

System Requirements Specifications

TOURIST MANAGEMENT SYSTEM

Version:1.0

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1)INTRODUCTION

1.1)Purpose

The purpose of this project is to provide tourist, a web application that delivers a scalable, secure, and reliable system that manages tourist bookings like transport bookings, restaurant booking and hotel bookings. The following SRS document will outline the features of the "Tourist management web application" and the requirements that the project will adhere to in developing the software for the organization.

1.2) Intended Audience

This document is used by developers for understanding the requirements of the project; also, the intended users of this document are project managers for planning and scheduling, testers to generate test cases, document writers for preparation of user manual and for other end-users/stakeholders to validate their requirements.

1.3) Project Scope

Tourist management web application is used to manage customers vacations or holidays travelling plans. This provides a user-friendly interface to book transportation tickets, hotels, restaurants and any guides. By using this web application customers can manage their daily schedules in vacations, also they can manage their bookings. It also recommends the popular places to visit in the city with locations and other details. It uses database to store all the data generated by web application.

The main objective of this project is to provide customers a user-friendly web application to manage their vacations without any problems.

1.4) Operating Environment

<i>Programming Language</i>	<i>JavaScript, Node JS</i>
<i>Query Language</i>	<i>SQL</i>
<i>Mark-up Language</i>	<i>HTML5</i>
<i>Style Sheet Language</i>	<i>CSS3</i>

Framework	Bootstrap
Integrated development environment	IntelliJ IDEA 2019.2 x64
Database	Microsoft SQL Server Management Studio 17

1.5) Design and Implementation Constraints

This application must be developed by using both mark-up language HTML and programming language that is JavaScript and Database language SQL. This web application is responsive which is conveniently viewable on extra-small (<576px), small (>=576px), medium (>=768px), large (>=992px), and extra-large (>=1200px).

Account details and booking details of customers will be securely stored in database and only accessed by authorized persons.

2) SYSTEM FEATURES

2.1)System Features

The Tourist management system will perform basic functions of booking system and managing system. This section describes the associated Functional requirements in the table below based on priorities.

#	Functions	Description	Priority	Function Requirements
1)	SignUP	This is used to create new account for customers.	High	<ul style="list-style-type: none"> ➤ Minimum 8 to 15 characters password. ➤ Valid G-mail address. ➤ Created account details should be stored in the database.
2)	SignIN	This is used to login into accounts which were already exists in the database.	High	<ul style="list-style-type: none"> ➤ Should accept the user name password ➤ If the correct user id and

				<p>password are supplied then, booking is available.</p> <p>➤ If an invalid user id or password is entered, then the system should display error message "Login Denied wrong credentials".</p>
3)	<i>ChangeAccountDetails</i>	<i>This is used to change account details.</i>	<i>Medium</i>	<p>➤ Change account details only when user is verified by entering old password correctly and entering correct verification code which is sent to user's mail.</p>
4)	<i>ViewProfile</i>	<i>This is used to view user account details.</i>	<i>Low</i>	<p>➤ Should show user's account details.</p>
5)	<i>ForgotPassword</i>	<i>This is used to reset password in case when user forgets his password.</i>	<i>Medium</i>	<p>➤ Should allow to reset his password when only he enters correct verification code which is sent to his mail.</p>
6)	<i>ViewTouristPlaces</i>	<i>This is used to view tourist places to visit.</i>	<i>Low</i>	<p>➤ Should show the places to visit with journey details and with accommodations details.</p>

7)	ViewLandmarks	<i>This is used to view the landmarks to visit during the stay at that particular place.</i>	<i>Low</i>	➤ <i>Should show the landmarks present in the place booked by user to stay.</i>
8)	ViewMaps	<i>This is used to view map of the particular place.</i>	<i>Low</i>	➤ <i>Should show the google maps of that place booked by user to stay.</i>
9)	ViewBookings	<i>This is used to view all bookings done by the user till date.</i>	<i>Low</i>	➤ <i>Should show the user bookings till date with dates, finances.</i>
10)	BookJourneyTickets	<i>This is used to book journey facilities to a particular place to visit. And also used to book return tickets.</i>	<i>Medium</i>	➤ <i>Should show the ways of transportation from particular place to another place with journey details like time and price of tickets. And used to book that tickets.</i>
11)	BookHotel	<i>This is used to book hotel at the place booked by user to visit.</i>	<i>Medium</i>	➤ <i>Should show the hotels list present in the place with price details and the cuisines served in that particular hotel with dates and room details. And used to book that hotel for stay.</i>
12)	BookRestaurant	<i>This is used to book reservations in the restaurants present in the place booked by user to visit.</i>	<i>Medium</i>	➤ <i>Should show the popular dishes in the particular place and the</i>

				dishes which were served by the restaurant with reservation details like prices of dishes, date and time. And used to book that reservations.
13)	BookVehicles	<i>This is used to book vehicles to ride in the place booked by the user to visit.</i>	Medium	<ul style="list-style-type: none"> ➤ Should provide user to book vehicles to ride like cars, bikes. And show price details with time. ➤ Should also take user's licence to book a vehicle.
14)	BookRides	<i>This is used to book rides to visit the landmarks and other places present in the place booked by the user to visit.</i>	Medium	<ul style="list-style-type: none"> ➤ Should provide user to book rides to visit landmarks and side seeing's with maps and other details like prices and time and pick up places.
15)	HireGuide	<i>This is used to hire guide to know about places and other help about that place.</i>	Medium	<ul style="list-style-type: none"> ➤ Should provide user to hire a guide and should view his details includes name and phone number. Should also provide the prices.
16)	Cancel Bookings	<i>This should be used to cancel the bookings done by the user. And also refund the amount paid by user.</i>	Medium	<ul style="list-style-type: none"> ➤ Should show active bookings done by user and allow user to cancel them.

3) EXTERNAL INTERFACE REQUIREMENTS

3.1) User Interfaces

The Application should be a simple web application used by its users with/without much of technical knowledge.

- ❖ Sign up interface: This interface should provide user options like name of the account, account ID, email address, phone number, password.
- ❖ Sign in interface: This user interface prompts the user to authenticate his/her credentials by asking username and password, so that only authorized users can log in to the system. Also, it displays error message and exits if the given credentials are wrong.
- ❖ Change account details interface: This interface is used to change account details by verifying user.
- ❖ View profile interface: This interface is view users profile details.
- ❖ Forgot password interface: This interface is used to reset his account password.
- ❖ View tourist places interface: This interface should show the user places which were provided by website to visit.
- ❖ View landmarks interface: This interface should show the user landmarks which were present in the place booked by the user to visit.
- ❖ View maps interface: This interface should show user google maps of place which is booked by user to visit.
- ❖ View bookings interface: This interface should show all bookings history done by the user with details like date, time and prices.
- ❖ Book journey tickets interface: This interface should provide user to book journey tickets with availability, time of journey, and prices. And also provides return tickets with same attributes.

- ❖ **Book hotel interface:** This interface should provide user with a list of hotels in that place with prices and availability. And allow user to book available tickets with required cuisines.
- ❖ **Book restaurant interface:** This interface should provide user with list of restaurants' in that place with list of dishes they provide with prices. And allow user to reserve meal in restaurant in required time.
- ❖ **Book vehicle interface:** This interface should provide user with list of vehicles to ride in that city. And allow user to book that vehicle at required time, prices and date with his licence.
- ❖ **Book rides interface:** This interface should provide user with list of landmarks to visit with map. And allow user to book ride at required time and date with prices.
- ❖ **Hire Guide interface:** This interface should provide user to hire a guide to know more about the places customer visits.
- ❖ **Cancel booking interface:** This interface should provide user cancel his bookings and refund respective money to user.

3.2) Hardware Interfaces

This web application requires a server to maintain webpages and database.

3.3) Software Interfaces

Browser	Modern browsers which support HTML5
Programming Language	Java script, Node JS
Query Language	SQL
Mark-up Language	HTML5
Style Sheet Language	CSS3
Framework	Bootstrap
Integrated development environment	IntelliJ IDEA 2019.2 x64
Database	Microsoft SQL Server Management Studio 17

In this application the software interfaces are:

- Browsers which support HTML5 like chrome (version: 73.0.3683 and above), Firefox (version: 67.0.2 and above).

- Java script version ECMA Script 2018 and Node JS version 10.16.0 can be used has programming language.
- *Microsoft SQL Server Management Studio 17 can be used has database management system.*
- *HTML5 can be used has mark-up language.*
- *CSS3 can be used has style sheet language.*
- *Bootstrap version 4.3.1 can be used has framework.*
- *IntelliJ IDEA version 2019.2 serves has IDE to write and execute the web applications html5 pages.*
- *Node JS serve as an interface to connect to the Microsoft SQL Server from the front end.*

3.4) Communications Interfaces

This web application is a standalone system hence does not require any communication interfaces.

4) OTHER NON-FUNCTIONAL REQUIREMENTS

#	Type of requirement	Details
1)	Performance Requirements	The web-based application should be able to run on any browser which supports html 5. As the database grows the intended performance with respect to report

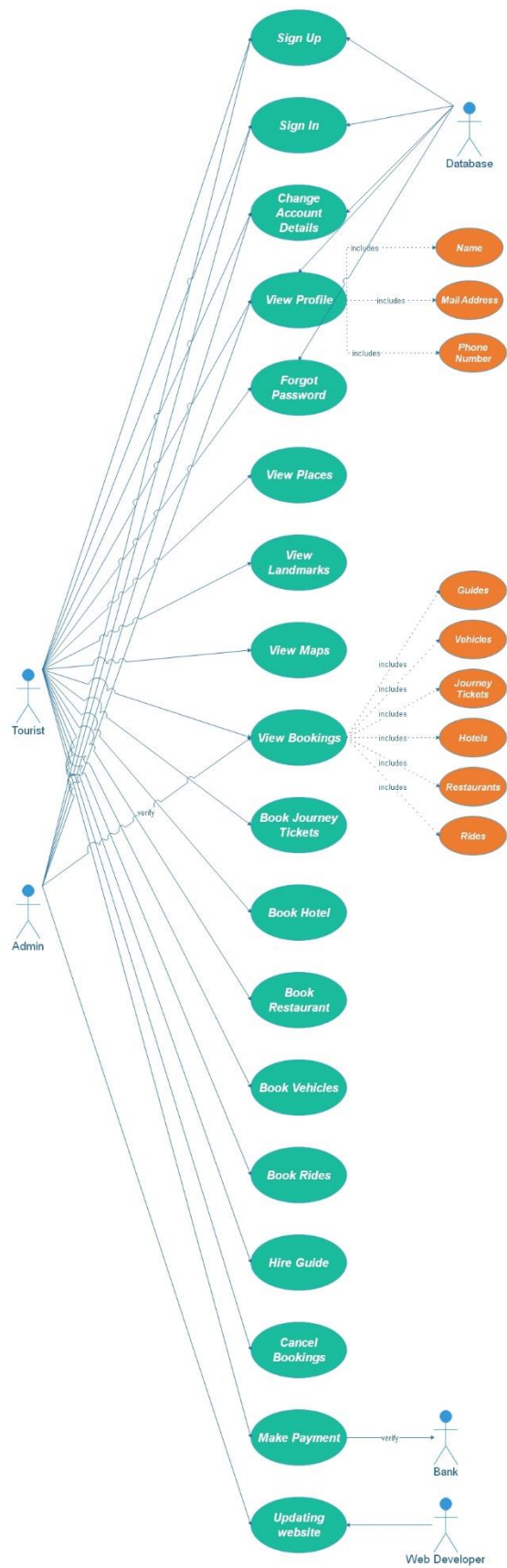
		<i>generation and accessing of data should not be affected.</i>
2)	<i>Availability Requirements</i>	<i>This system must be able to provide accurate data to all the users with valid credentials.</i>
3)	<i>Training Requirements</i>	<i>The GUI should be user-friendly and provide self-learning system.</i>
4)	<i>Security Requirements</i>	<i>The system should process if and only if valid credentials are provided.</i>

5)REFERENCE

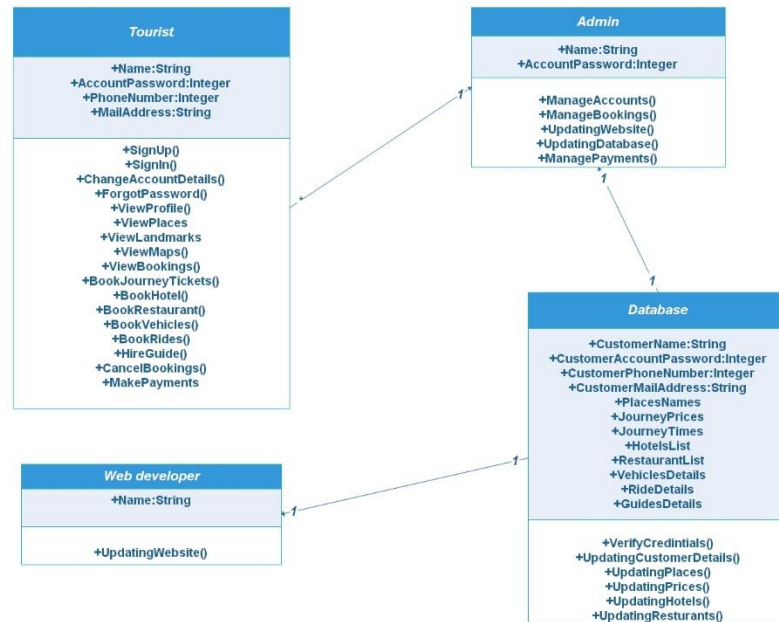
- ✓ *Tutorials based on database, java script, node JS, html5, css3 and bootstrap.*
- ✓ *Can refer to any system which is developed before.*
- ✓ *Can refer to any existing tourist management system.*

6) UNIFIED MODELLING LANGUAGE

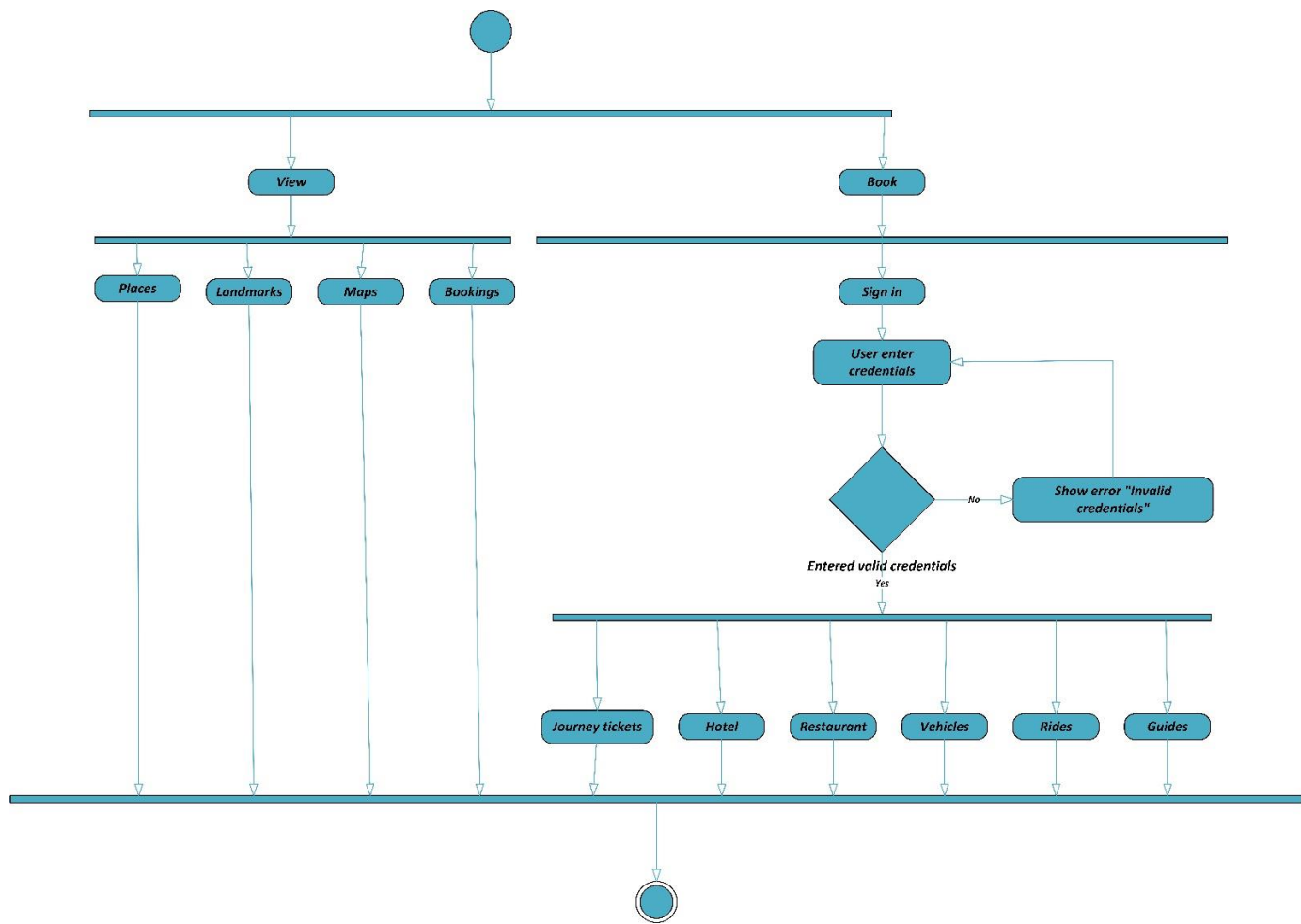
6.1) Use Case Diagram



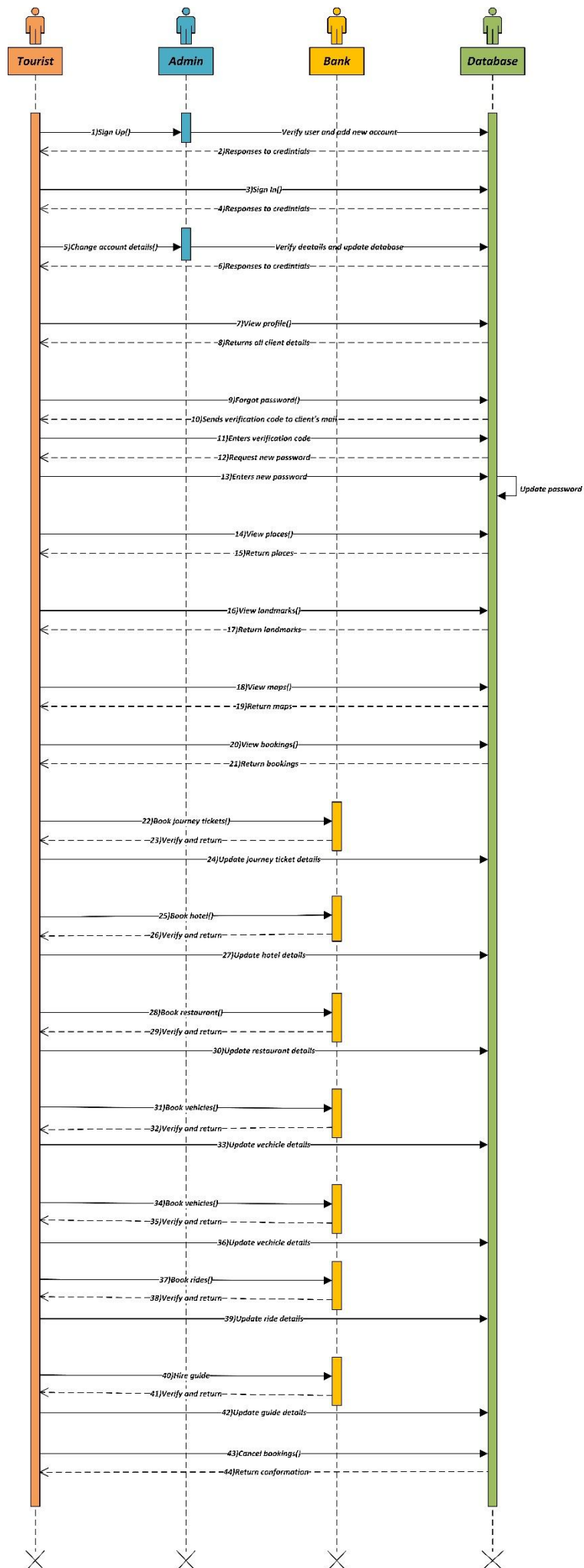
6.2) Class Diagram



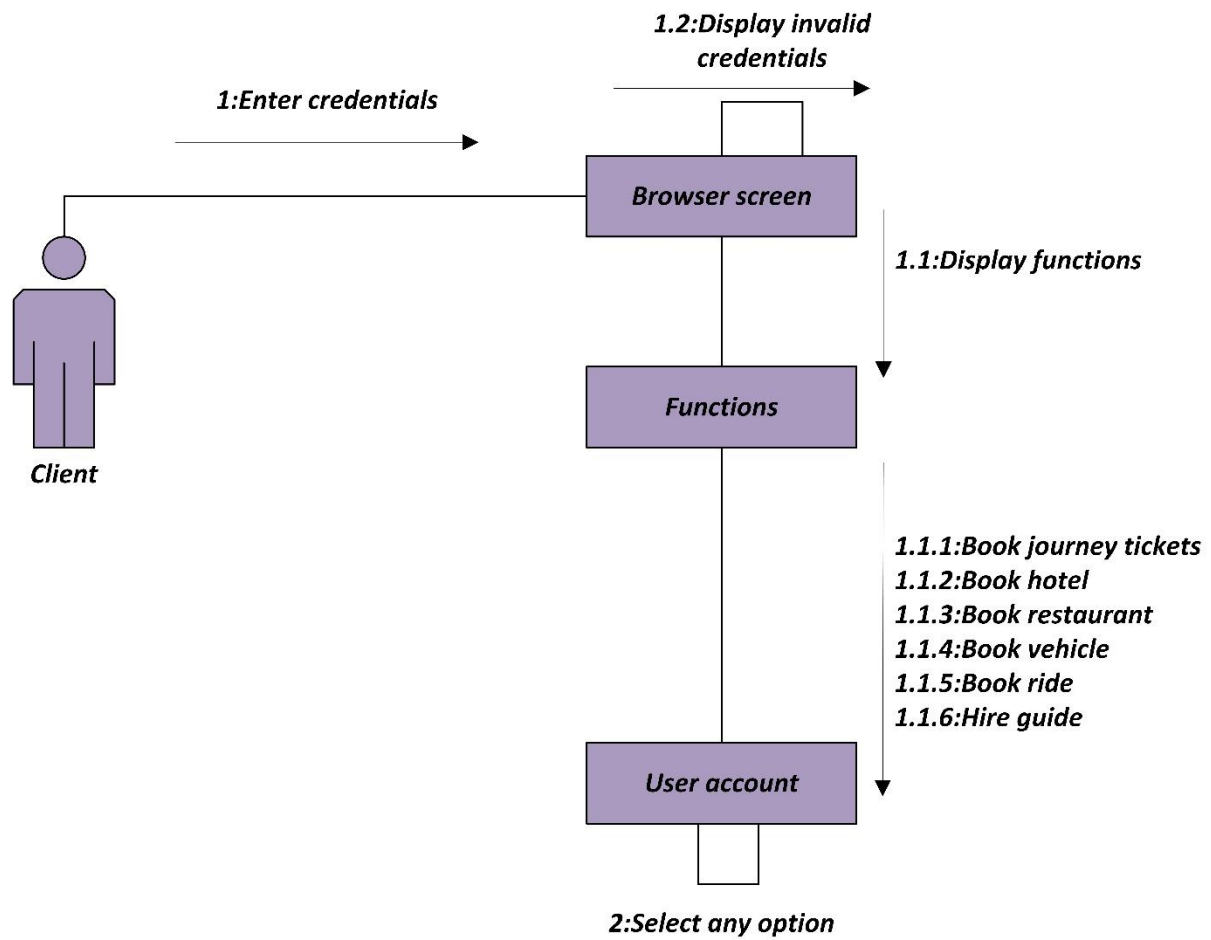
6.3) Activity Diagram



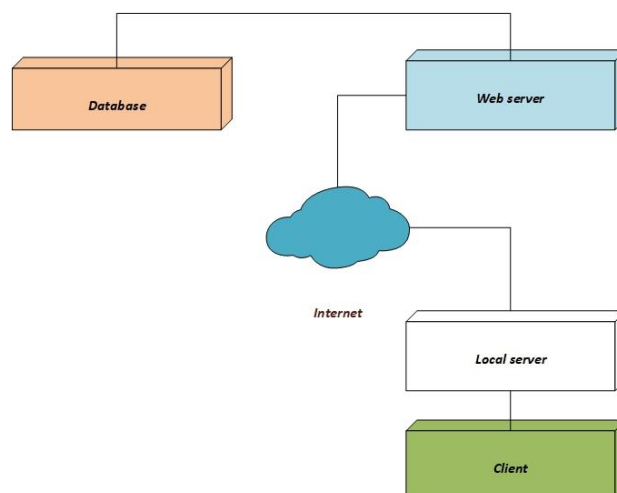
6.4) Sequence Diagram



6.5) Collaboration Diagram



6.6) Deployment Diagram



TOURISM MANAGEMENT SYSTEM NEEDS & PROBLEM STATEMENT

NEEDS

- *This tourism management system should be user friendly. And should be handled without any technical knowledge.*
- *This application should provide user all details of particular place which includes prices, maps, landmarks and foods.*
- *This application should also provide schedule to make it easy to user to plan his vacation or holiday easily.*
- *And should also include feedbacks section to improve and add new features.*

PROBLEM STATEMENTS

Customer:

<i>Elements</i>	<i>Description</i>
<i>The problem of ...</i>	<i>High maintenance cost, Unstable external services and high network traffic</i>
<i>Affects</i>	<i>Customer and stakeholders</i>
<i>And results is</i>	<i>Unexpected output with bugs and lots of time to find solution</i>
<i>Benefits of the solution</i>	<i>Expected output with defined requirements and user-friendly application</i>

User:

<i>Elements</i>	<i>Description</i>
<i>The problem of ...</i>	<i>Instability in webpages like rapid user interface changes and unknow functionality</i>
<i>Affects</i>	<i>Users and software company</i>
<i>And results is</i>	<i>Loss of users trust , loss of income</i>
<i>Benefits of the solution</i>	<i>User satisfaction , becomes user-friendly application with well understood functionality.</i>

