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# SOFTWARE REQUIREMENTS SPECIFICATION

for

Tour Buddy

Version 1.0

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# **1 Introduction**

## **1.1 Purpose**

In our modern world almost everything is available on our fingertips. Entertainment, work or recreation all of which are easily accessible. One of the few areas however that lags behind in development due to the sheer variety in destinations is travel. In our age most people before going on vacation, plan their trip sitting on an armchair. When to reach which place, how to reach that place, how long to stay and so on... . However where as the information about hotels and transportation is well organized, the information about the various places/monuments/resorts itself is not well documented. To get information about each of them we have to rely on government websites, which is a tedious job. Even if there are private websites they usually advertise limited information, limited to only the services they provide at the location. So what our web app does is it displays all relevant information about the place at a single place. This information includes links to various hotel booking apps, a link to IRCTC for booking trains, phone numbers and information about tour guides etc.

## **1.2 Intended Audience and Reading Suggestions**

This SRS can be useful for developers, project managers, users and testers. The document will provide in detail the working of our Site 'Tour Buddy' .

## **1.3 Project Scope**

Our website creates a specific webpage for each place and takes in reviews from the customers and adds them to it. Our project singlehandedly covers the job of providing detail analysis of various destinations and how to reach them, where to stay and whom to take as a tour guide. There are other miscellaneous features such as tour buddy in which if a particular place is far from urban areas you can choose a travel companion so as to reduce the taxi fare. There is also the nearest atm feature which helps in finding ATMs nearest to you. The app also has nearest restaurant feature. All in all the project decreases the burden on the tourist by not making him surf a lot of websites to get information and thus helps in convenience of travel.

## **2 Overall Description**

### **2.1 Product Perspective**

Tour Buddy is a web-based service platform to create a community of travellers and provide everyone a detailed account of every tour spot. Content creators will get a chance to monetize their passion for travelling . The platform gives security to lone travelling and distributes travelling cost, by grouping with other verified lone travellers.

### **2.2 User Classes and Characteristics**

Tour Buddy has the following Users:

- Customers: Use services of searching and creating packages, pairing up, etc.
- Travellers: Search for places to visit without login from the website
- Maintainers: Maintain the website and add data

### **2.3 Product Functions**

The product provides detailed information of all tourist spots, allows the user to create his custom travel package depending on his budget. When in the travel he/she can get all necessary details and things to do at that place. Also, customers can pair up or group with other verified travellers.

This is done by matching up the requests for pair-up based on the dates and to and from cities. Any sensitive information of the users is not displayed during the request of the pair-up too.

### **2.4 Operating Environment**

The platform is a web-app and requires any browser as the only support (the latest version is appreciated). Thus, the product works across all operating system with the requirement of a browser.

## 2.5 Design

The product is designed such that the data flows from content creators to the users. To use the portal every user the user has to create an account and fill in personal details during the first login. They will be assigned a unique username and password.

Customers can login and search for the details of a tourist spot (famous for, travellers visiting, things to take with you, etc). Once on travel he can access the nearest ATM, transport spots, police station, etc.) according to their real-time location. They can book flights using customization and also pair up with other travellers to distribute cost and ensure safety (Tour buddy feature).

## 2.6 UML diagrams

### 2.6.1 UML Activity diagram

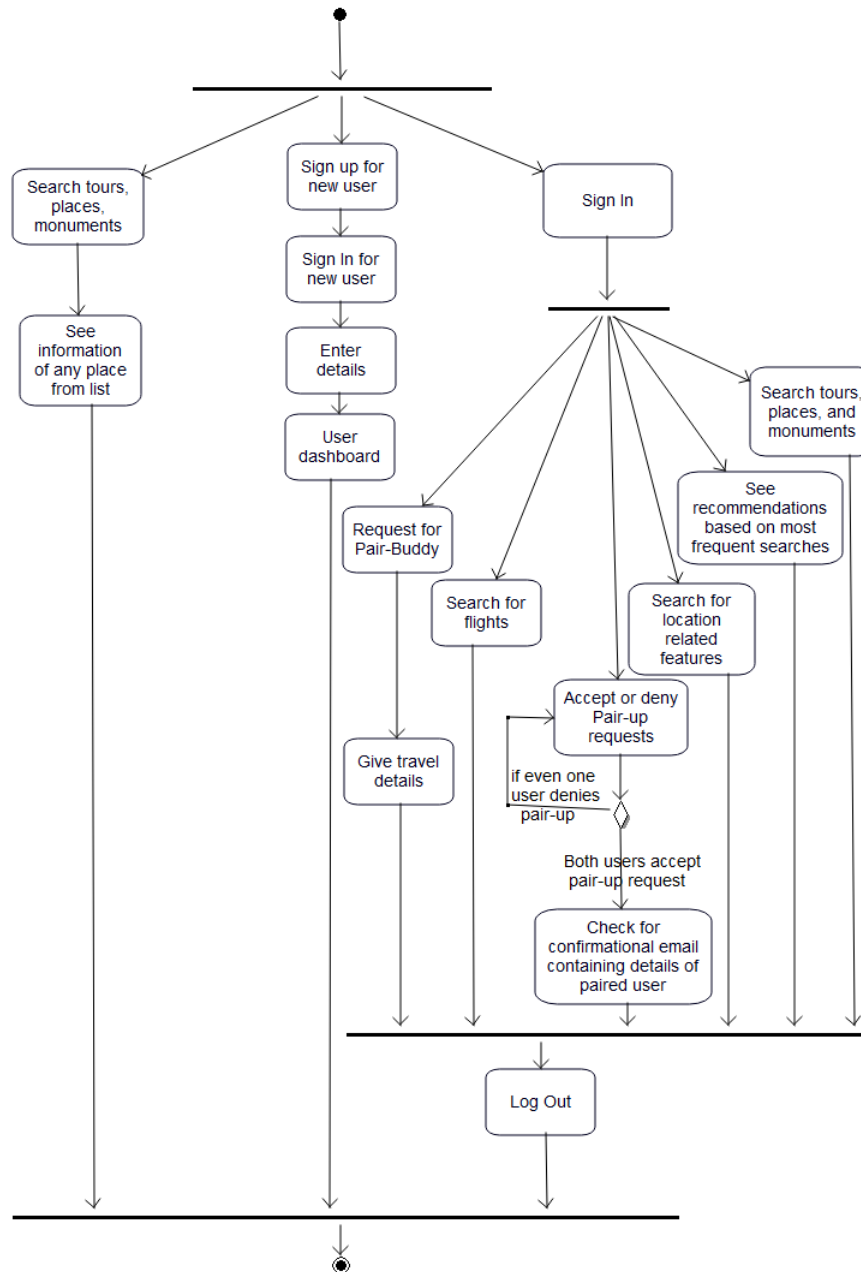


Figure 2.1: Activity diagram

## 2.6.2 UML Use Case diagram

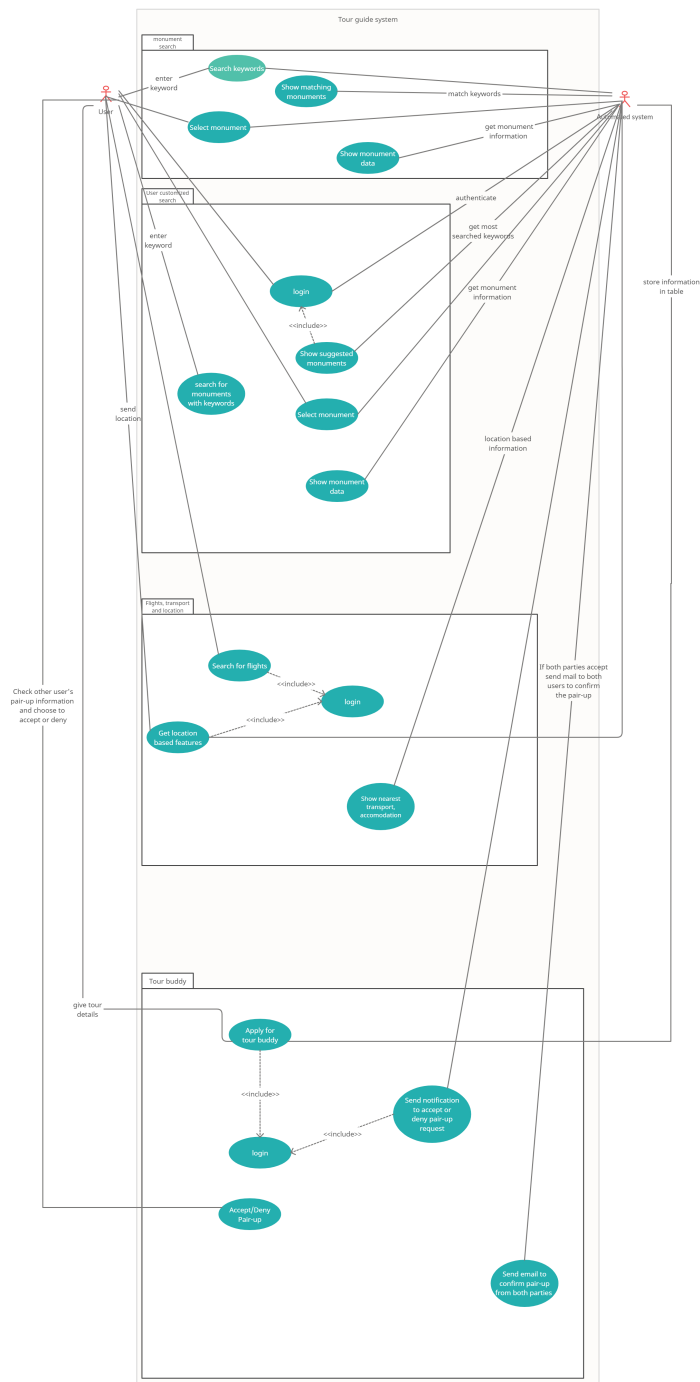


Figure 2.2: Use Case diagram

## 3 System Features

"Tour Buddy" is making a tour around the world with all the facilities at low prices. The main purpose of this app is show them all the unknown tourist places.

### 3.1 Description and Priority

"Tour Buddy" has many main and some sub-ordinate features. The Highlight features: The features with priority up to down -

1. Searching for a tourist place and familiarizing with the history of the place and making note of all the things to do around that place.
2. Providing the user with emergency contacts and locally available tour guides.
3. User can search for nearby transport Facilities and public places using Google Maps.
4. Providing Books and Magazines, videos on the tourist spots.
5. User can search for nearby ATM, Bank, hotel, restaurant and Govt Offices in our app using Google maps.
6. Pairing up users to cut down costs and ensure security during travel (Tour buddy feature)

### 3.2 Functional Requirements:

**User Verification:** Anyone can visit the website and can search the tourist places which he likes, we will refer to such a client as a user. While some users will register on the site and their email and mobile number would be verified using an OTP (one-time password) system. These users referred to as Verified users will have certain special privileges.

#### **Tour Planning Features:**

**1. Search For Place And Make Your Tour:** Users can query the website to get famous tourist spots filtered on the basis of location (country, state etc), genre (historical, sightseeing, wildlife, hill station, etc.), budget, ratings, connectivity, etc. The site will return a list of spots links based on the search made.



Allow the tourist to explore the spot to the fullest, before they make their final decision, by providing link to magazines and books to brief the user of the location.

**2.Description, estimated cost, Duration of tours:** Users will be able to extract the description, estimated cost and approximate duration of their trip once they have created a custom tour or selected a package offered. Also they will be provided a route of travel along with famous places on the way or nearby which they may consider to have a visit to.

**4.Pair Up/ Group up:** In case the user is in search of company, then if both the people agrees then pairing of the people will be accepted and done with in 2 days.After that they can travel together.

**Location-Related Features:** After taking the location either manually or automatically (with necessary permission) the user will have the following options:

**Transport Details:** User can get access to the nearest Airport, nearest Train Station, nearest Bus stops and Cab station from Google Maps.

**Nearest Facilities Details:** User can get access to your live location on the map which will show user the nearest restaurants,lodges, ATM's and Banks,PS,Tourist Info Desk and other leisure and entertainment as per the demand of the user.

## 4 Nonfunctional Requirements

### 4.1 Performance Requirements

The Tour Buddy website will be used for reciprocating all the needs or necessities required by any tourists planning to have a relaxed and secure tour, providing a smooth user-friendly interface supported by MongoDB database.

### 4.2 Security Requirements

The system is secure and protects all personal information of the user unless given consent (for the tour buddy features if at all). The system uses cookies which are stored in the clients browser and not accessible by anyone outside the system. Each registered user can only change their own information and not alter any other users.

### 4.3 Software Quality Attributes

The software quality attributes are explained in detail below:

1. **Efficiency:** The system will be implemented using MongoDB database and coded in a highly structured manner using **Flask, jQuery** along with **MongoDB** database, since the software is aimed to be hosted in a website, it won't be wasting any memory or processing cycles of the user's devices.
2. **Maintainability:** Since the system is implemented in HTML, CSS, JS, and Flask, all the files are *highly ordered and easily read by any developers* in the future and can easily pick out a particular feature to modify, since the frontend and backend of the system are separated it shall be easy for the system to evolve as per the customer's needs and changing requirements. It is very easy to implement this as it also ensures to minimize the costs required to change the software as the new updates need not be manually installed in each user's device.
3. **Dependability:** Since the system uses the highly reliable *cloud software MongoDB*, all the user's personal or confidential information is stored securely and

proper fail-safes shall be enforced to secure the database in any event of a crash of the software, thus making sure it won't cause any physical or economical harm to both the users and the developers. MongoDB ensures high security, by ensuring proper *encryption* and even *IP access listing* to make sure the database is only accessed by the admin, and once connected to the cluster, the developers do not need to physically access the data to make changes.

4. **In time:** Proper work division and teamwork can assure the software is developed with a properly working implementation of all features within the intended time
5. **Functionality:** The system shall perform all the necessary tasks required by a user intending to access the services of a proper tour guide, by the automation of several features, the system offers easy access to resources for the user to properly plan the intended tour, minimizes the budget of the user, offers several alternatives and suggestions based on reviews, also has several features to access all the necessary facilities to *facilitate safe and secure travel*.
6. **Adaptability:** The system is *easily maintainable* and due to the highly ordered implementation of the software it is *very easy to access* and change only the necessary files even in the absence of the original developers in case of a change in requirements of the software.
7. **Acceptability:** The system shall be *user-friendly*, and designed after intensive discussion of all features, and ease of operating the software. The system is also *highly compatible* and does not require any modification of the user's current software in their devices. All the features are properly described so that any user even without prior knowledge of the working of the system can easily understand and use the system's features to access resources.
8. **Portability:** The system is *highly portable* since it can easily be modified into a different language, the database handling, backend design, frontend design is implemented in different files and folders it is easy for any developer to access certain files and convert them into a different language and use the rest of the design with minimal modifications.
9. **Scalability:** The system shall be implemented with a good base and core functionalities, and shall easily adapt as per the user's demands.
10. **Understandability:** The system is easily understandable by the users and developers alike, the developers can pick out the necessary parts of the program and

modify it with ease if required.

11. **Testability:** Since the system is designed in a highly ordered fashion, it is *easy to* find or *isolate any bugs or faults* of the system in a particular part of the software and modify only those files without disturbing the rest of the program. It is thus highly testable.

## 4.4 Business Rules

Our TOUR GUIDE website is for helping any tourists to have a hassle free trip to a tourist location.

Helps save precious time and minimizes the economic cost for the client. A lot of these features have never been seen together in a single working software, thus is highly profitable field too.