

Functional Requirements

- The system shall allow users to register using email and password.
- The system shall provide secure user authentication using JWT tokens.
- The system shall allow users to log in and log out of their accounts.
- The system shall provide a "Forgot Password" feature for users to reset their credentials.
- The system shall send Gmail-based email verification links during registration.
- The system shall allow users to verify their accounts through Gmail verification.
- The system shall manage user sessions securely and automatically expire them after inactivity.
- The system shall allow administrators to log in and access the admin dashboard.
- The system shall display user and trip data in tabular format in the admin dashboard.
- The system shall allow administrators to approve or remove user accounts and trip submissions.
- The system shall support CRUD operations for managing users, trips, and bookings.
- The system shall allow users to input trip details such as destination, budget, and interests.
- The system shall generate AI-based travel itineraries based on user inputs.
- The system shall integrate map APIs to display destinations and trip routes with markers.
- The system shall allow users to view trip plans on an interactive map.
- The system shall display summarized trip results as cards with relevant travel details.
- The system shall allow users to browse and book local hosts for accommodation or experiences.
- The system shall manage host availability and booking confirmations through backend APIs.
- The system shall allow users to view host profiles, including ratings and reviews.

- The system shall allow users to leave feedback or reviews for hosts and services.
- The system shall enable searching for verified tour partners based on criteria such as location and rating.
- The system shall manage and verify tour partner profiles for authenticity.
- The system shall allow users to send and manage partnership requests with verified tour partners.
- The system shall allow users to block or report inappropriate hosts or partners.
- The system shall record and display analytics on bookings, user activity, and partner engagement in the admin dashboard.

Non-Functional Requirements

- The system shall ensure secure data transmission using HTTPS and encryption standards.
- The system shall be designed to handle at least 100 concurrent users without performance degradation.
- The system shall respond to user actions within 3 seconds for all main operations.
- The system shall maintain 99% uptime for production environments.
- The system shall be compatible across major browsers and devices (desktop and mobile).
- The system shall follow a responsive UI design for consistent user experience.
- The system shall use scalable architecture to support future expansion of features.
- The system shall maintain proper logs of user activities and errors for debugging.
- The system shall have regular database backups to prevent data loss.
- The system shall ensure data privacy compliance with general data protection standards.