-in date, checkout date and hotel name.

- Search hotels by entering city
- Find hotels and room types
- Add check-in date and check-out date
- Book or reserve domestic and international hotels
- Cancellation

3.2.5. **Holiday package:** The customer can search tour packages by entering destination, duration of travel, month of travel and number of person.

- Holiday packages based on vacation

- View holiday package price details, and package details
- Book domestic and International holiday packages
- Cancellation

3.2.6. **Payment module:** This module allows customers to make payment after the reservation. The customer will receive ticket receipt by mail after the payment.

- Make payment to selected service
- Generate billing receipt
- Update credit card details
- View payment details

3.2.7. **My Account:** This module is for customers where customer can access account module after login id and password. This module will display booked ticket, Billing receipt, ticket cancellation page, logout, etc.

- Display booked receipt
- Change password
- Update profile information

3.2.8. **Cancel booking:** Customer can cancel flight ticket, bus ticket, train ticket, or hotel bookings. The system refunds paid amount the after deducting cancellation charges.

- Cancel booking details
- Cancellation policy
- Refundable and non-refundable booking amount

3.2.9. **Dashboard module:** This module allows the administrator of this site to manage the different aspects of ticket reservation related activities. The administrator of the site can add or modify the records of flights, bus, train, holiday packages, etc.

- Add, edit, view flight records
- Add, edit, view bus agency and busses.
- Add, edit, view train details

- Add, edit, view hotel information
- Add, edit, view holiday packages
- View bookings, View cancellation report
- View payment report
- Add users
- Change password

3.3. PERFORMANCE REQUIREMENTS

- ❖ Some Performance requirements identified is listed below:
- ❖ The database shall be able to accommodate a minimum of 10,000 records of customers.
- ❖ The software shall support use of multiple users at a time.
- ❖ There are no other specific performance requirements that will affect development.