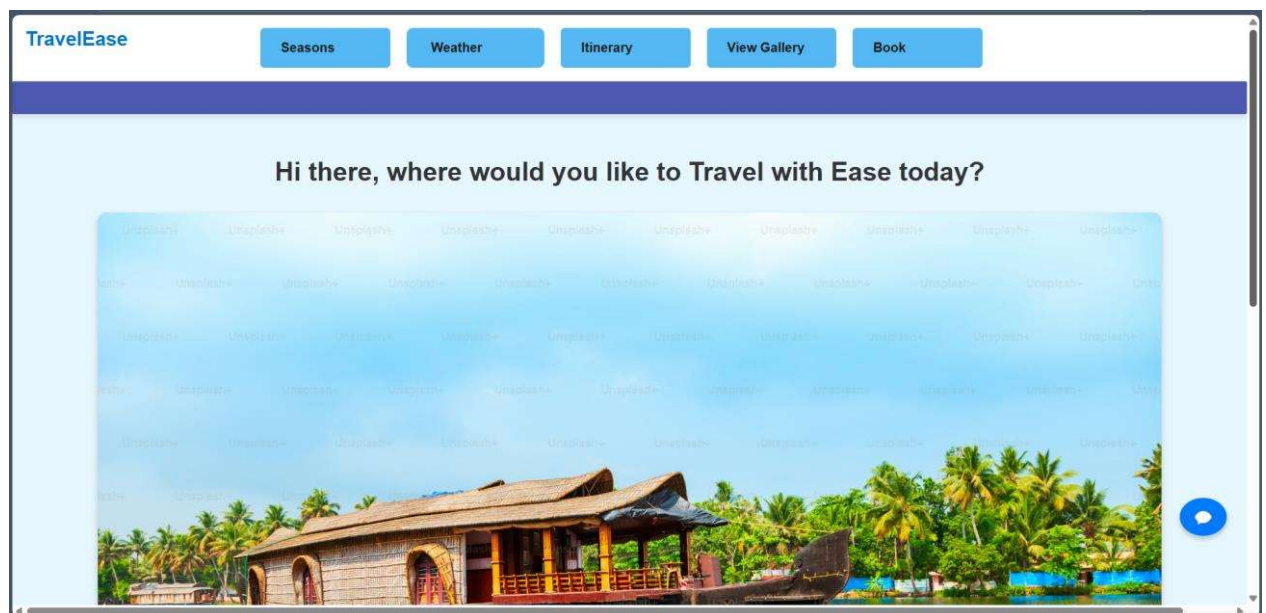


## PROJECT REPORT (TEAM- G4)

### 1. Project Statement:

#### TRAVELEASE

In today's fast-paced world, travelers often struggle to find relevant information to plan vacations that align with their preferences, and the best seasonal experiences. Our project, **TravelEase** is an advanced itinerary planning system that helps travelers choose destinations based on seasons and personal preferences. It allows users to create, update, search, and delete customized itineraries, while providing real-time weather updates for more effective planning. The platform also features a chatbot for instant support, a photo upload and review section to share travel experiences, and a ticket management system for booking and managing reservations. Users can explore pre-made itineraries, book flights and hotels, and manage bookings seamlessly. TravelEase includes secure authentication and authorization through a login and signup page, ensuring personalized access for each user. The entire project has migrated to MongoDB, ensuring efficient data management and a scalable solution for all user and admin activities to help travelers plan their trips more effectively ensuring a seamless and personalized travel planning experience.



2. **Approximate duration (in hours) to complete the project:**

180-200 hours

3. **Proposed Project In charge:**

Dr. Astha Gupta

4. **Team Members along with roll nos.:**

JHANVI: 2210994797

PRAGATI: 2210994823

TINA: 2210994851

DIYA: 2210994878

5. **Check Points:**

a. **Does the project statement result in a product? If yes, what type of product?**

Yes, the project statement **does result in a product**. It describes the development of a **web-based travel itinerary planning platform**. Specifically, it is a **comprehensive travel management application** that helps users plan, organize, and manage their trips with features such as:

- Season-based destination suggestions
- Customizable itineraries
- Real-time weather updates
- Photo sharing and reviews
- Ticket and flight management
- Hotel booking and management
- Secure authentication and authorization for personalized user access

b. **If it is a product, can a prototype be made, if not, what is it, which we can produce that our teachers can evaluate.**

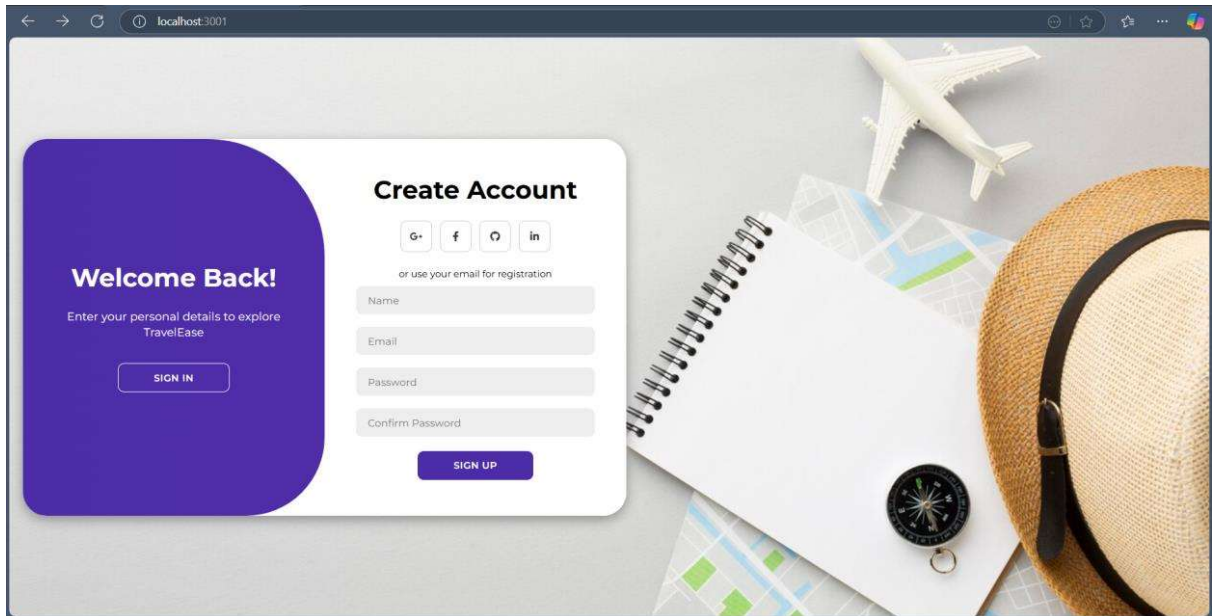
Yes, **a prototype can definitely be made** for this product. A **prototype** is an early, working version of the product that showcases its core features and functionality, allowing for evaluation and feedback. It serves as a proof of concept to demonstrate how the final product will work.

c. **Does the project statement use multiple concepts to achieve the outcome? (yes/no)**

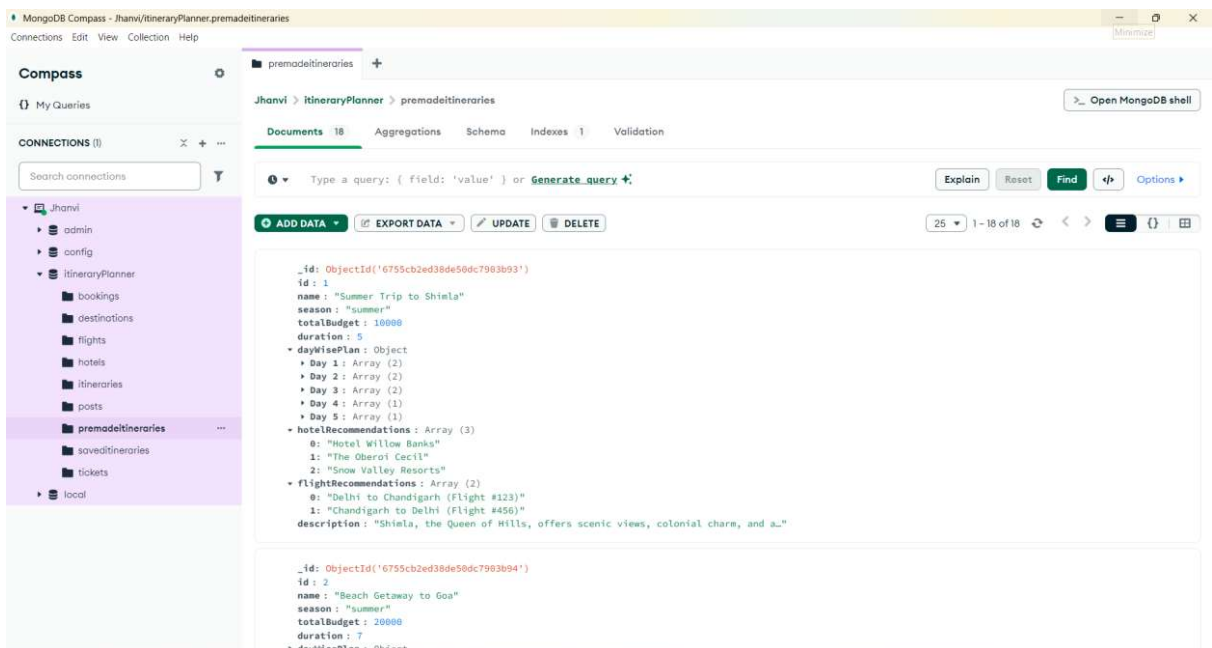
**Yes**, the project statement uses multiple concepts to achieve the outcome.

It integrates concepts such as:

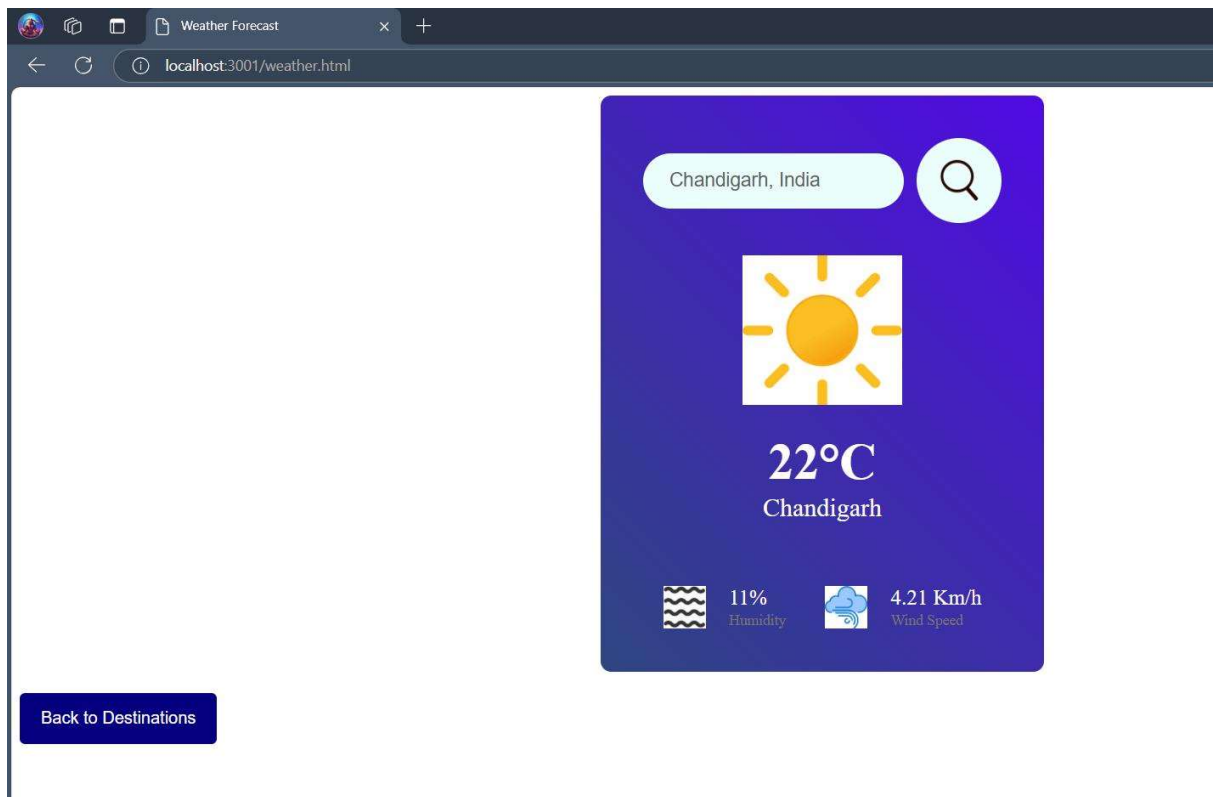
- Web Development (frontend and backend development)
- User Authentication and Authorization (login/signup)



- Database Management (MongoDB for storing and retrieving data)

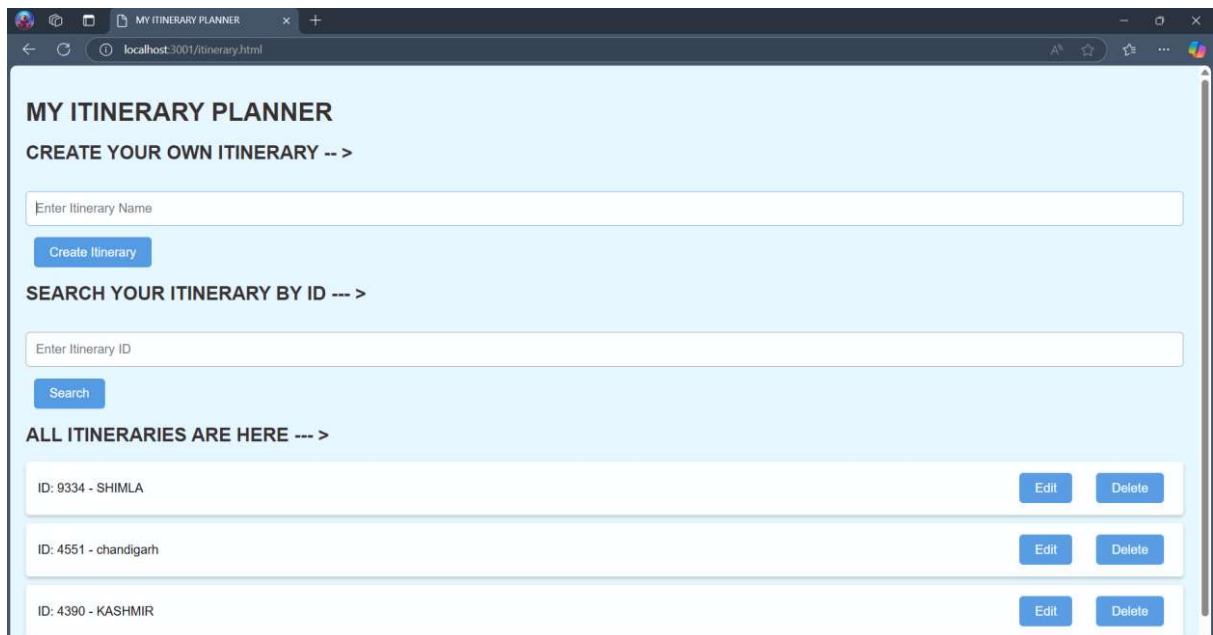


- APIs and Real-time Data (weather updates)

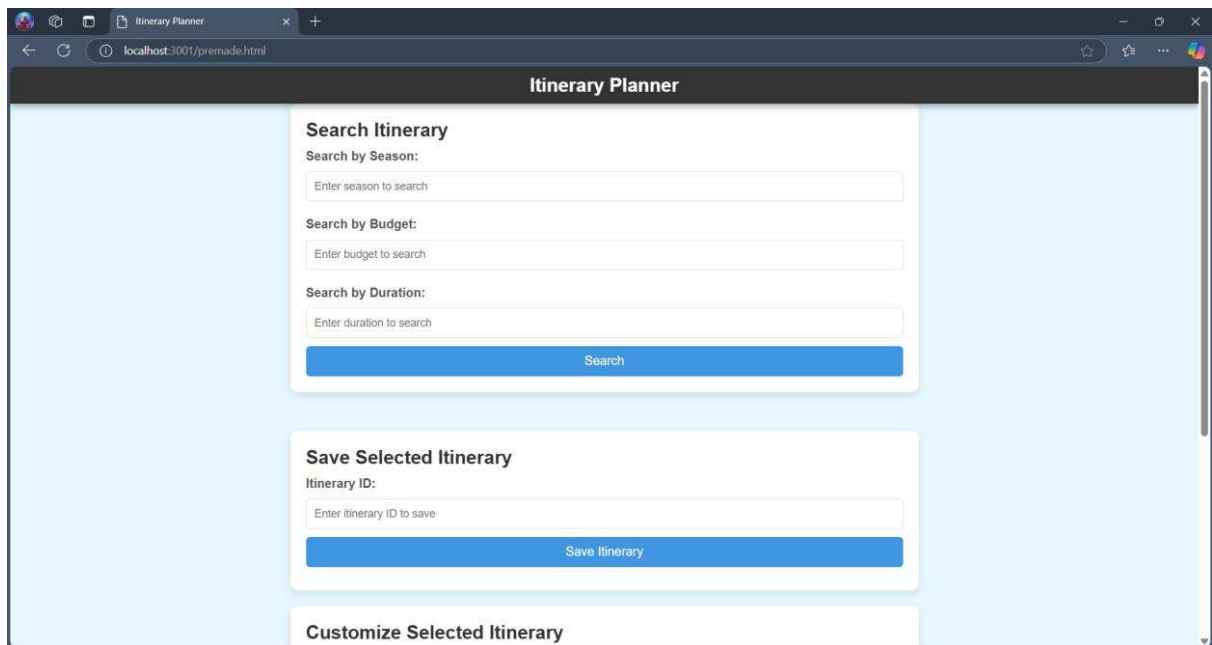


- User Experience Design (customizable itineraries, gallery uploads, chatbot support)

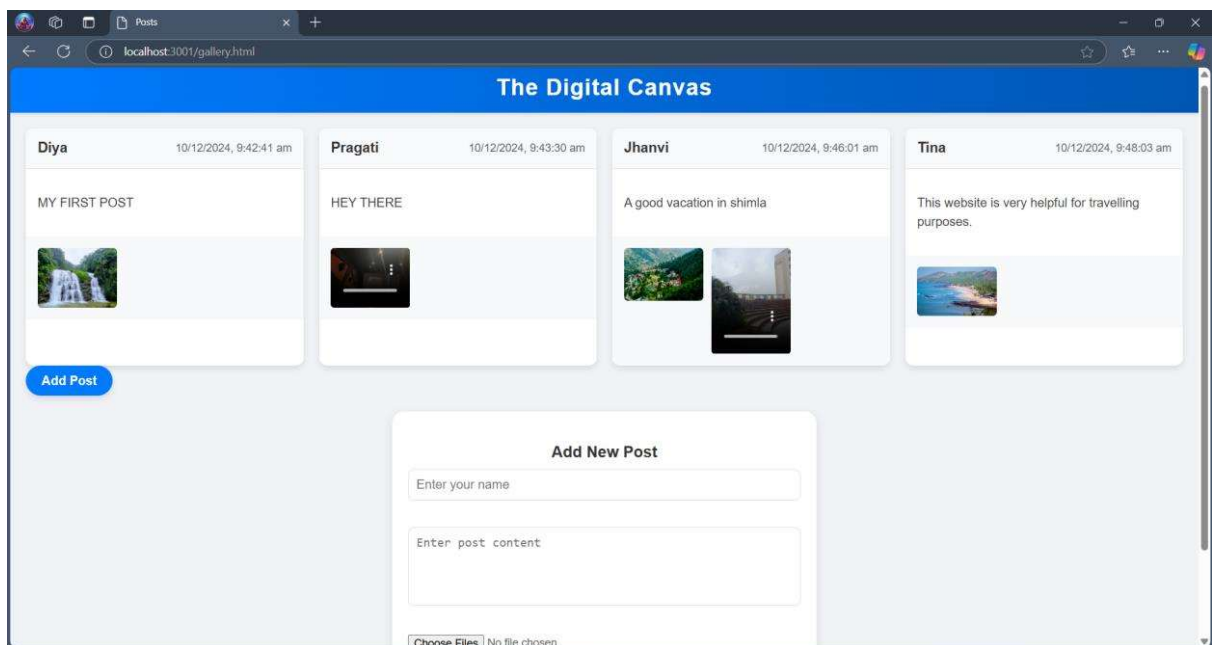
#### USER CAN CREATE THEIR OWN ITINERARY HERE -



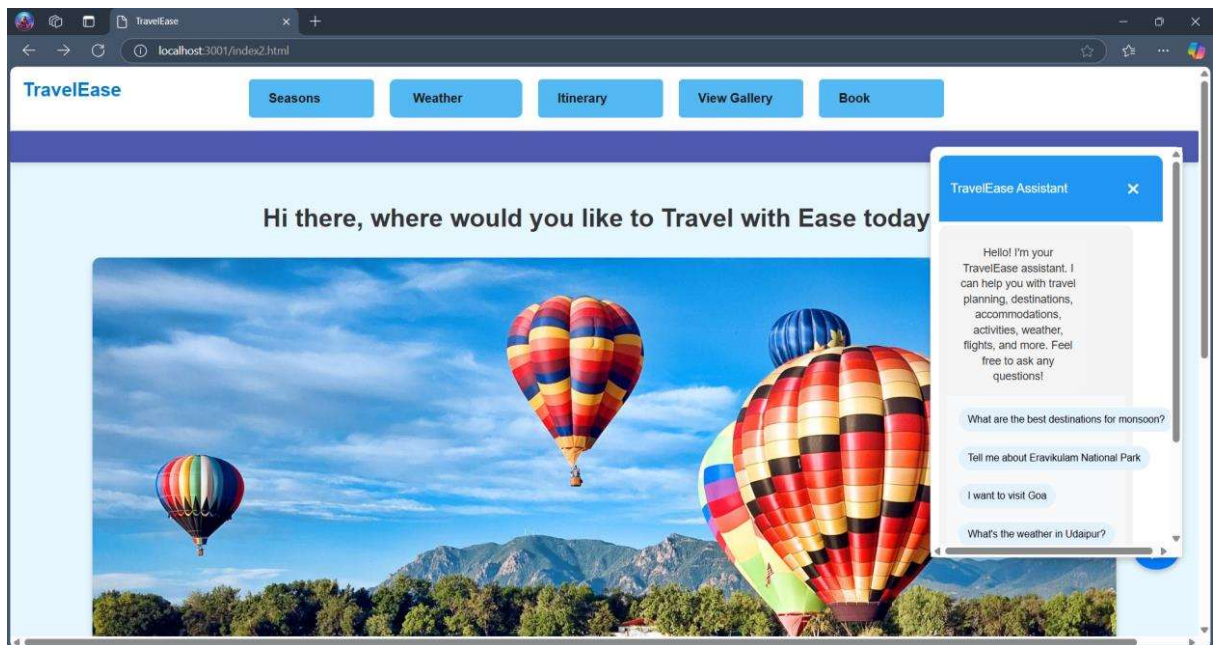
USER IS ABLE TO GET PRE MADE ITINERARIES HERE ON THE BASIS OF THEIR OWN NEEDS LIKE SEASON , DURATION AND BUDGET -



**GALLERY UPLOADS – HERE USER IS ABLE TO POST FEEDBACK , PHOTOS AND VIDEOS**

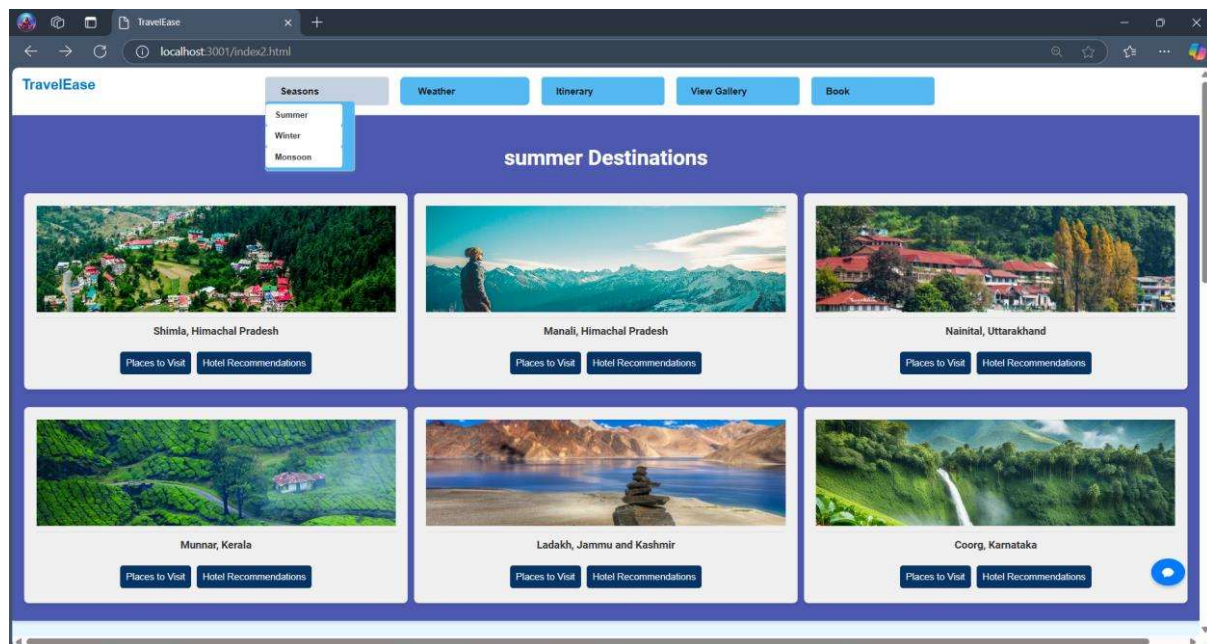


**CHATBOT - TRAVELEASE ASSISTANT (HERE USER CAN ASK ANY QUESTION REGARDING WEBSITE OR REGARDING ANY INFORMATION)**



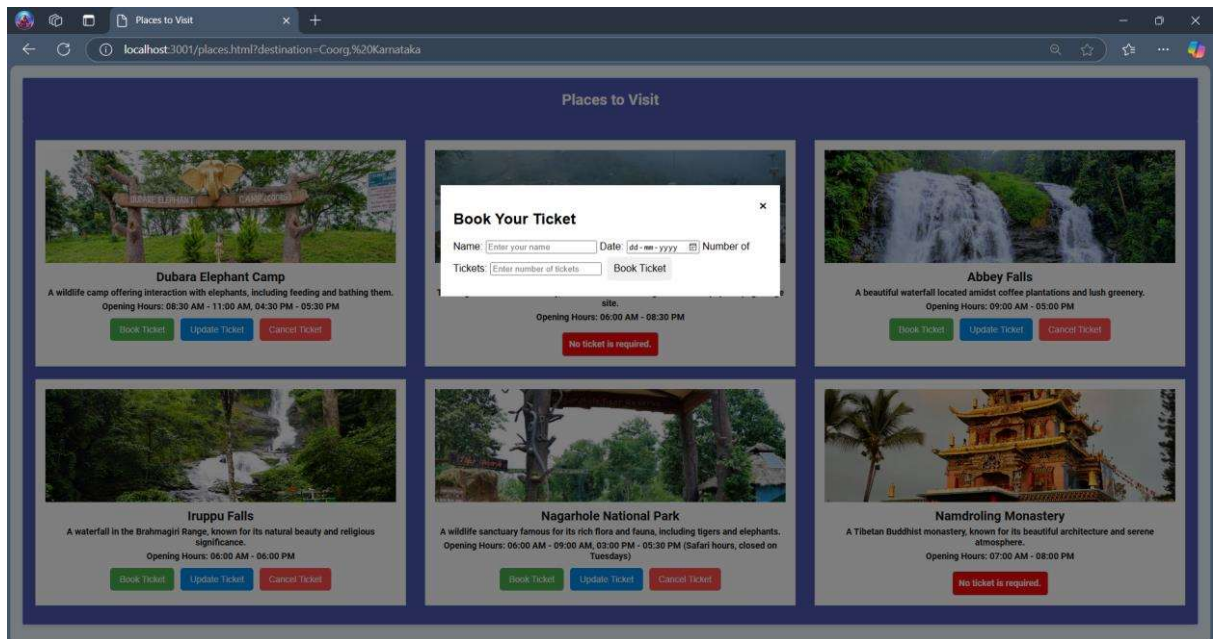
- **Data Management** (flight, hotel, and ticket management systems)

### DESTINATIONS BASED ON SEASON

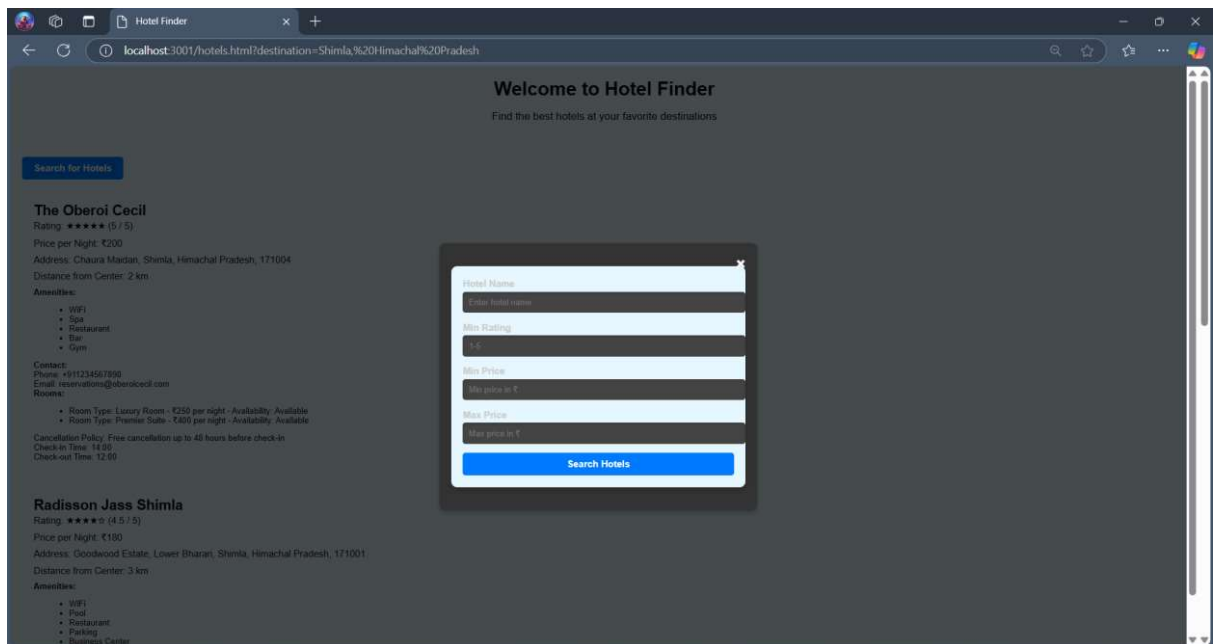


### PLACES AND TICKETS MANAGEMENT SYSTEM BASED ON DESTINATIONS AND PLACES -





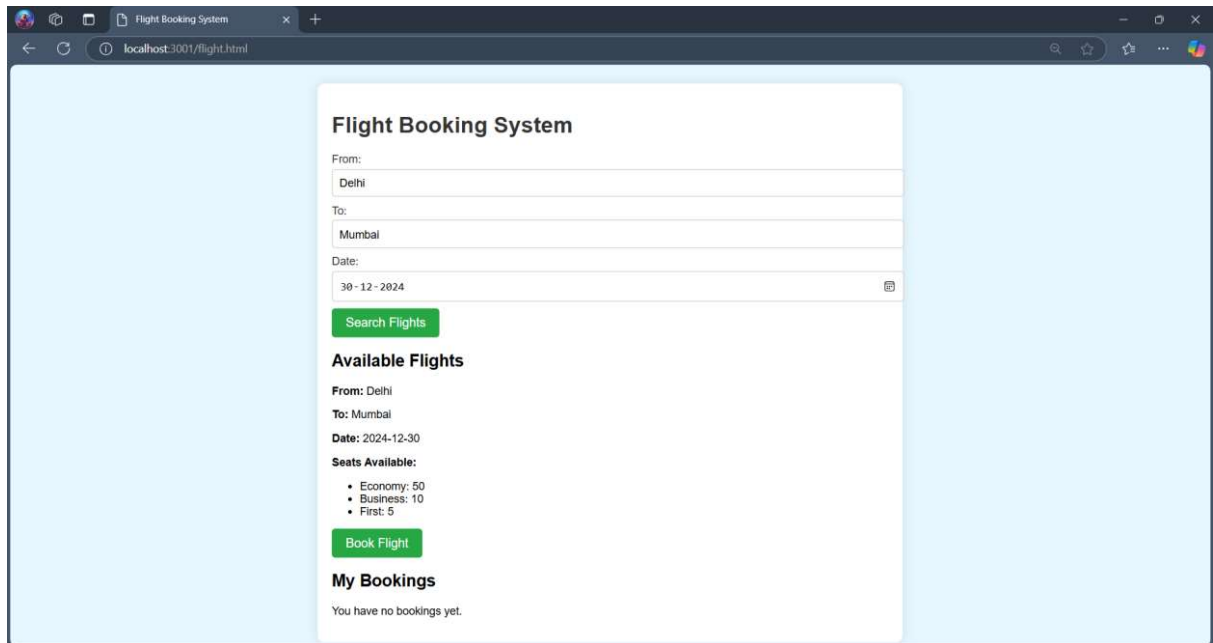
## HOTELS MANAGEMENT SYSTEM BASED ON DESTINATIONS -



- **Interactive Features** (photo upload, review system, chatbot)

These combined concepts contribute to creating a comprehensive travel management platform.

## FLIGHT MANAGEMENT SYSTEM



**d. Does it have enough for our team members to do sufficient amount of work? (yes/no)**

Yes, there are multiple tasks and modules that can be distributed among team members. The project is divided into various tasks such as setting up the server, creating API endpoints, managing data files, and developing the front-end service. Each team member takes on different responsibilities, ensuring that everyone contributes significantly to the project. This distribution of work will help in efficiently managing the project and completing it on time.

**6. Technical Nodes:**

<b><i>Subject / Area / Topic</i></b>	<b><i>Technical Nodes</i></b>
Web Development	HTML, CSS, JavaScript, Node.js, Express.js
Database Management	MONGO DB , Data Models
API Integration	RESTful APIs
User Interface Design	Responsive Design, UX/UI principles , Dynamic Interactions
Git Version Control	knowledge of Git and GitHub for collaboration and version management.

**7. Prerequisites for doing the Project:**

- Knowledge of JavaScript, HTML, and CSS.
- Understanding of Node.js and Express.js
- Familiarity with Database management (Mongo DB) in Node.js
- Experience with API integration and RESTful services.



- Ability to integrate and manage real-time weather updates and dynamic data.
- Basic knowledge of Git and GitHub for collaboration and version management.
- Experience with file upload tools like Multer and file management in Node.js.
- Concepts of responsive web design

#### 8. **Material that may be required to make the project and where it might be available:**

- **DEVELOPMENT TOOLS**

Visual Studio Code (Available Online)

- **DATABASE FOR DATA MANAGEMENT**

Mongo Db (Available Online)

- **APIs**

Third-party APIs for weather, destinations, etc. (available online) - Used to fetch additional data required for the application

- **VERSION CONTROL**

Git and GitHub (Available Online)-Tools for version control and collaboration

#### 9. **What could the total cost of the project?**

- **Development Tools:** Free

Tools like VS Code are available for free.

- **Database for Data Management:** Free (with limited usage plans)

Using the Mongo DB for data management, which is free.

- **APIs:** Free (with limited usage plans)

Many third-party APIs offer free tiers with limited requests.

- **Design Tools:** Free (with limited usage plans)

#### 10. **Resources available to us:**

- GitHub for version control and collaboration.
- Free online resources and documentation for development tools.
- Online tutorials for learning required technologies.