TripPlanner Platform

A Spring Boot project that enables seamless trip planning experiences with secure user authentication, personalized trip itineraries, real-time destination discovery, collaborative trip management, and comprehensive admin controls for managing destinations, activities, and user preferences.

Features:

Version 1:

1. User Authentication & Profiles:

- Registration and Login
- User Profile with personal details and preferences
- Role-based access control (Admin and User)

2. Trip Planning:

- o Create, edit, and manage trip plans
- o Add destinations, dates, and travel modes
- Trip recommendations based on interests

3. Destination Search & Discovery:

- Search destinations by city, or region
- Filter destinations by category (e.g., Adventure, Relaxation, Family)
- Popular and trending destinations section

4. Itinerary Builder:

- Create and manage itineraries (day-by-day schedule)
- Add activities and attractions to the itinerary
- Suggest activities based on destination and user preferences

5. Accommodation & Transportation:

- Search for hotels, flights, buses, or trains
- Save favorite hotels and transport options

6. Budget Management:

• Estimate and manage trip budget (transport, accommodation, food, etc.)

7. Admin Panel:

- Manage destinations, activities, and trips.
- o Admin controls for user management and roles

8. Mobile-Friendly Design:

• Fully responsive for easy use on mobile devices

Version 2:

9. Collaborative Trip Planning:

- Invite friends and family to collaborate on trip planning
- Share itinerary and trip details with other users (Whatsapp, etc)

10. Trip Reminders & Notifications:

- Notifications for upcoming trips (flight reminders, weather updates, etc.)
- Alerts for planned activities or changes to itineraries

• Reminders for accommodation bookings and transport arrangements

11. Social Sharing:

- Option to export trip details to PDF or Excel
- O Share destination reviews and experiences on social media

12. Weather Integration:

- Weather updates and forecasts for each destination
- Display weather conditions for planned activities

Tech Stack:

- Spring Boot
- **❖** Spring Security
- ❖ JWT, OAuth, OTP
- **❖** Spring Data JPA
- **♦** MySQL
- ❖ React.js
- **❖** REST APIs
- Git/Github
- Eclipse / VSCode
- **❖** POSTMAN
- Canva
- **❖** AWS

Development Process (Step by Step):

- 1. Design Architecture, Flowcharts, Diagrams Canva
- 2. UI Design Canva
- 3. Database Architecture, Schema Google Docs
- 4. Database Integration MYSQL
- 5. User Side Frontend React.js, Bootstrap, Animation Library
- 6. Admin Side Frontend
- 7. APIs Listing Google Docs
- 8. Admin Side Backend Spring Boot, JPA
- 9. User Side Backend
- 10. Security Integration (RBAC) Spring Security
- 11. JWT Integration
- 12. OAuth, OTP Integration
- 13. Email Integration for Contact form
- 14. APIs Testing POSTMAN
- 15. Hosting on AWS
- 16. Beta Testing

User Features:

- Explore Destinations
- **♦** Add preferences
- Plan a Trip
- Bookings
- **❖** Login to view profile
- Contact us for queries
- Share Trips
- Previous Data in Dashboard and Profile

Admin Features:

- Login for admin access
- **♦** Admin Dashboard
- ❖ Add new trip
- **❖** Update trip
- **❖** Delete trip
- View all registered users
- ❖ Recent trips booked
- * Recent trips uploaded by admin
- Cancelled bookings