

### **Objective:**

- Create and implement a database system for an online tour and travel company. This website is intended to give customers a wealth of information about their travels, including travel itinerary data, hotel bookings, and daily schedules.
- Additionally, the system provides useful functionalities to meet the needs of travel agents and company managers. Administrators can manage the full range of tasks performed by customers and travel agents.
- The application helps travel agencies find appropriate trip packages that meet the unique needs of their clients. This all-inclusive solution aims to improve productivity and customer happiness by streamlining the online tours and travel management company's operations.

 Let the website be called: [www.travelsafari.com](http://www.travelsafari.com)

### **Application Users:**

- Guest users (Unlogged users)
- Clients (Logged users)
- Travel agents
- Tour guides
- Company administrators (Managers)

### **Use Cases → Guest users (Unlogged users):**

These users land on the website and explore without registering and logging in.

- 1) Explore Destinations:
  - Browse and look for different tourist destinations.
  - View general information about locations, attractions, and climate.
- 2) View Tour Packages:
  - Explore available tour packages without any customization.
- 3) Review and Rating Browsing:
  - Look through and read other people's ratings and reviews.
- 4) Get General Information:
  - Access general information about the tourism company.
  - Read about the company's features and benefits.
- 5) Contact Support:
  - Locate the customer service or travel agent's contact details.
  - Send in questions or help requests to the company.

### **Explore Destinations:**

Each destination entry in the database may include additional details such as images, videos, maps, and related articles or blog posts.

### **View Tour Packages:**

Explore available tour packages without any customization.

The system maintains a database of tour packages offered by the travel company or agency.

Each tour package entry in the database includes details such as package name, description, destination(s), itinerary, duration, activities, accommodations, transportation options, pricing, and availability.

### **Review and Rating Browsing:**

This system allows unlogged users to Look through and read other people's ratings and reviews so that the user can come to know about that destination, tour package, etc.

### **Get General Information:**

Here users can Access general information about the tourism company such as company overview, history, locations, services offered, contact information, and more.

### **Contact Support:**

Also, this system has a feature to Locate the customer service or travel agent's contact details so that the user can Send in questions or help requests to the company.

### **Use Cases → Clients (Logged users):**

These are the users who have registered on this website.

- 1) All functionalities of Unlogged Users:
  - Logged-in users have access to all functionalities available to unlogged users.
- 2) Premium Facility:
  - Facilitates some special users who buy the premium package with some additional benefits and enhance the traveling experience.
- 3) User Profile Management:
  - Create and manage a user profile with personal details.
  - Revise contact details and preferences.
- 4) Booking and Reservation:
  - Select tour guides per client preferences (Language, Cost, Rating).
  - Make bookings for accommodations, transportation, and tour packages.
  - View and manage booking details and itineraries.
- 5) Review and Rating Submission:
  - Leave reviews and ratings for destinations, accommodations, and services.
  - Share feedback and experiences with the community.
- 6) Expense Tracking:
  - Track and manage expenses during the trip.
  - Examine and evaluate their spending habits.

- Manages outstanding amount and the amount to be given back to the client in case of cancellation.
- 7) Customization of Tour Packages:
- Customize tour packages based on personal preferences.
  - Select specific activities, accommodations, or transportation options as per their need.
- 8) Notification Handling:
- Receive personalized notifications about bookings, updates, and special offers.

### **Registration to the website:**

When an unlogged user logs in to the website, he/she gets a unique **User ID**. Let this User ID be unique amongst all the clients, travel agents, tour guides, and administrators. After registration, the client needs to enter some personal details like Name, Age, Contact Details (Address, PIN code, Contact Number, Email ID), and User type (Admin, Client, or Agent). Now, every registered user can make bookings and registrations.

Here, there are two possibilities to process further bookings for a trip. (1) The user books all the bookings by himself/herself or (2) The user takes the help of the travel agent. If the user chooses the first option, then the procedures are as follows:

Also, clients can choose tour guides in 2 possible ways: (1) They can book their tour guides by themselves on the application itself, and (2) The tour guides can be associated with the clients by the travel agents.

### **Registration for the accommodations:**

To register for accommodations, the user must provide specific details such as the type of stay they prefer, the type of room they wish to book, the size of the room, as well as the number of rooms they wish to book.

### **Ticket booking for traveling:**

To book the traveling tickets, the user has different options for traveling like he/she wants to travel by flight or train, or something else. Then there are also different options for flights and trains according to the timings, flight-train companies, cost-effectiveness, etc. They can also check for the availability of tickets for the flight or train on which they are willing to travel.

### **Premium Facility:**

The users who buy the premium membership get expert advice from specialists when needed and get some additional benefits in terms of discounts on traveling expenses or accommodation expenses and can also get free tour packages as per company terms & conditions.

### **Review and Rating Submission:**

The users can give reviews and rate their traveling experience out of 5 on the website. So, it may be helpful to other users who are willing to make a trip to the same places.

### **Expense Tracking:**

The website also keeps track of the total expenditure during the whole trip. It also maintains the yearly total trip expenditures data of users.

### **Customization of Tour Packages:**

The system also customizes the tour package according to the individual preferences of the users and selects specific activities, accommodations, or transportation options according to the needs of the users.

### **Use Cases → Travel agents:**

These are the professionals of the companies who help individuals to plan and book their travel arrangements.

- 1) Client Info Management:
  - Add, edit, or delete client information.
- 2) Destination Recommendations:
  - Provide personalized destination recommendations to clients.
  - Create custom tour packages based on client preferences.
- 3) Booking and Reservation Handling:
  - Assist clients in making bookings and reservations.
  - Manage and update client itineraries.
- 4) Communication:
  - Communicate with clients for feedback and updates.
  - Coordinate with accommodation and transportation providers.
- 5) Sales, Revenue, and Performance Tracking:
  - Monitor sales, commissions, and revenue generated.
  - Track the performance of different tour packages.
  - Keep track of payments that are to be made by the company to the agent and the refunds that are to be given back to the company in case of cancellation.

### **Client management:**

Agents can add, edit, or delete client information like personal information, preferences and interests, booking history, communication history, payment information, etc.

### **Destination Recommendations:**

The agent provides client travel services such as flights, hotels, tours, and car rentals based on their preferences, travel dates, destinations, and budget.

### **Booking and Reservation Handling:**

Agent assists clients in making bookings and reservations. They use the system interfaces with databases containing information about available inventory. It checks availability in real-time and displays relevant options to the agent. Once the agent selects the client's desired travel services, the system guides them through the booking process. It collects necessary information from the agent, such as passenger details, payment information, and any special requests or preferences. After the booking is complete, the system generates a booking confirmation for the agent's client, providing details of the booked services, itinerary, payment summary, and any other relevant information.

### **Communication:**

The agent communicates with clients for feedback and updates on the travel services and then coordinates with accommodation and transportation providers to act further accordingly.

### **Sales and Revenue Tracking:**

For bookings made through travel agents, the system calculates commissions based on predefined commission rates or agreements between the travel company and the agents. Also, the system finds the total revenue generated for an agent over a particular period or a given client. Also, the system maintains a database of tour packages offered by the travel company, including details such as package IDs, package names, destinations, itineraries, prices, and availability, and accordingly then tracks tour-package performance by including metrics such as the number of bookings, total revenue generated, and customer satisfaction ratings for each package.

### **Use Cases → Tour guides:**

Tour guides play a crucial role in enhancing the travel experience for tourists by providing valuable insights, information, and personalized assistance throughout the journey.

#### 1) User Profile Management:

- Create and manage a Tour Guide profile with personal and professional details.
- Update contact information, certifications, and language proficiency.

#### 2) Availability Status:

- Set and update availability status to indicate the periods during which the Tour Guide is open for assignments.

#### 3) Specialization and Expertise:

- Specify areas of specialization and expertise, such as historical sites, adventure tourism, or cultural experiences.

#### 4) Itinerary Planning:

- Collaborate with tourists to plan personalized itineraries and manage time constraints according to their tour package and travel.

5) Real-time Communication:

- Engage in real-time communication with tourists to provide updates, answer queries, and offer assistance during the trip.

6) Feedback and Improvement:

- Collect feedback from tourists to continually improve services and tailor future tours based on user preferences.

7) Language Support:

- Offer multilingual support to accommodate tourists with different language preferences.

8) Expense Tracking for Tour Guides:

- Track and manage personal expenses related to tours, ensuring fair compensation and reimbursement.

9) Documentation and Reporting:

- Maintain documentation of tours, including highlights, challenges, and successes.
- Generate reports for personal and company use.

### **Tour Guides:**

As per clients' requirements, tour guides can be allocated to the clients by the travel agents or clients can directly book their tour guides by themselves from the application itself. Tour guides take the help of this database to obtain some necessary information on the tour packages that are chosen by the clients and then work accordingly by contacting the clients. Also, this system maintains associated lists of clients for all tour guides.

### **Specialization and Expertise:**

This application allows tour operators (guides) to specify their areas of specialization and expertise, such as historical sites, adventure tourism, or cultural experiences. This information helps match tourists with tour packages and guides that best suit their interests and preferences, enhancing the overall travel experience.

### **Itinerary Planning:**

The system facilitates collaboration between tourists and travel agents or guides to plan personalized itineraries. Tourists can communicate with guides and then guides can offer suggestions and recommendations based on their expertise and knowledge of the destination. Travel guides can optimize the itinerary of their travel to ensure that tourists can make the most of their time while minimizing travel fatigue and stress. They may adjust the sequence of activities, prioritize must-see attractions, and recommend efficient routes to maximize sightseeing opportunities.

### **Real-time Communication:**

Tour guides create interactive experiences, such as storytelling, guided walks, or activities, to enhance the overall tour experience. They also share local insights, historical information, and interesting facts about destinations visited during the tour. Also, our

application has communication logs that maintain tourists, including messages, inquiries, and responses, ensuring effective and documented communication.

### **Feedback and Improvement:**

The feedback and improvement feature enables the collection of feedback from tourists to enhance services and customize future tours based on user preferences. The system gathers feedback about guides through surveys, reviews, or ratings and stores this information in the database.

### **Expense Tracking:**

This feature enables the monitoring and management of personal expenses incurred during tours. This ensures fair compensation and reimbursement for tour guides. The system records expenses such as transportation, meals, accommodations, and other relevant costs, associating them with specific tours or trips. Tour guides can submit expense reports through the system, and administrators can review and approve reimbursements accordingly. This helps maintain accurate financial records and ensures that tour guides are fairly compensated for their expenses. Also, this database keeps records of the payments made by the company to guides and refunds that are to be made to the company by guides in case of cancellations.

### **Documentation and Reporting:**

This facility keeps detailed records of tours, like where they went, what they did, and any feedback from tourists. It also creates reports for individuals and the company, showing how well the tours went, how happy the customers were, and how efficiently things ran. These reports help make decisions, evaluate performance, and plan for the future, making the tours and travel business better overall.

### **Use Cases → Company administrators (Managers):**

Company administrators are individuals within an organization who are responsible for managing various administrative tasks and functions to ensure the smooth operation of the company.

#### 1) Manage Users:

- Add, edit, or delete user accounts.
- Assign roles and permissions to users.

#### 2) Destination, Accommodation & Transportation Management:

- Add, edit, or delete destination information.
- Monitor and manage destination-related content.
- Manage information about accommodations and transportation services.

#### 3) Tour Package Management:

- Create, edit, or delete tour packages.
- Customize and update package details based on user preferences

- 4) Booking and Reservation Management:
  - View and manage user bookings and reservations.
  - Resolve booking-related issues.
- 5) Review and Rating Management:
  - View and moderate user reviews and ratings.
  - Address and resolve customer feedback.
  - Manages cancellation requests and refunds.
- 6) Payment History Management:
  - Oversees payment records for tour guides and agents, including pending payments (refunds to the company) and those to be made. Additionally, tracks client payments and outstanding balances.

### **Manage Users:**

Administrators can create new user accounts within the system. This involves entering relevant information such as the user's name, email address, contact details, and any other required information. Upon creation, each user account is assigned a unique identifier (e.g., user ID or username) for identification within the system. Administrators can assign specific roles to each user account within the system. Roles define the level of access and permissions granted to users, determining what actions they can perform and what data they can access.

### **Destination, Accommodation & Transportation Management:**

Administrators can add new destinations to the system by entering relevant information such as destination name, description, location details, tourist attractions, activities, and images. They can also edit or update existing destination information as needed.

Additionally, administrators can delete destinations from the system if they are no longer relevant or available for booking.

Also, the admin monitors and manages destination-related content. For example, if a hotel named X has changed its location, then the admin updates its data such as address, hotel room photos, car parking zone, etc.

Administrators can add new accommodation listings to the system, including hotels, resorts, vacation rentals, and other lodging options. Each accommodation listing may include details such as property name, location, description, room types, amenities, pricing, availability, and images. Administrators can also edit or update existing accommodation listings and remove listings that are no longer available.

Administrators can add transportation options to the system, including flights, trains, buses, rental cars, and other modes of transportation. Each transportation option may include details such as route, schedule, pricing, availability, booking options, and many more.

### **Tour Package Management:**

Administrators can create new tour packages by entering relevant information such as package name, description, destination(s), itinerary, duration, activities, accommodations, transportation options, pricing, and availability. The system may offer tools for customizing



tour packages to meet the preferences and requirements of different user segments. Administrators can adjust package details like adding extra activities, improving accommodations, or offering special perks to match what users want.

Also, administrators can upload images and multimedia content to showcase the highlights and attractions included in each tour package. High-quality visuals help attract users' attention and provide them with a preview of the travel experience.

### **Booking and Reservation Management:**

The system maintains a database of user bookings and reservations, storing details such as booking IDs, user information, booked services (e.g., flights, accommodations, tours), booking dates, prices, and payment status. Administrators can view and manage all bookings and reservations made by users. This interface provides search and filter options to easily locate specific bookings based on criteria such as booking ID, user name, travel dates, etc.

Administrators handle and resolve booking-related issues that may arise, such as booking errors, overbookings, cancellations, or conflicts. They work to address user concerns promptly and effectively, striving to ensure a positive customer experience. Administrators communicate with users to provide assistance, clarification, or resolution regarding their bookings. This may involve responding to user inquiries, addressing complaints or concerns, and providing updates on the status of their bookings. Admins fix any problems that might affect booking or user experience by working with tech support and other teams to find and solve issues.

### **Review and Rating Management:**

The system maintains a database of user reviews and ratings for various travel services, including accommodations, transportation, tours, and destinations. This database stores details such as review text, rating scores, user IDs, timestamps, and associated bookings or transactions. Administrators have access to view all user reviews and ratings submitted within the system. This database provides tools for moderating reviews, including options to approve, reject, edit, or flag reviews for further investigation.

Administrators address and resolve customer feedback submitted through user reviews, ratings, or direct communication channels. This may involve coordinating with relevant departments, service providers, or third-party partners to investigate root causes and implement corrective actions. Administrators communicate with users to acknowledge their feedback, provide assistance or clarification, and offer resolutions to their concerns.

**Just to clarify, in our application, travel agents can be tour guides as well as clients. Administrators (Managers) can also be travel agents and clients. Here one agent can have multiple clients and also a client can have no agent. Also, here client can have only one tour guide, and a tour guide can have multiple clients but have different time slots for each client. Same slots for more than one client for a given guide are not allowed here. If the tour guide receives an acceptance request from the client and simultaneously, his availability status shows "Available", then he can't deny the client's request.**

Also, note that our application is limited to data from INDIA only.

### Tentative list of reports (Queries):

#### **For Guests (Unlogged Users)**

- Look up tourist destinations in particular cities/states.
- Look up famous (Ratings > 3.5) locations in particular regions according to climatic conditions.
- Show all travel and tour packages.
- Show travel packs in a given range of budget.
- Read through negative reviews (Ratings <= 2) of a given destination.
- Read through the company's basic information.
- Extra features in company premium membership.
- Give price-wise available tour packages information for a given arrival and departure destination.
- Give all ongoing offers information for a particular package having a rating >= 3.5.

#### **For Clients (Logged Users)**

- All the functionalities of unlogged users.
- Update the name or other details in the database related to a user.
- Update the bookings section according to user interests.
- Update the reviews section in the database.
- Give all the transaction history for a given month.
- Search hostels in a particular location.
- Search for the most famous restaurants or food corners of the location.
- Search for extra fun adventure activities other than in the common package i.e. open jeep, paragliding services, etc. at the forest location.
- Give the total discount amount given by the company on a given tour package.
- Give the information of tour guides according to their years of experience for a given tour package.
- Give the information of travel agent according to their rating.
- Give my total outstanding amount till now.
- Suggest tour guides according to the client's tour packages and destinations under a given budget and over a given rating.

#### **For Travel Agents**

- Add/Update client information into their database.
- Give client-wise feedback for a given destination.
- Give the top 3 tour packages according to their performance number (PFN out of 10) for a given arrival and departure destination.
- Offer custom tour packages based on previous customer's preferences.

## Tours & Travels Management

- Search for ID proof of new clients.
- Offer customized accommodation services to the clients.
- Provide transport options to clients as per their requirements.
- Search for available transport services from transport providers.
- Look up for higher profit generation in a particular location and time of year.
- Give client-wise commission earned by the agent for a given tour package.
- Total Payment that is to be received from [www.travelsafari.com](http://www.travelsafari.com).
- Give cancellation summaries.
- List of refunds (with refund details) to be made to the company.
- Customers who have given them a poor rating.
- List of customers who have bought packages through the agent.
- Look up guide availability status to associate them with the clients.

### **For Tour Operators (Guides)**

- Retrieve tourist information after the guide gets associated with clients.
- Give destination-wise weather forecasts for a given day.
- Look up accommodation and transportation details of the associated clients.
- Look up reviews and ratings to check the average and maximum ratings given to the guide.
- Give all communication logs for a given client's tour package.
- Give cancellation summaries.
- List of refunds (with refund details) to be made by the guide.
- Clients who have given them a good rating.
- Look up clients who are associated with the given guide.
- Total Payment that is to be received from [www.travelsafari.com](http://www.travelsafari.com).

### **For Company Administrators (Managers)**

- Add delete and edit user (client, agent, guide) information.
- Search for maximum profit generation region-wise or season-wise.
- Search for the maximum number of tourists to a particular location at a particular time in a year.
- Add new custom travel or accommodation packages to general packages if demanded by more users
- Delete some old packages that not many people prefer.
- Delete or take action for some irresponsible behavior by transport or accommodation service providers.
- Give the status of booking status-related issues for a particular client.
- Delete reviews having an interval of more than equal to 3 years for a given destination.
- Give the destination-wise feedback of a client.
- Give cancellation summaries.
- Money to be paid to agents/guides in total or for a particular agent/guide.
- List of refunds (with refund details) to be made.
- Give destinations that are in the preference list of a user.
- Look up the reviews and ratings of the guides and delete guides whose rating is below 1.5.