

# Full Stack Developer

## Project Report

As Partial Fulfilment of  
Master of Science (Information Technology) – MSc (IT)  
Semester-IV

Developed at  
**ScriptJet**

Developed by  
**Gajera Mansi (202300819010067)**  
**Godhani Hetasvi (202300819010068)**

Under Guidance of  
**Ms. juhi Patel , FCAIT-MSc (IT) Programme,**



Faculty of Computer Applications & Information Technology  
MSc (IT) Programme  
GLS University  
Ahmedabad-380 006

# Project Profile

Project Title:	TripTales											
Description	<p>This website allows users to explore and discover interesting places to visit. It includes user authentication so people can securely sign up and log in. Once logged in, users can search for places, post updates, write reviews, and leave comments. The platform also lets travelers share their experiences and interact with others, making it a fun and social way to explore new destinations.</p>											
Objective	<p>The goal of this website is to provide a platform where users can securely sign up, explore visiting places, and share their travel experiences. Users can search for locations, post updates, write reviews, and engage through comments. The site aims to offer an interactive, easy-to-use experience for discovering and discussing popular destinations.</p>											
Project Category	Web-site											
Tools Used Required:	<p>/ Development side:            Operating System: Linux(Ubuntu)            Front End: ReactJS            Middleware: Node.js (Express.js)            Back End: MongoDB            Framework: MERN Stack (MongoDB, Express.js, ReactJS, Node.js)</p> <p>Deployment side            Hardware: Linux(Ubuntu)            Software: ReactJS, MongoDB</p>											
Developed at:	ScriptJet											
Developed By:	<table border="1"> <tr> <td>Enrollment No</td> <td>Name</td> <td>No.</td> </tr> <tr> <td>202000819010067</td> <td>Gajera Mansi P.</td> <td>FCAIT</td> </tr> <tr> <td>202000819010068</td> <td>Godhani Hetasvi R.</td> <td>FCAIT</td> </tr> </table>			Enrollment No	Name	No.	202000819010067	Gajera Mansi P.	FCAIT	202000819010068	Godhani Hetasvi R.	FCAIT
Enrollment No	Name	No.										
202000819010067	Gajera Mansi P.	FCAIT										
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Guided By:	<table border="1"> <tr> <td>Internal at Institute</td> <td>External at company</td> </tr> <tr> <td>Name: Ms. Juhi Patel Designation: Assi. professor</td> <td>Name: Abhishek Tada Designation: Team Lead</td> </tr> </table>			Internal at Institute	External at company	Name: Ms. Juhi Patel Designation: Assi. professor	Name: Abhishek Tada Designation: Team Lead					
Internal at Institute	External at company											
Name: Ms. Juhi Patel Designation: Assi. professor	Name: Abhishek Tada Designation: Team Lead											



(+91) 95108 09987



contact@script-jet.com

Date: 11/04/2025

### Training Certificate

This is to certify that **Miss Mansi Gajera** is working at **ScriptJet IT Services** as a **Software Developer Trainee** from **01<sup>st</sup> November 2024**.

During her training she is found hardworking.

We wish her all the best in her endeavors.

**Ekta Bhanderi**

**(Managing Director)**



[www.script-jet.com](http://www.script-jet.com)



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contact@script-jet.com

Date: 11/04/2025

**Training Certificate**

This is to certify that **Miss Hetashvi Godhani** is working at **ScriptJet IT Services** as a **Software Developer Trainee** from **01<sup>st</sup> November 2024**.

During her training she is found hardworking.

We wish her all the best in her endeavors.

**Ekta Bhandari**

**(Managing Director)**



[www.script-jet.com](http://www.script-jet.com)



302, SNS Business Park, University Rd, Opp. J H Ambani School, Vesu, Surat, Gujarat-395007

## Acknowledgment

Every work that one completes successfully stands on the constant encouragement, goodwill and support of the people around. Through this, we would like to express our gratitude to all those who have contributed to our project.

We express our heartfelt thanks to **Dr. Savita Gandhi** ma'am, The dean of Department for their continuous support and guidance throughout the project. They provided us the wealth of technical Knowledge as well as analytical knowledge, which helped us, a lot during our project.

We are also grateful to **Dr. Harshal Arolkar** (the head of Department) for the brainwave and encouragement given. It was pleasure working with GLS FCAIT.

We would like to thank our internal guide **Ms. Juhi Patel, Asst. Professor, FCAIT**, who helped us get through with the functionality of the system and solving the technical problems. We really admire her professional attitude.

We also like to thank **Mr. Abhishek Tada**, Sr. Developer at. ScriptJet, for his valuable advices and suggestions. Also, we would like to thank all other, all respected staff for helping us a lot in successful completion of our project.

We extend whole hearted thanks to faculties of **FCAIT, GLSU** for providing all facilities, valuable suggestion and constant supervision for the successful completion of the project.

## Introduction of Company and Guide

Company Name:	ScriptJet
Company Address:	302, SNS Business Park, Opp. J. H. Ambani School, Vesu, Surat – 395007
Technologies:	Design: Html,css,React js Mobile : React Native Database: MongoDB, MYSQL Core Technologies : Node Js,PHP,JAVA
External Guide:	Abhishek Tada
Designation:	Sr. Software Developer

ScriptJet is backed by a skilled team of developers, designers, and digital strategists, operating from its development center in Surat, India, and collaborating with clients across the USA, UK, Canada, and UAE.

- The company offers end-to-end digital services including custom web development, mobile apps, SaaS product development, UI/UX design, and API integration.
- ScriptJet is committed to building scalable, secure, and performance-driven solutions tailored to business needs.
- With a strong focus on innovation and customer satisfaction, ScriptJet delivers high-quality digital products that enhance user experience and drive business growthReactReply

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## Introduction

### Project Description :

- A web platform for discovering and exploring various visiting places.
- Users can search for destinations and view detailed information and images.
- Registered users can add new posts about places they have visited.
- Users can write reviews and share their experiences.
- Includes secure user authentication and personalized user experience.

### Technical Description :

- Project would cover the following technical aspects of programming:
- React.js component-based architecture for building reusable, dynamic, and responsive user interfaces with state management using React Hooks.
- Node.js for server-side development utilizing asynchronous event-driven architecture to handle multiple client requests efficiently.
- Express.js framework used to build RESTful APIs with structured routing and middleware integration.
- MongoDB NoSQL database with schema design using Mongoose for handling relational data in a flexible document-based structure.
- JWT-based Authentication for secure login and route protection, along with bcrypt for password hashing.

### Websites(For Users/Visitors) :

- It includes essential features such as browsing places, searching locations, viewing detailed posts with photos and descriptions, and reading user reviews.
- Users can register and log in to add new posts, comment on places, add favorites, and report inappropriate content.
- The platform is designed to be user-friendly, responsive, and compatible with all major web browsers, providing a smooth experience across devices.

## Project Needs

- The key benefit is that users can explore and share information about travel destinations anytime — day or night.
- Allows tracking of user behavior, such as searches, favorites, and comments, to enhance user experience and content relevance.
- Reduces the need for physical guidebooks or in-person recommendations, making travel planning more efficient.

## Benefits of the System

- Enhanced User Engagement: Social features like likes, comments, follow, and chat keep users engaged.
- Real-time Interaction: With socket-based messaging and updates, users can interact instantly.
- Location Awareness: Viewing posts on a map provides a more immersive and location-aware experience.
- User Privacy and Control: Features like block/report and secure authentication give users control and safety.
- Content Organization: Hashtags, category filters, and search make it easy to find and manage content.
- Accessibility: PDF export makes it easy for users to save or print posts for offline use.
- Scalable and Maintainable: Built using modern technologies like React.js, Node.js, and MongoDB, making it scalable for future enhancements.
- Responsive Design: Compatible with desktop and mobile views for a seamless experience.

## New Features

- Nearby Places Finder
- Automatically show users nearby attractions based on their current location using GPS.
- Refer a Place to a Friend
- Users can refer a place to a friend. If the friend marks it as visited or reviews it within a certain time, both users get rewards (like profile badges or points).

## Feasibility Study

### **Technical Feasibility :**

- The application will run on any modern web browser (Chrome, Firefox, Safari, Edge, etc.) across all devices.
- It is developed using React.js for the frontend and Node.js with MongoDB for the backend, ensuring scalability and high performance.
- Users only need a device with internet access and a browser—no special system requirements.
- The tech stack supports dynamic features like authentication, adding favorites, reviews, and real-time updates.

### **Operational Feasibility :**

- The system is user-friendly and intuitive, making it easy for users to browse, search, and interact with posts and places.
- Admins can manage posts, user reports, and comments efficiently through the backend.
- Features like post reporting, commenting, and favorites improve user engagement.
- Secure user authentication ensures privacy and data protection.

### **Economic Feasibility :**

- Development uses open-source technologies (React, Node.js, MongoDB), which reduces licensing costs.
- The cost of hosting and maintaining the application is affordable and scalable based on traffic.
- Long-term savings are achieved by automating features like user management, reviews, and reporting.
- Potential for monetization through ads, partnerships, or premium listings in the future.

# System Requirement Specification

## Function Recuirement :

### **1. Registration :**

- Users must register to access full platform features such as posting, liking, commenting, and chatting.
- Registration requires basic details such as username, email, and password.

### **2. Login :**

- Users log in using their registered email and password.
- Login ensures user authentication and personalized access.

### **3. Browse Places :**

- Users can explore places posted by others.
- Browsing includes search functionality, filtering by category or hashtags, and viewing places on map.

### **4. Add to Favorites :**

- Users can mark posts/places they like as favorites.
- This helps users save places they're interested in for future reference.

### **5. Add a Post :**

- Registered users can add new places by uploading photos, location, description, and adding categories or hashtags.

### **6. Like, Comment, Review, Report a Post :**

- Users can interact with posts by liking, commenting, giving reviews, or reporting inappropriate content.
- Reviews can be useful for others visiting the same place.

### **7. Follow / Unfollow Users :**

- Users can follow other users to stay updated on their posts.
- Unfollow anytime to remove their updates from the feed.

### **8. Chat with Other Users :**

- Users can chat with each other via direct messaging.

## **10. View Post Details & Location :**

- Users can open any post to view full details including the location on map, comments, reviews, and user profile.

## **11. Search & Filter**

- Users can search for posts or users using keywords.
- Filters include categories and hashtags for easier navigation.

## **12. Block / Report User**

- Users can block or report other users if they face abuse or spam.
- Blocked users cannot interact further.

## **13. Download Post as PDF**

- Users can export post details (text and image) into a downloadable PDF format.

## **Data Requirement :**

The system will utilize database structures to manage user data, post data, interaction data, and chat data. These will support core functionalities such as posting, commenting, reviewing, and messaging. File structures will include uploaded images, profile pictures, PDF exports, and media shared in chat.

### **1) Database Structures :**

- 1) User Data: Stores user credentials, profiles, followers, blocked users, and preferences.
- 2) Post Data: Manages content such as titles, descriptions, media, categories, hashtags, and location.
- 3) Comment & Review Data: Includes user comments, reviews, timestamps, and associated post/user references.
- 4) Interaction Data: Captures likes, follows, reports on posts and users.
- 5) Chat Data: Contains user-to-user message histories, chat sessions, and timestamps.
- 6) Report Data: Stores flagged content and user reports for moderation purposes.

## 2) File Structures :

- 1) Profile Images: Stored via Cloudinary for user avatars.
- 2) Post Media Files: Uploaded images and videos attached to posts.
- 3) PDF Reports: Exported post summaries or user activity in PDF format using jsPDF/html-pdf.
- 4) Map Data: Location points from Leaflet or Google Maps API for displaying post locations.
- 5) Backup Files: Periodic MongoDB data dumps for backup and recovery.

## Performance Requirements :

### 1) System Response Time :

All user actions such as login, logout, and navigating between pages must complete within 2 seconds under normal load conditions.

### 2) Post Management :

Operations like creating, editing, or deleting posts must be completed within 3 seconds.

### 3) Search & Filter :

Search queries and category/hashtag filters should return results within 2 seconds.

### 4) Map Rendering :

Location-based features using Google Maps or Leaflet must load maps and pins within 3 seconds.

### 5) Chat Functionality :

Messages sent through the chat system must be delivered in real-time, with a delay of no more than 1 second.

### 6 ) PDF Generation :

Exporting data (posts or user profiles) to PDF format must be completed within 5 seconds.

## **7) File Uploads :**

Image and file uploads using Cloudinary must complete within 4 seconds for files up to 5MB.

## **8) Concurrent Users :**

The system must support a minimum of 200 concurrent users without performance degradation.

## **9) Scalability :**

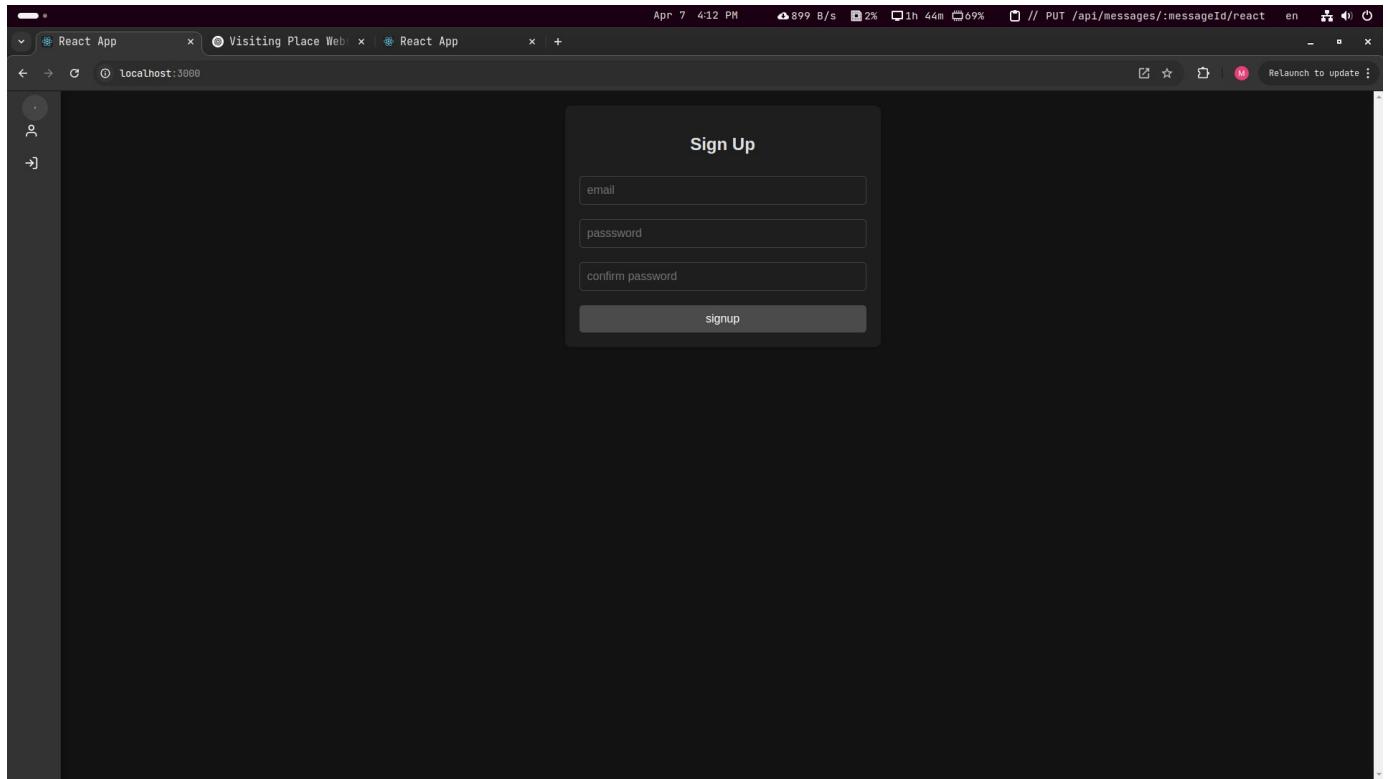
The architecture should allow horizontal scaling to handle increased user traffic efficiently.

## **10) Availability :**

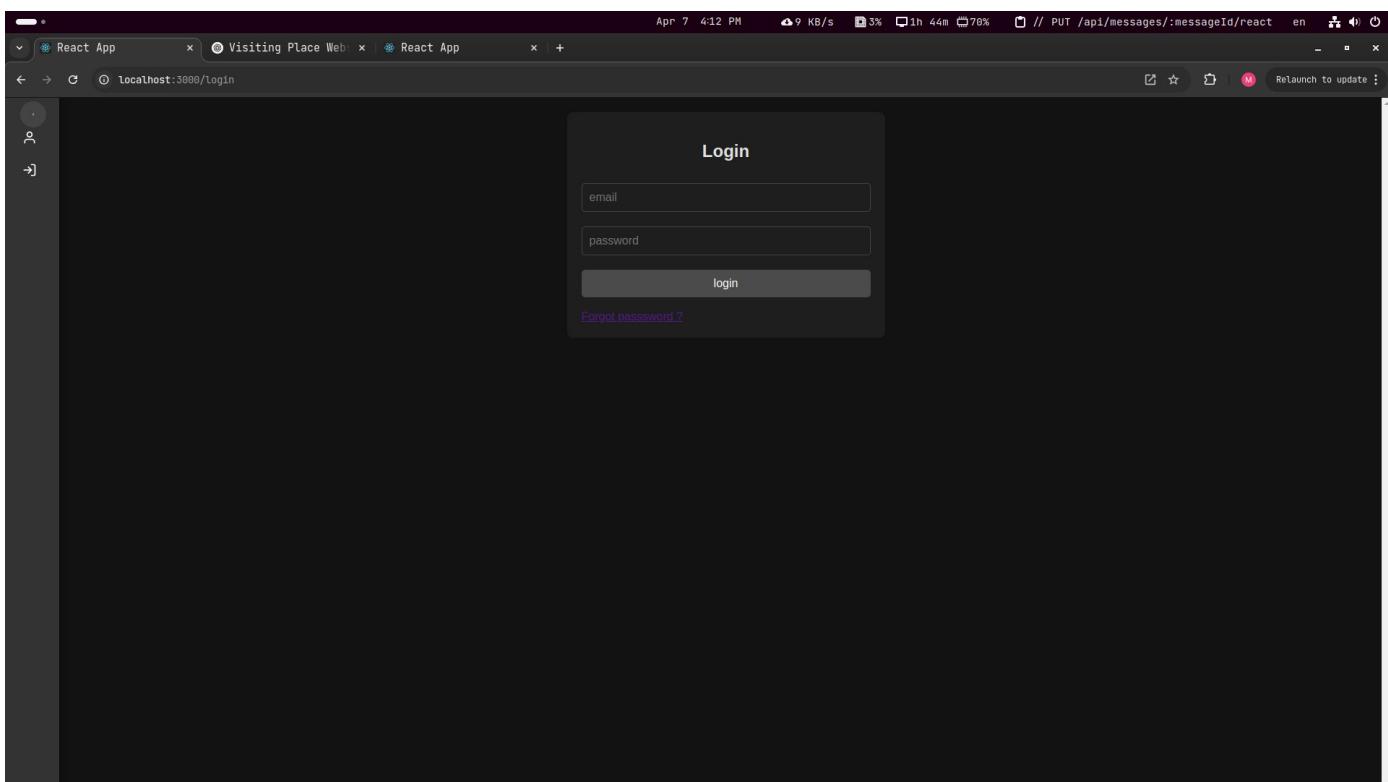
The system must ensure 99.9% uptime with minimal downtime for maintenance.

# GUI [Screen Shots]

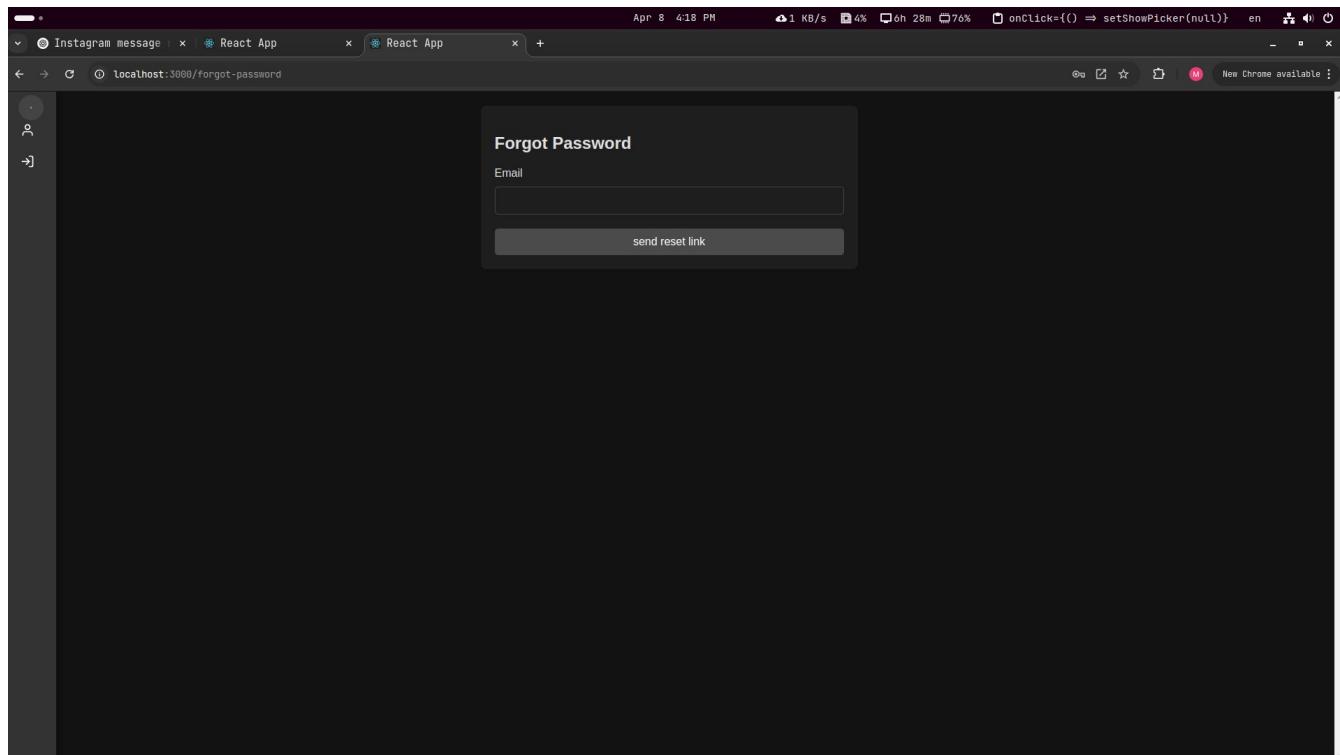
## Signup Page :



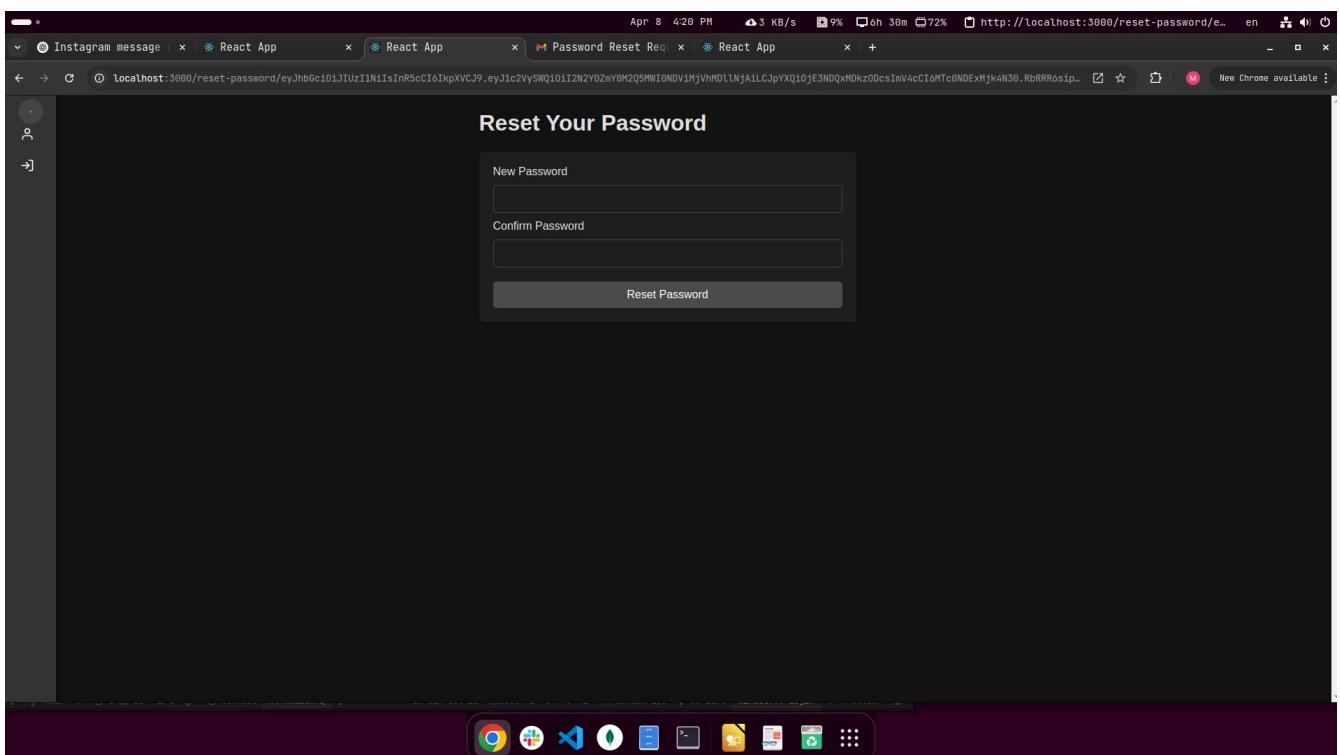
## Login Page :



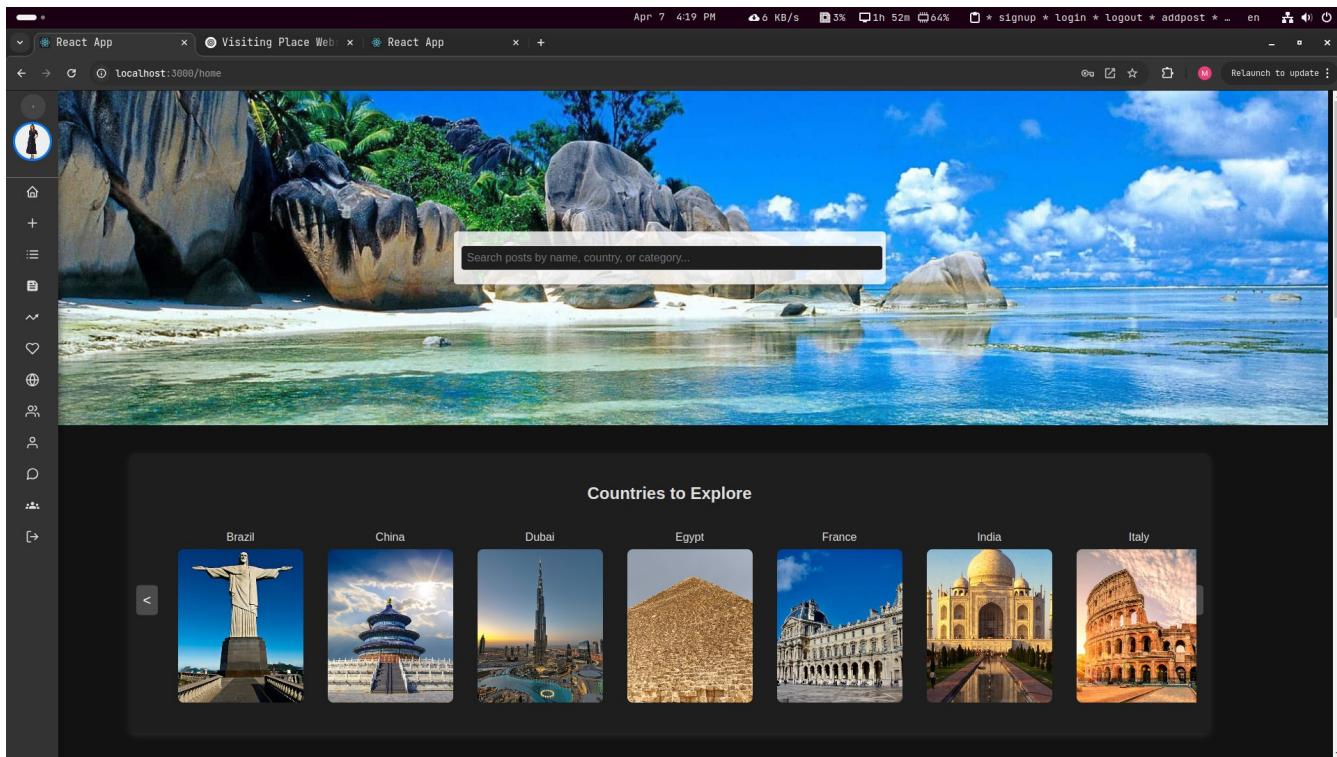
## Forgot-password page :



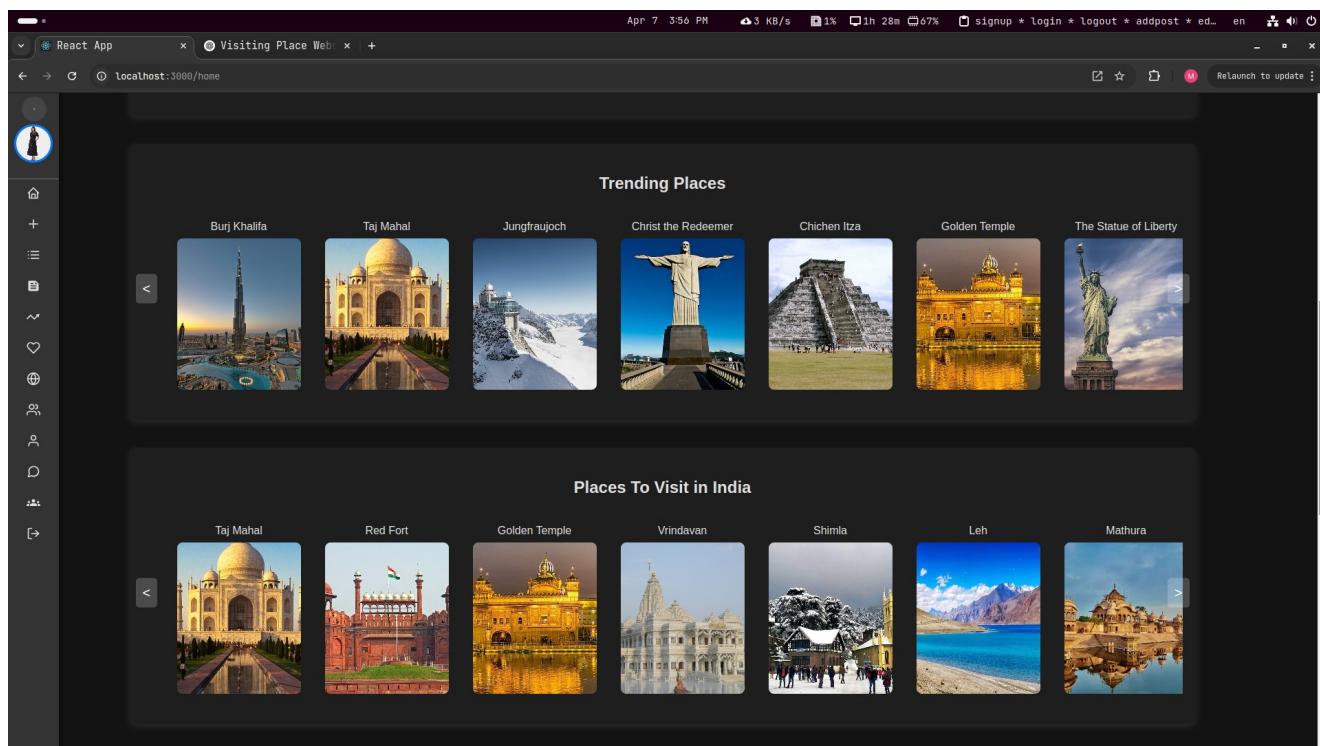
## Reset-password page :



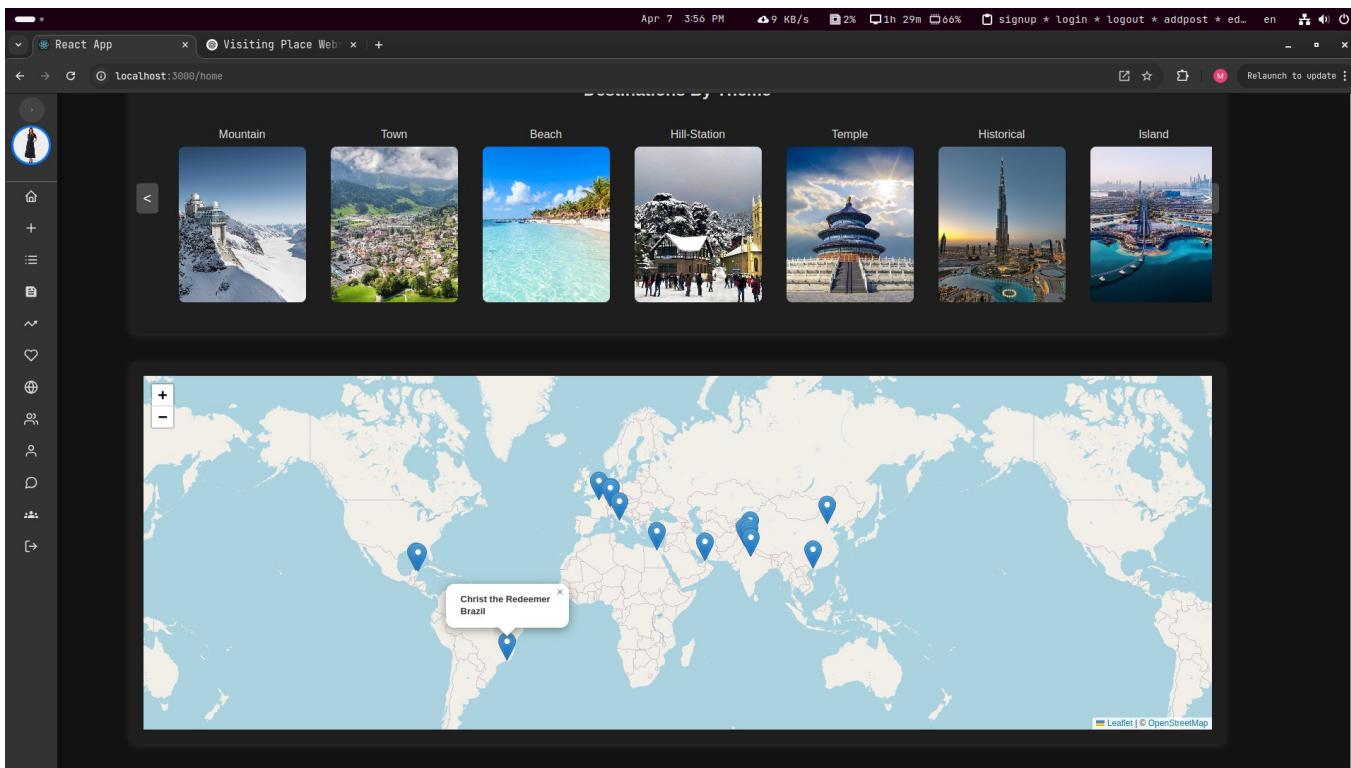
## Home Page :



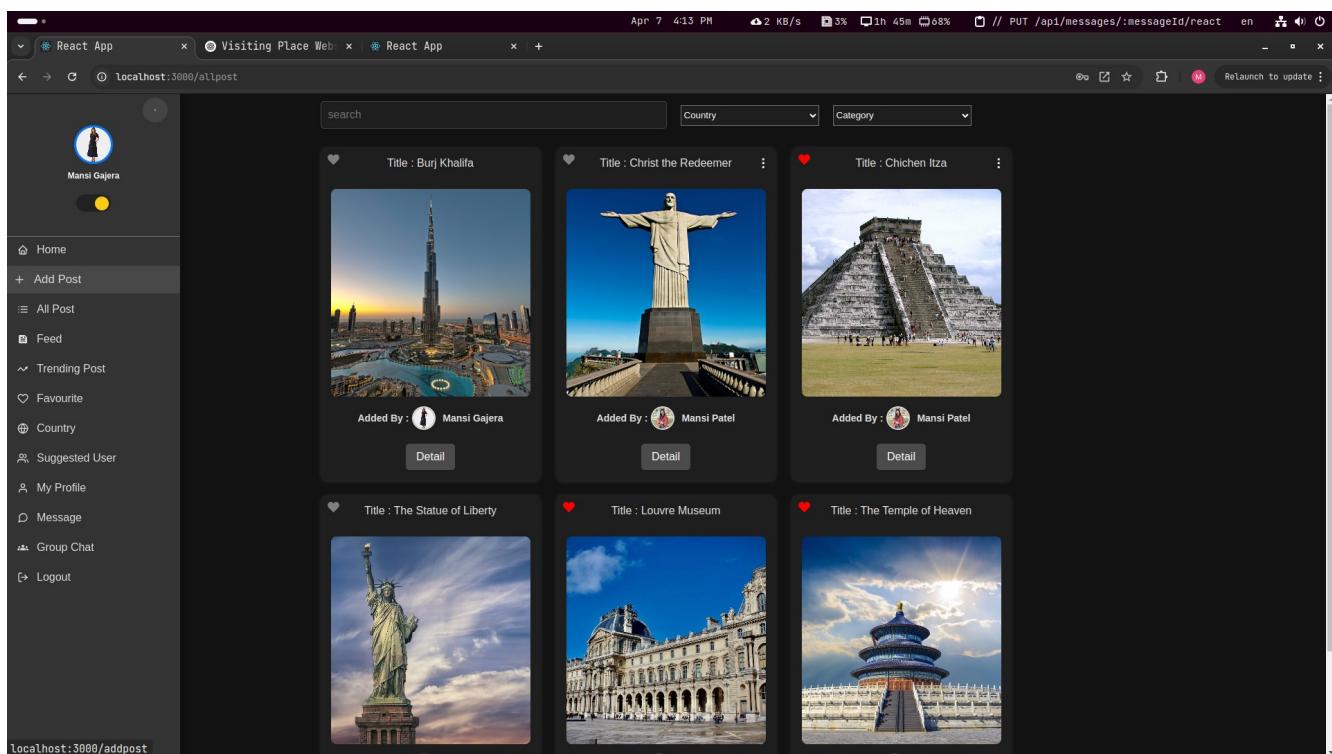
## Categorized Data Display Page :



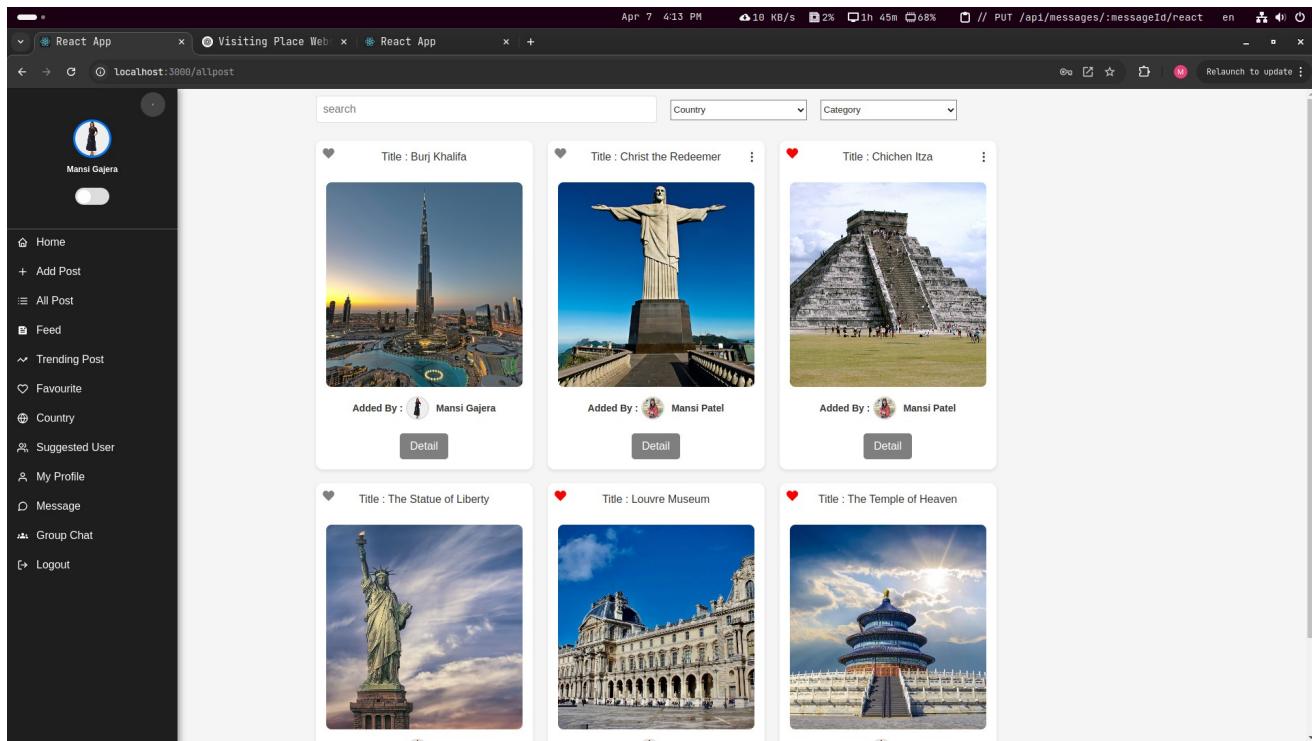
## All The Place Loaction On the Map :



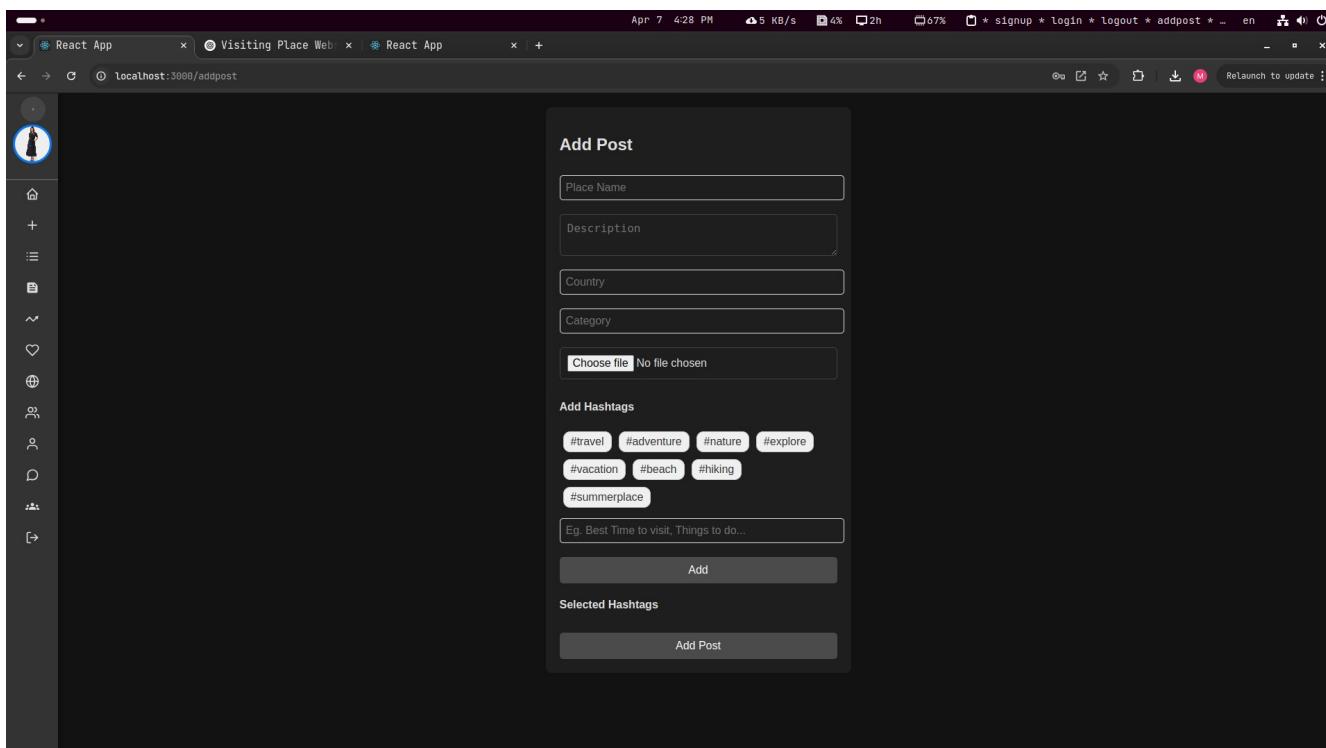
## All Post Page :



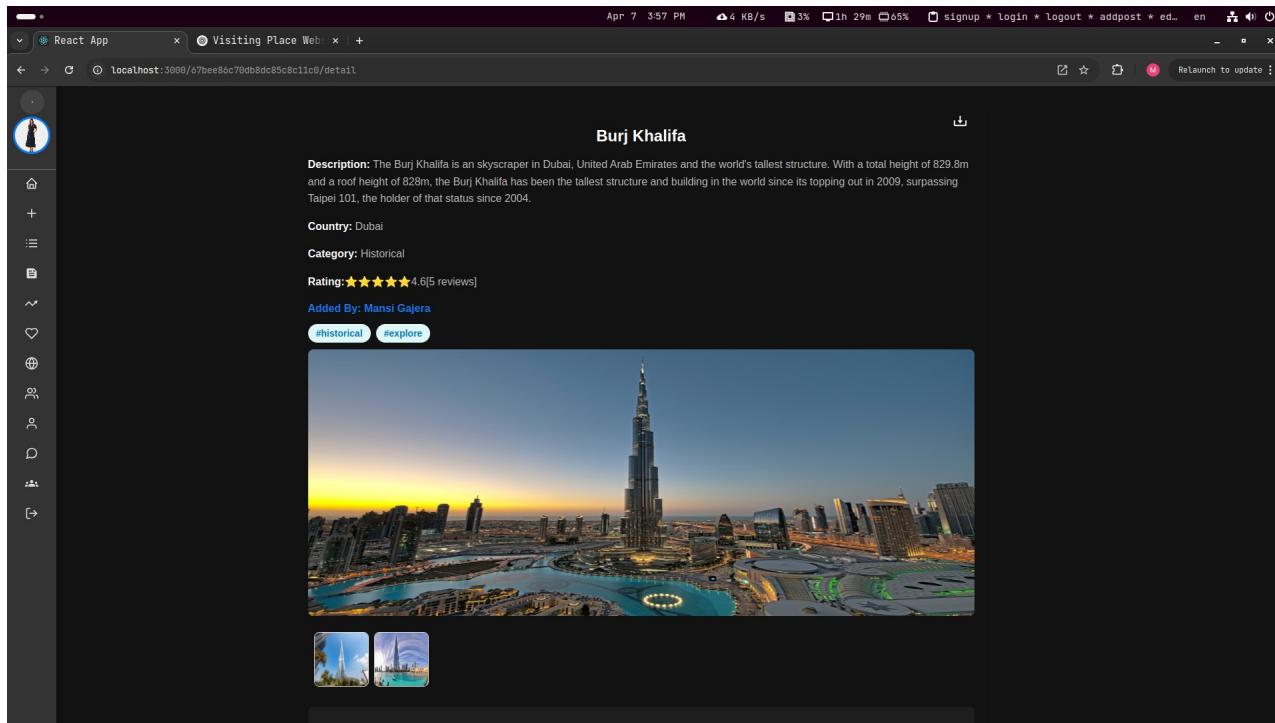
## Dark-Light Theme :



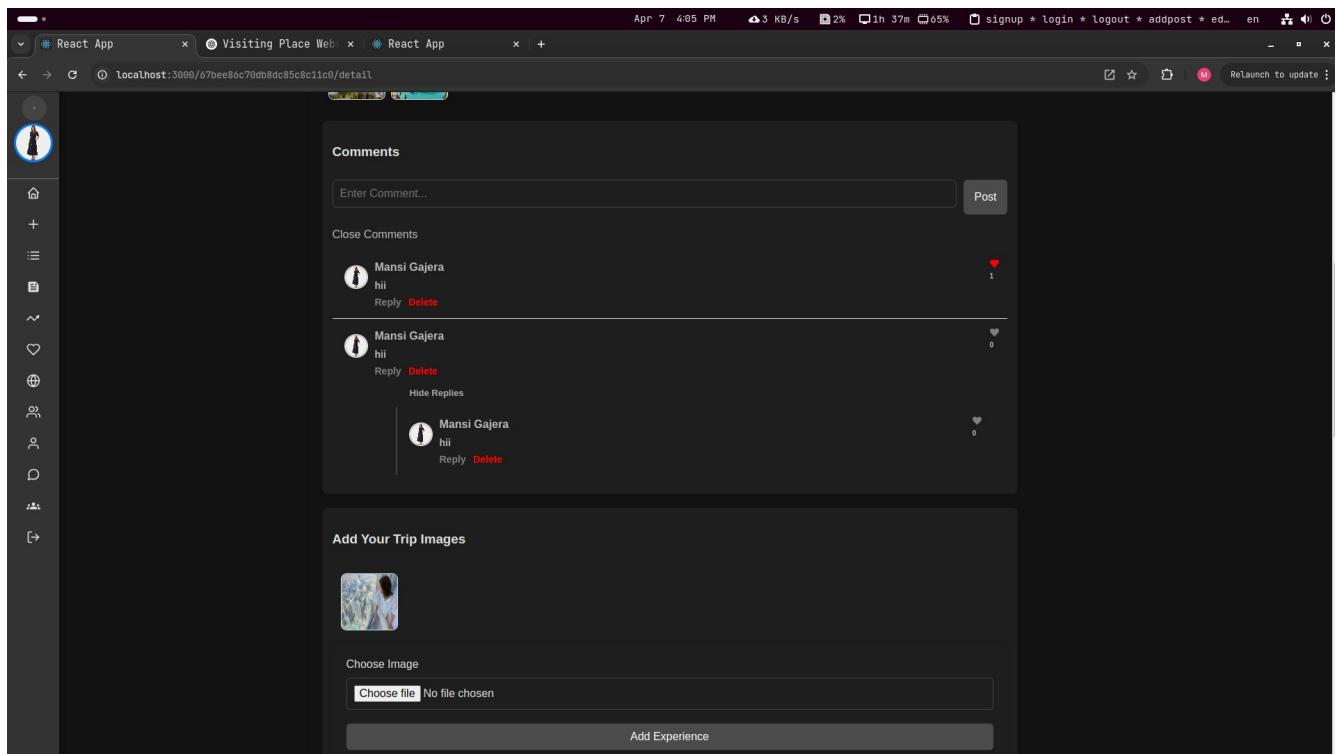
## Add Post Page :



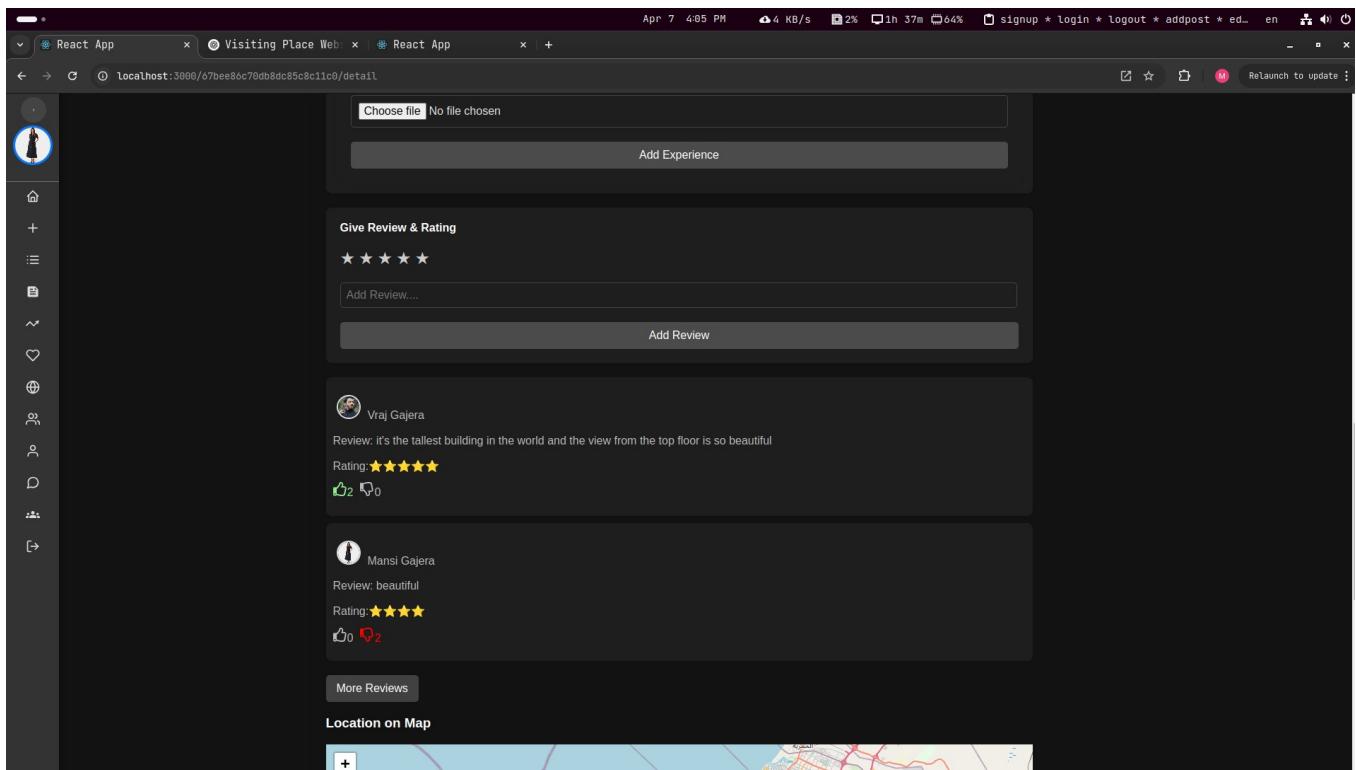
## Details View Page :



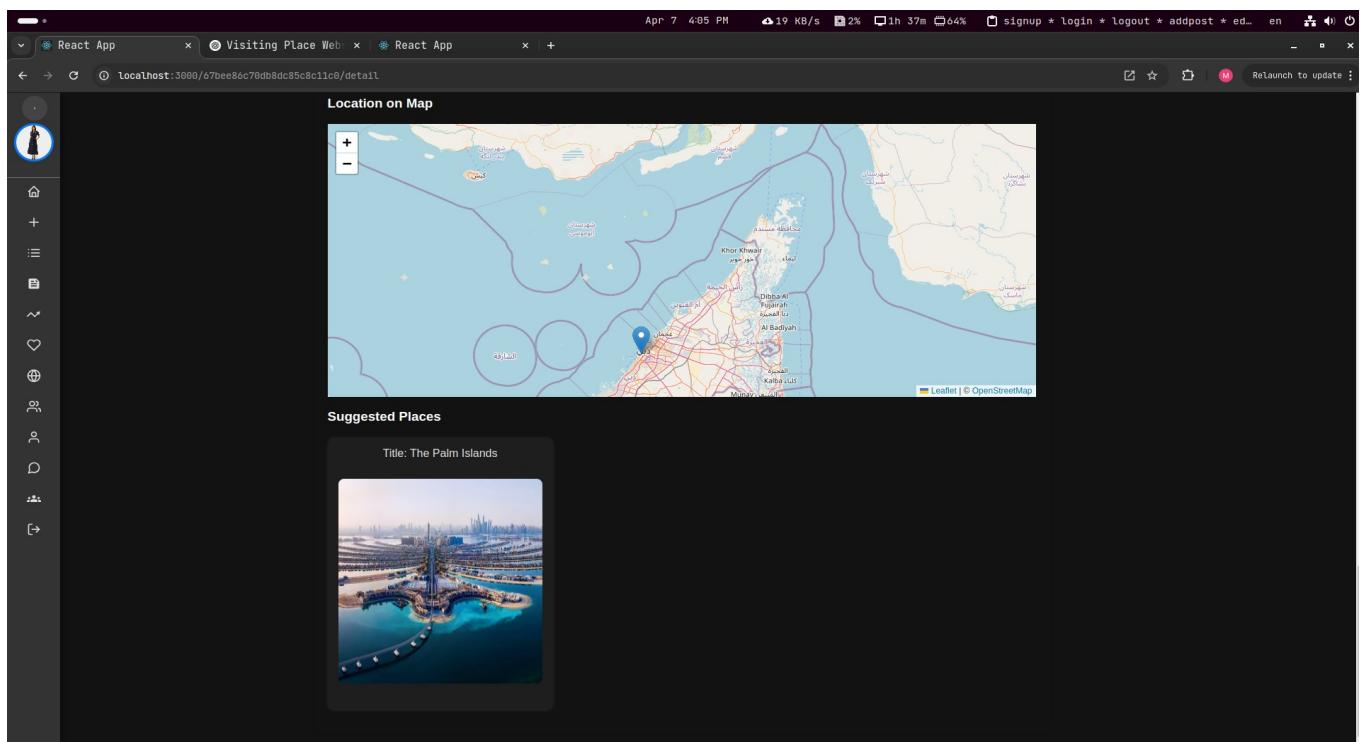
## Comment Section and User can Add Trip Experience



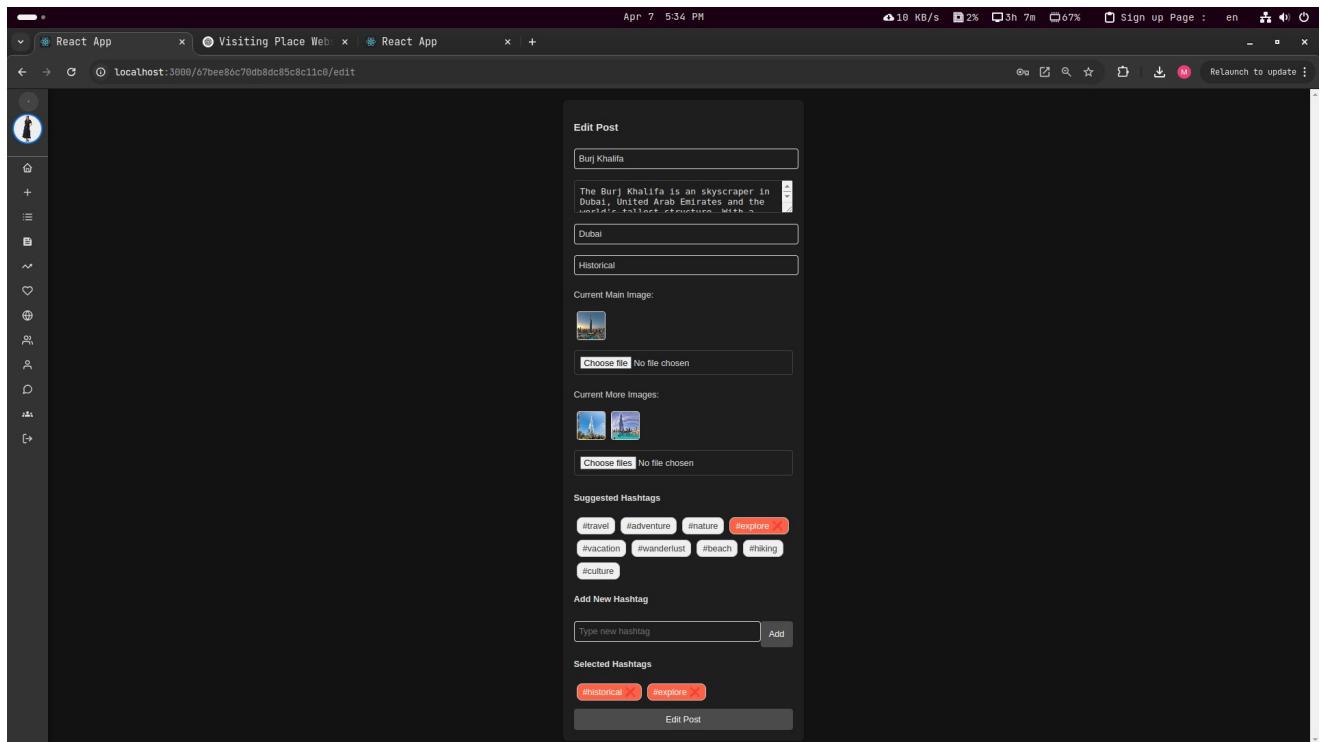
## Rate and Review Section :



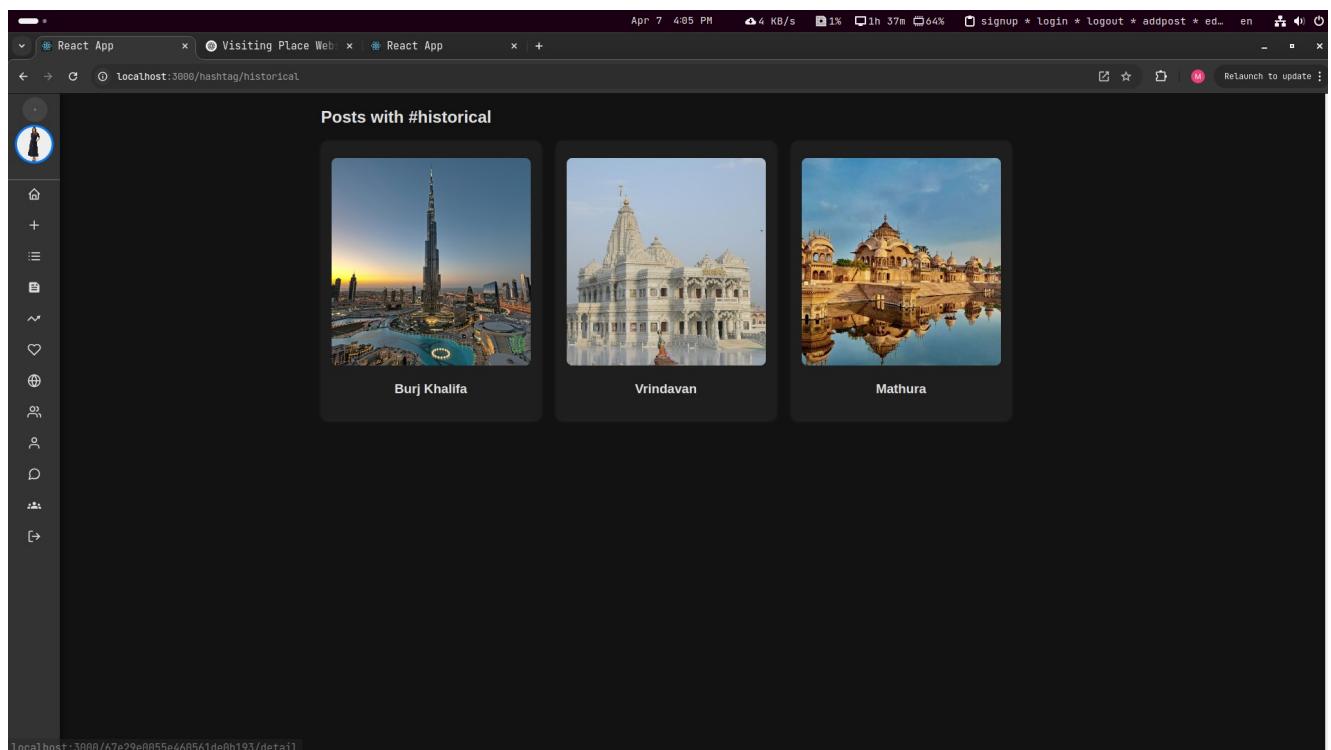
## Place location on Map and Suggested Places For User :



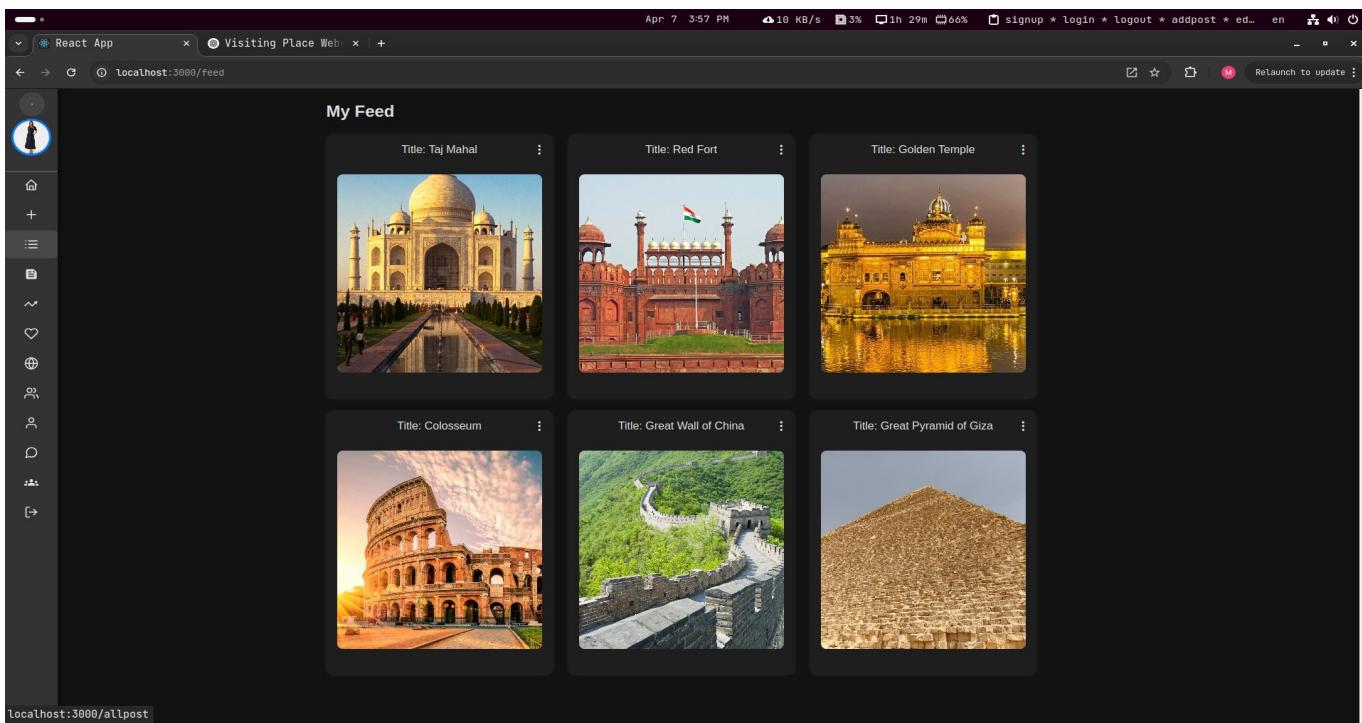
## Edit Post Page :



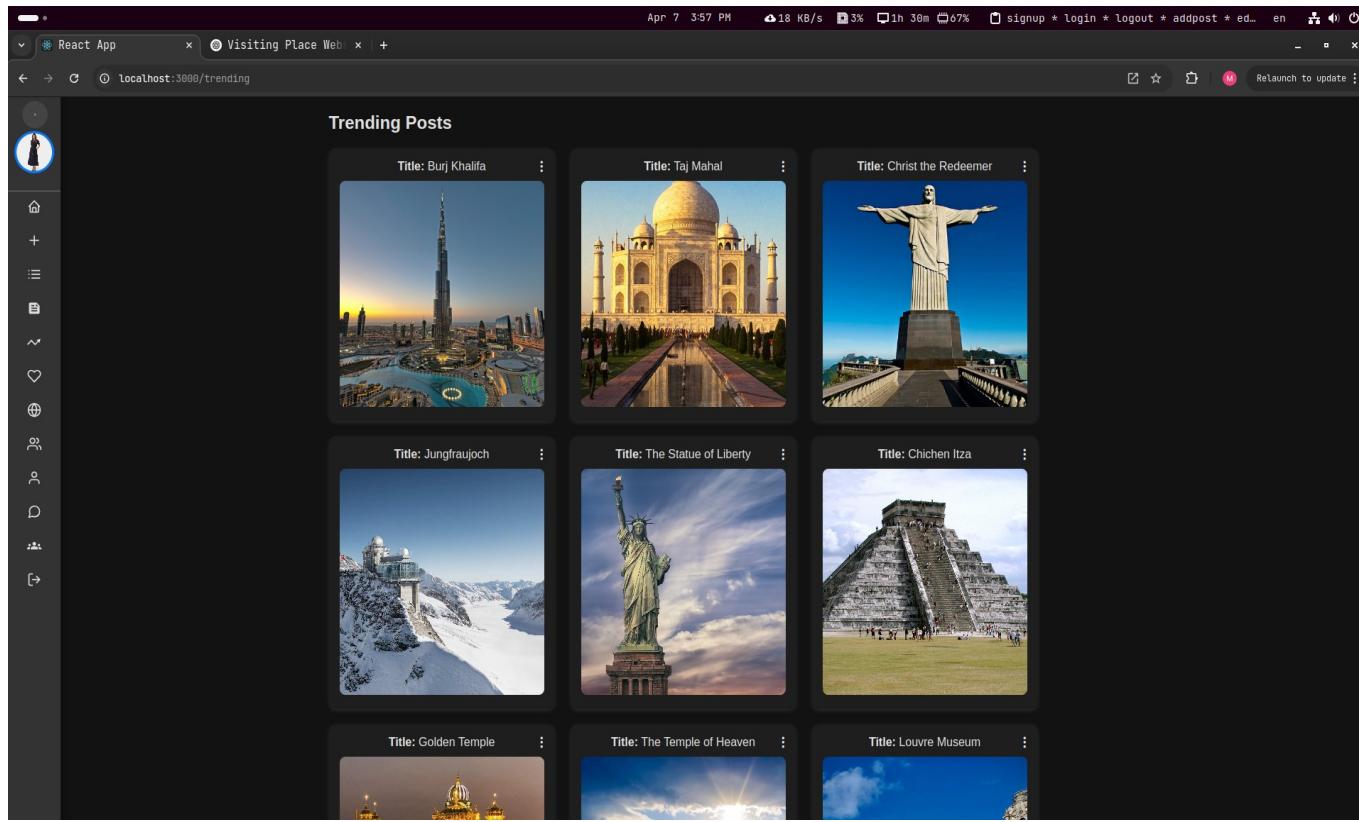
## Hashtag Page:



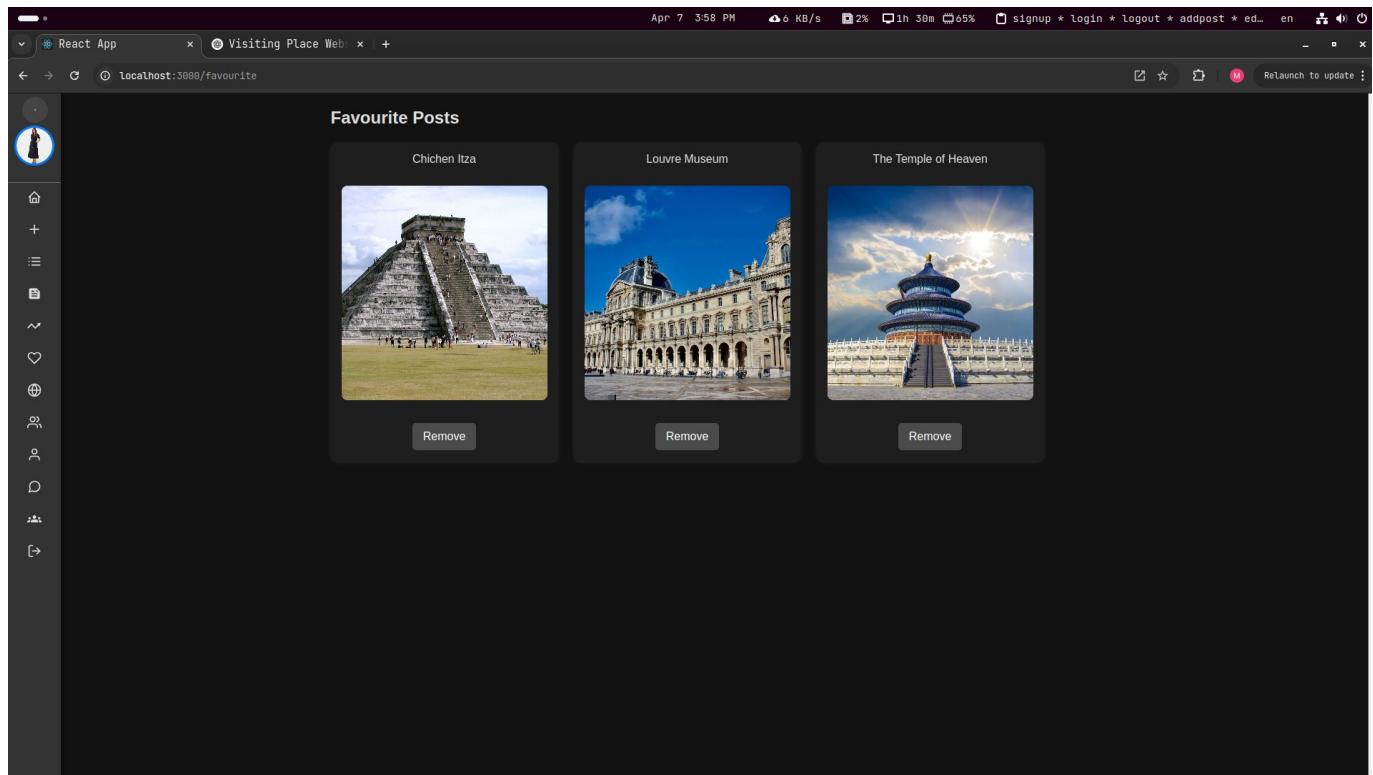
## My Feed :



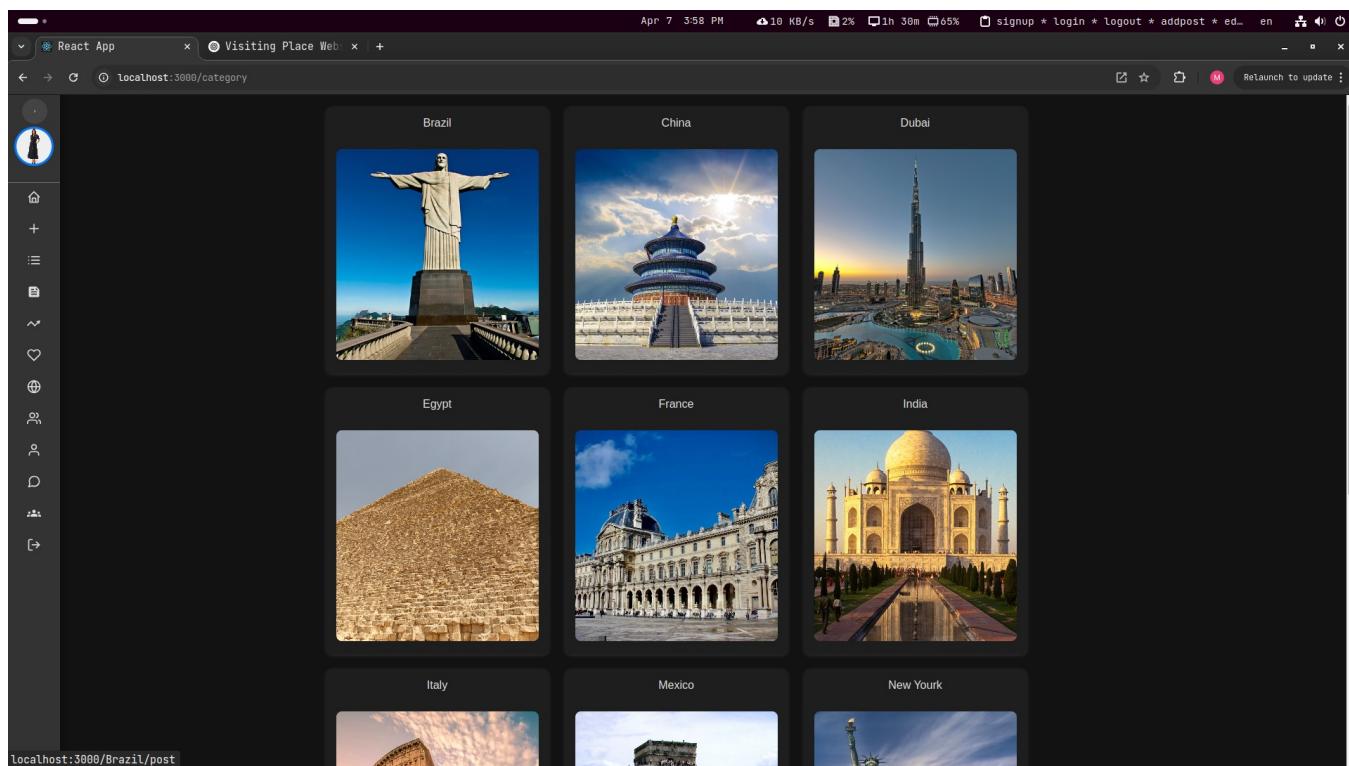
## Trending Post Page:



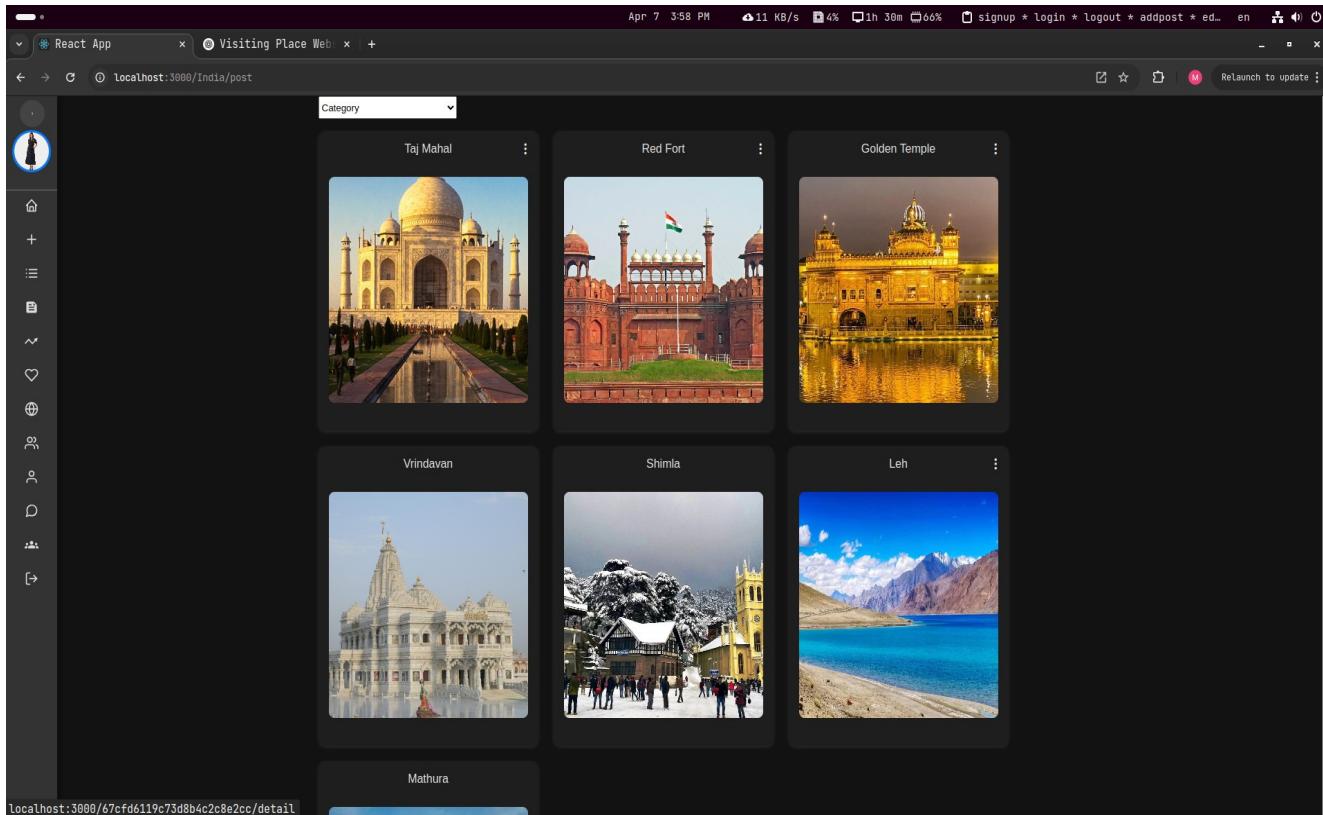
# Favourite Post Page:



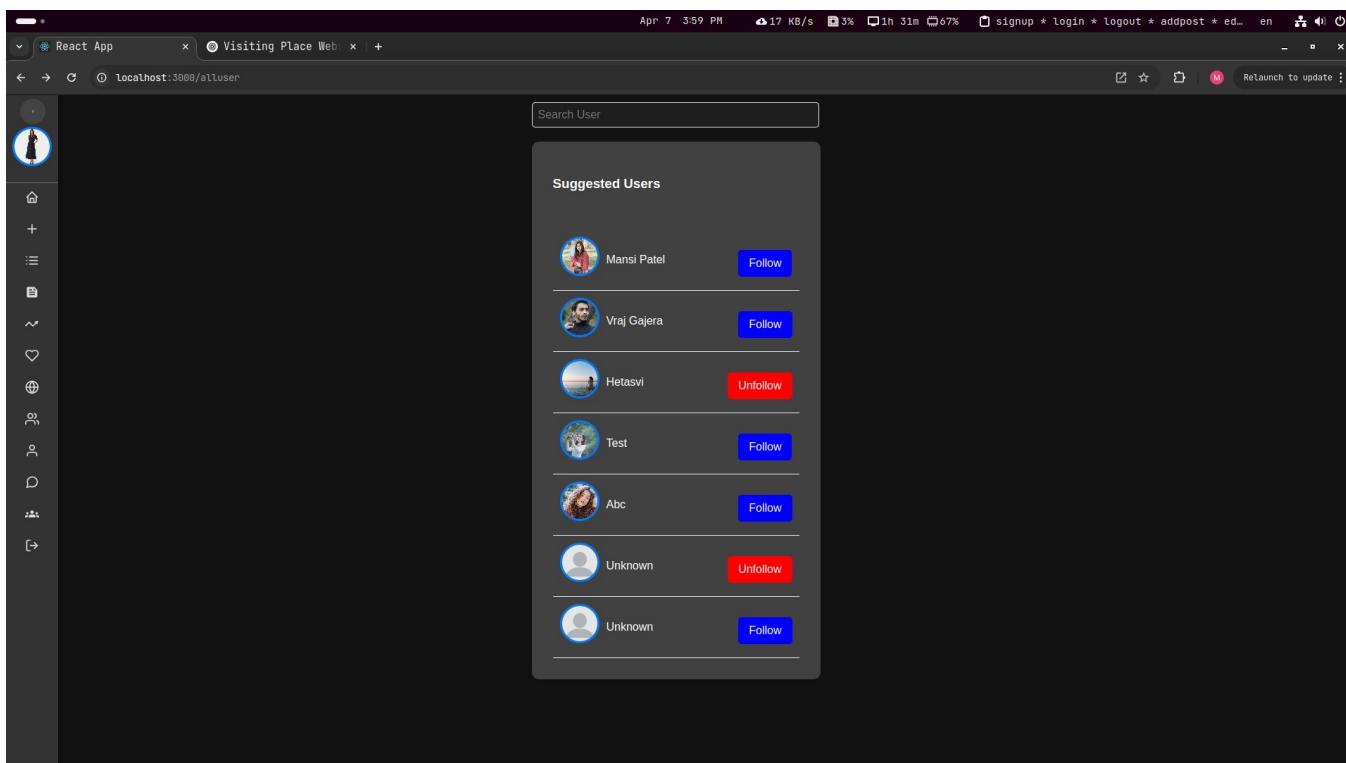
# All the Country :



## Country Wise Post Show :



## Suggested User Page:



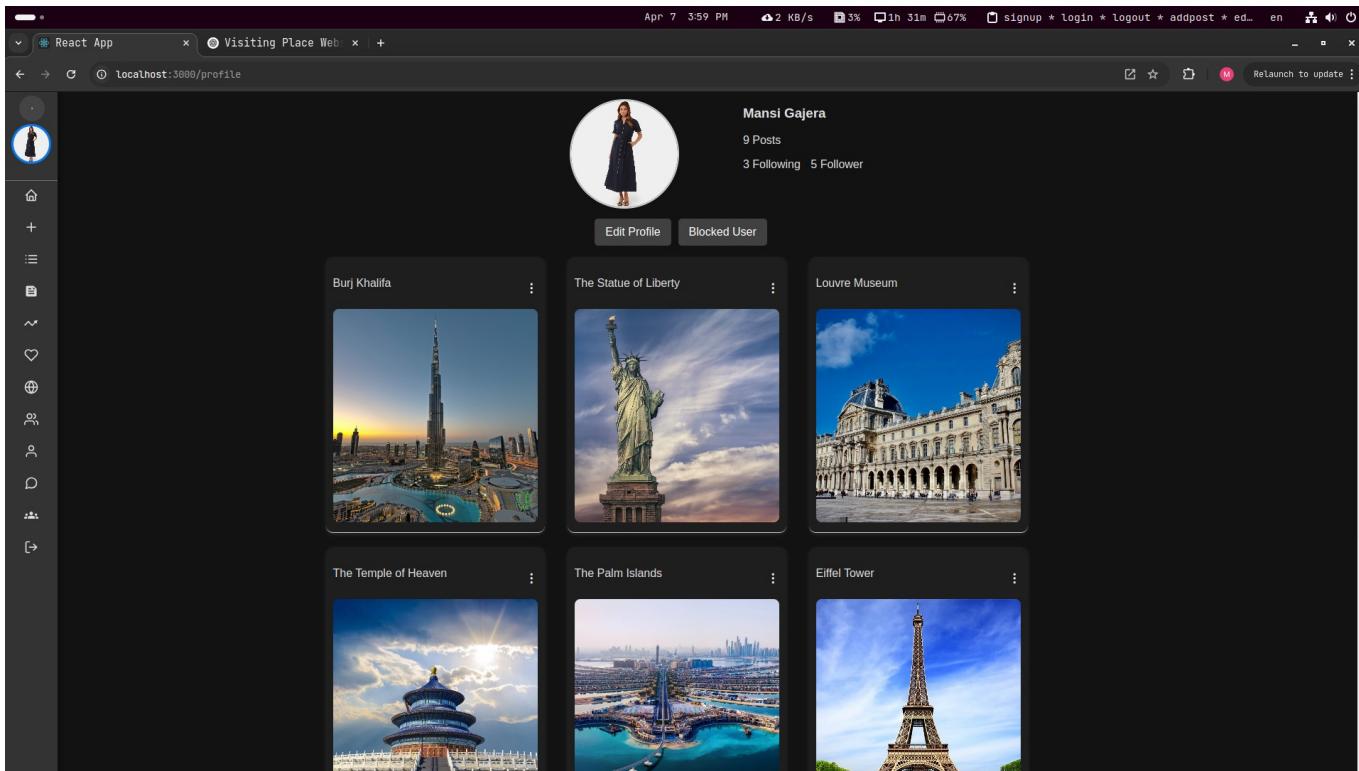
## Other User Account Page:

A screenshot of a web browser showing a user profile for 'Hetasvi'. The profile picture is a circular image of a person standing by a body of water at sunset. Below the profile picture, there are statistics: 6 Posts, 8 Following, and 4 Follower. A 'Message' button is also present. To the left of the profile picture is a vertical sidebar with various icons. The main content area displays six travel photos in a grid: the Taj Mahal, the Red Fort in Delhi, the Golden Temple in Amritsar, the Colosseum in Rome, the Great Wall of China, and a pyramid.

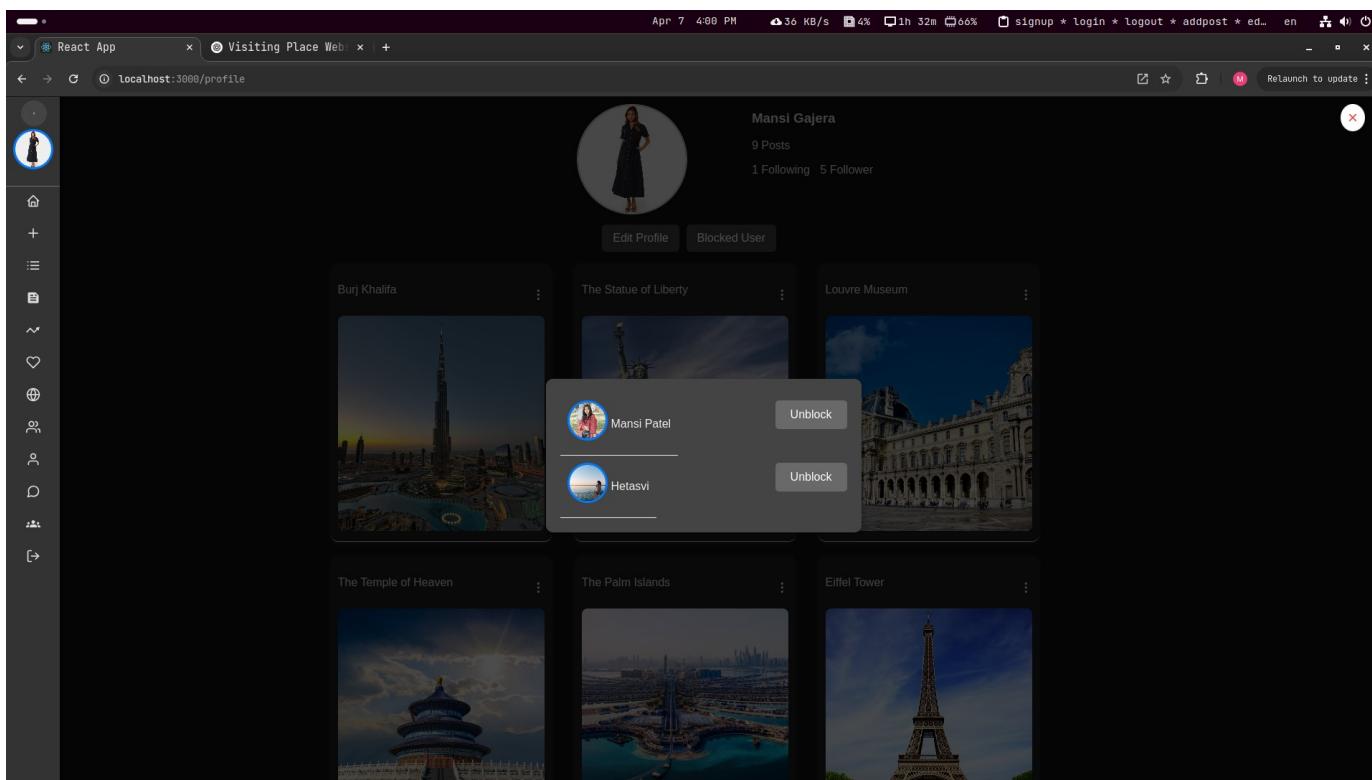
## Other User Following List View:

A screenshot of a web browser showing the 'Following' list for the user 'Hetasvi'. The interface is similar to the account page, with the user's profile picture and stats ('6 Posts', '8 Following', '4 Follower'). A 'Message' button is also present. The main content area displays the same six travel photos as the account page. A modal window is open over the third photo (the Great Wall) showing a list of three users: 'Unknown', 'Vraj Gajera', and 'Test', each with a small profile picture.

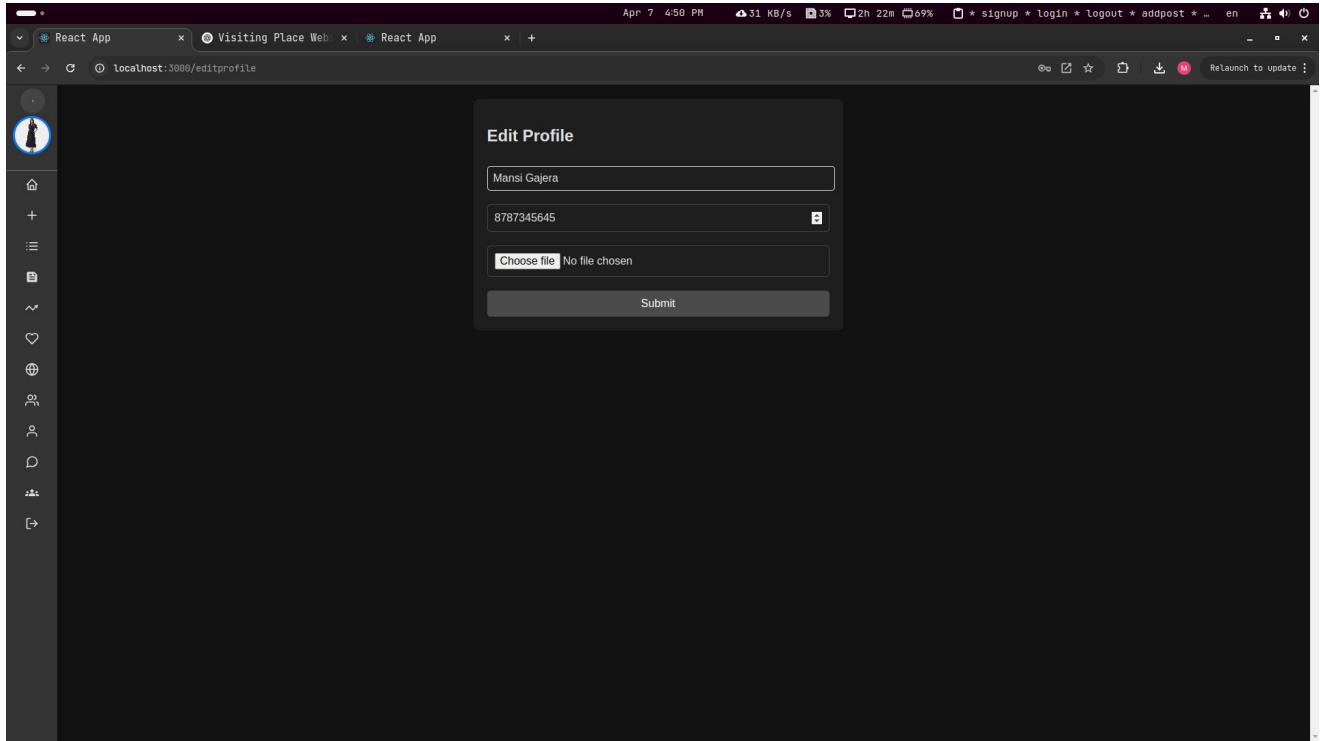
## My Account Page :



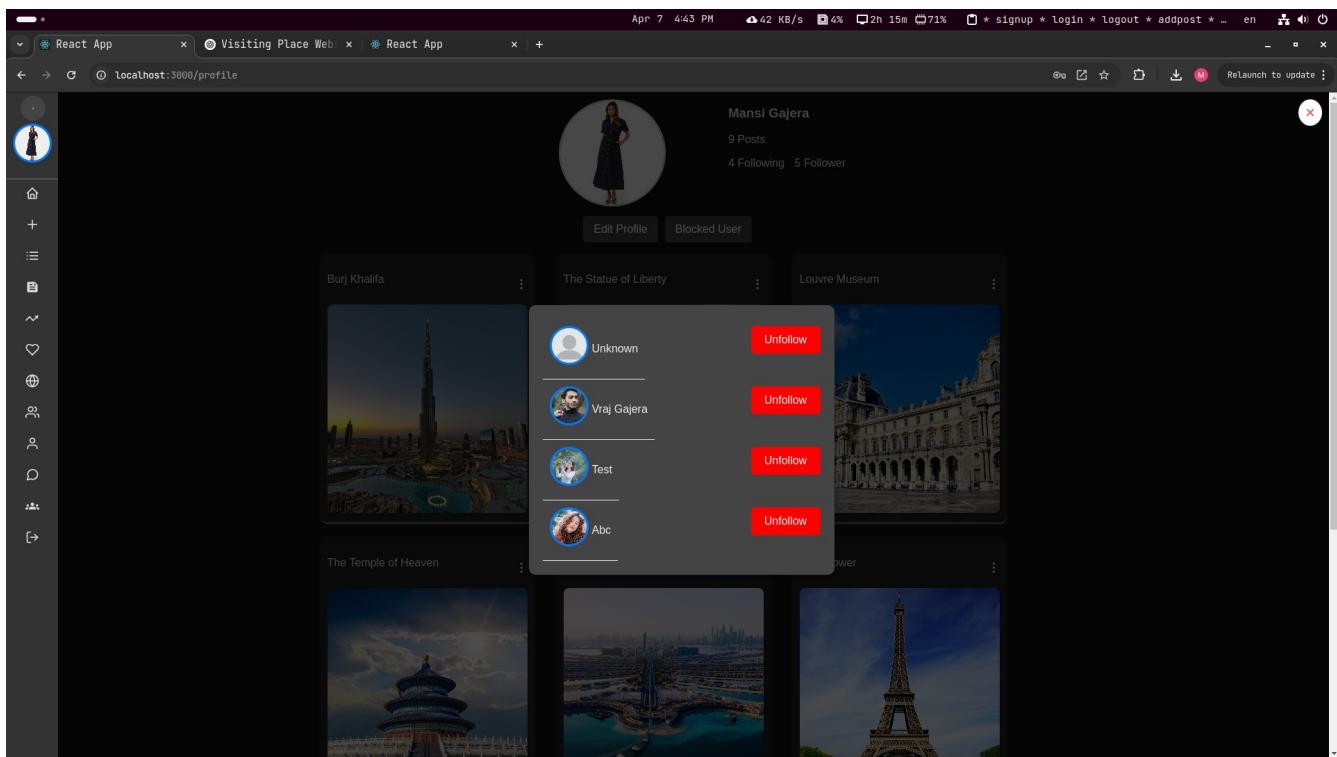
## Block User View :



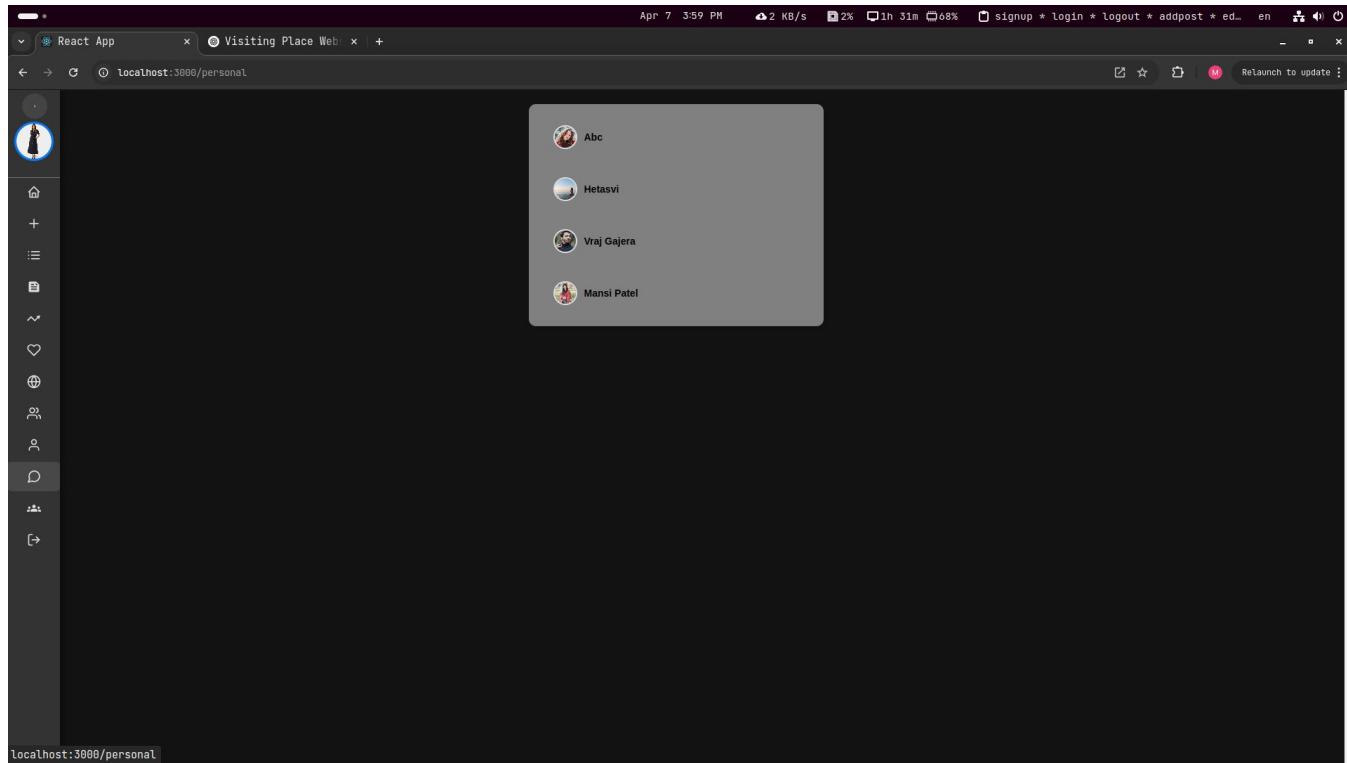
## Edit Profile page :



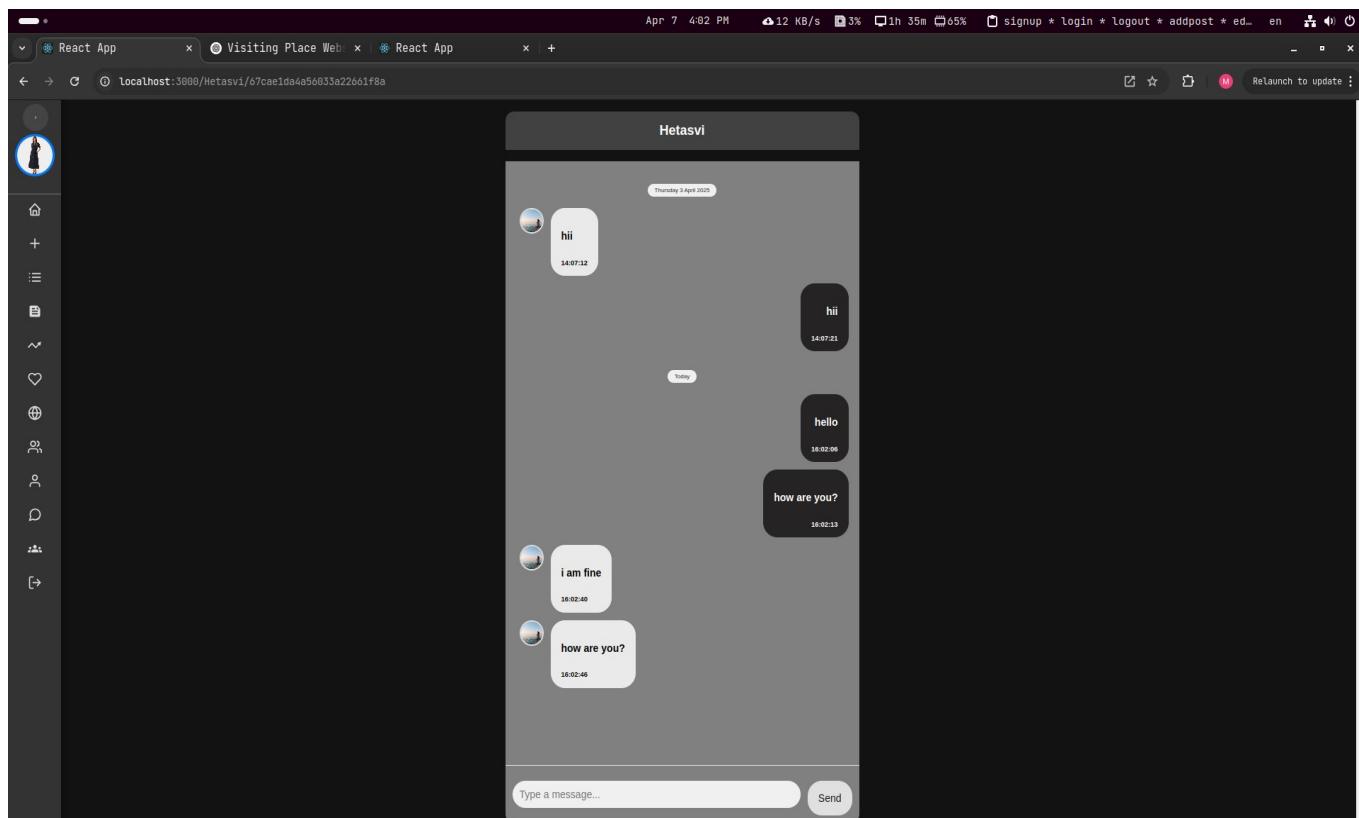
## User Following List :



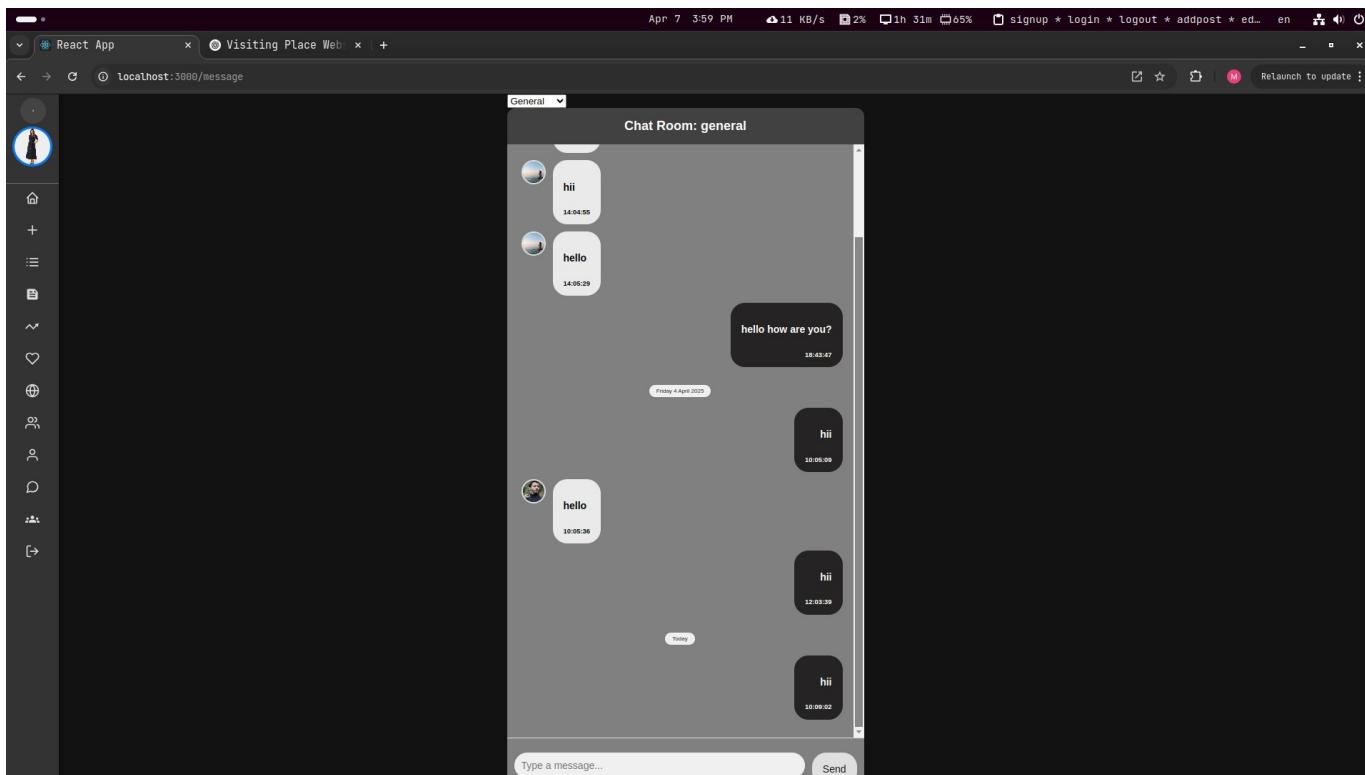
## User Message List :



## Group Message :



## Personal User Message :



## Pdf Generator :

A screenshot of a PDF viewer displaying a document about Chichen Itza. The PDF has a dark background. The first page contains a small thumbnail image of the pyramid, the title 'Chichen Itza', a detailed description of the site's history and features, and the author information 'Added By : Mansi Patel'. Below the text is a large, clear photograph of the El Castillo pyramid. The PDF viewer interface shows a navigation bar at the top and a zoom control at the bottom.

# **Learning and Working Experience During Training :**

This project experience with the company was truly amazing and enriching. I gained a wealth of knowledge from the company's professional environment, and my seniors provided continuous guidance throughout the journey. Here are some key takeaways I'd like to share:

## **General :**

Gained insight into the professional workflow and collaborative development processes in a tech environment.

Learned coding best practices, such as maintaining clean and well-structured code, using proper commenting, and following naming conventions (camelCase, PascalCase).

Improved my team collaboration and communication skills while working with developers, testers, and project coordinators on the same project.

## **Development / Programming Experience :**

During the course of the project, I was deeply involved in designing and developing a full-stack feature-rich web application using the MERN (MongoDB, Express.js, ReactJS, Node.js) stack along with Redux and JavaScript for enhanced application state management and interactivity.

## **Appendix :**

### **Tools & Technologies Used :**

- JavaScript, ReactJS, Node.js, Express.js – Used for developing dynamic and responsive user interfaces (React) and handling server-side logic (Node.js + Express).
- MongoDB & Mongoose – Used as the NoSQL database for efficient document-oriented data storage and retrieval with schema modeling.
- Redux – Implemented for global state management across components.
- Multer & Cloudinary – Used for handling image uploads and storing them in a cloud environment.
- [Socket.io](#) – Enabled real-time chat functionality between users.
- Leaflet / Google Maps API – Integrated to display post locations interactively on a map.
- PDF – Used to export post content as downloadable PDF documents.
- JWT & Bcrypt – Used for secure user authentication and password hashing.

### **Terminologies:**

- Post – A user-generated item including a title, image, description, and tags.
- Wishlist – A feature allowing users to bookmark posts for future reference.
- Hashtags – Keywords tagged to posts for easier search and categorization.
- Follow/Unfollow – Social feature to subscribe or unsubscribe to another user's content.
- Block/Unblock – Allows a user to restrict interactions from specific users.
- Review – A comment or feedback given on a post.
- Real-time Chat – Instant messaging between users, facilitated through WebSocket ([Socket.io](#)).

## **Coding Conventions:**

- Camel Case Naming – All functions and variable names follow camelCase format.
- Proper Indentation & Commenting – Codebase is structured with consistent indentation and meaningful inline comments.
- Modular Structure – Code is divided into reusable modules such as routes, controllers, models, and middlewares.
- Environment Variables – Sensitive data such as API keys and database URIs are stored securely using .env files.
- Error Handling – Implemented consistent error handling in both backend and frontend for better user experience.
- Version Control – Git used to maintain the source code, manage branches, and track feature updates or bug fixes.
- Code Testing – All critical endpoints tested using Postman; sample test cases documented for core features.