

BeteQuest

Making the World Your Home

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BETEQUEST

Inspiration

- "Bete" means "house" or "home" in Tigrinya (Eritrean language).
- "Quest" symbolizes the journey of exploration.
- Project Purpose: Create a platform that makes the world feel like home through exploration and understanding.



“

THE WORLD IS A BOOK, AND
THOSE WHO DO NOT TRAVEL
READ ONLY ONE PAGE.

Saint Augustine

Challenges in Travel Planning and Cultural Understanding

01 INFORMATION OVERLOAD

Too much information can be overwhelming and often includes unreliable sources

02 DISORGANIZED TRAVEL PLANS

Current tools and resources for travel planning can be disjointed and lack integration.

03 LACK OF PERSONALIZED INSIGHTS

General guides often miss tailored cultural details relevant to individual interests.

04 LIMITED LOCAL INTERACTION

Few opportunities for authentic local experiences and understanding of cultural nuances.



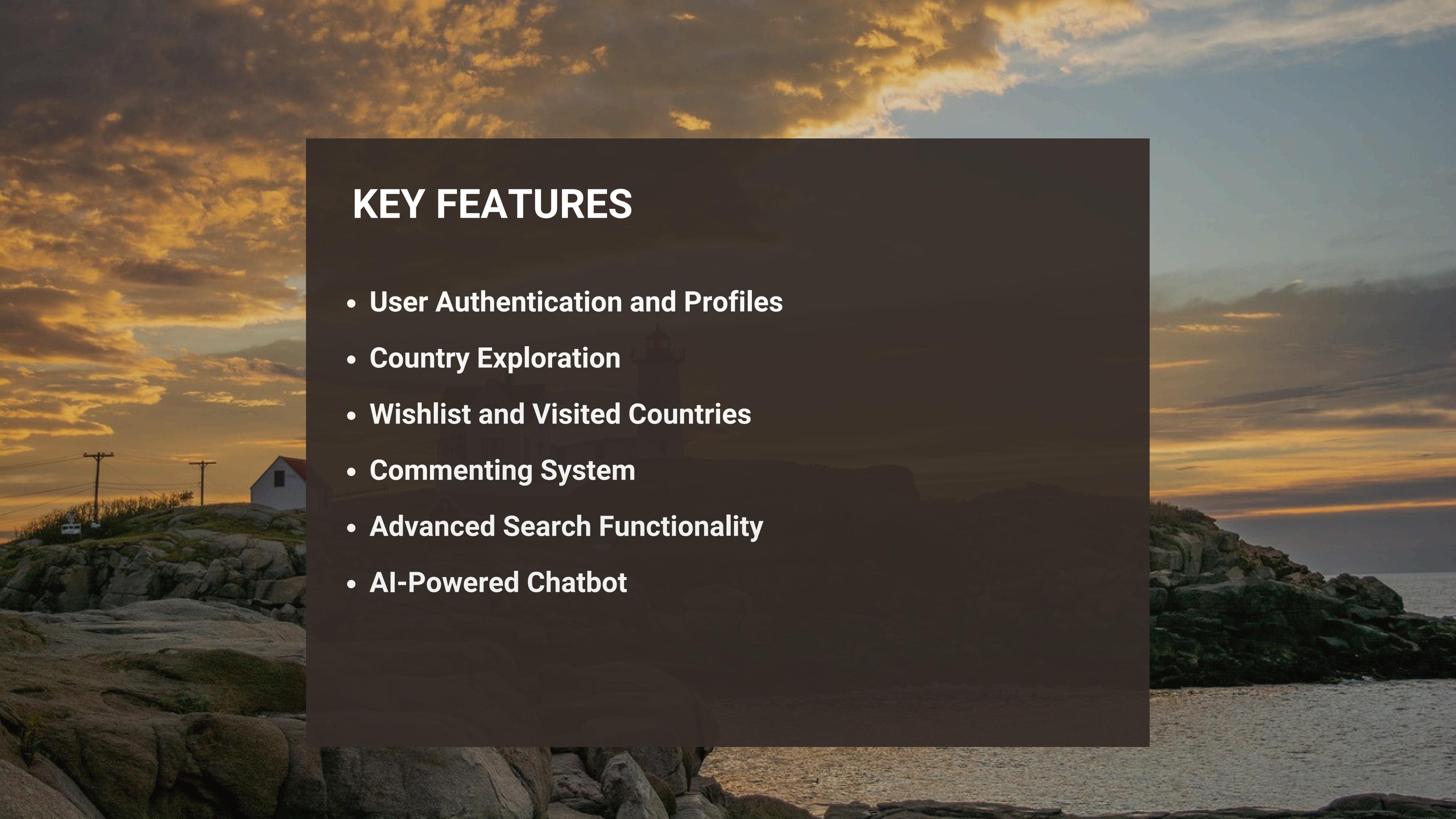
BeteQuesT Solution Overview

BeteQuesT's Approach:

- Centralized platform for country information.
- Personalized user profiles and travel tracking.
- AI-powered chatbot for instant answers.
- Community-driven insights through comments.

Technology Stack

- **Backend:** Node.js, Express, MongoDB.
- **Frontend:** React, TypeScript, Material-UI.
- **Authentication:** JWT.
- **API:** RESTful architecture.

The background of the slide features a wide-angle photograph of a coastal landscape at sunset. The sky is filled with dramatic, orange and yellow clouds. In the foreground, there's a rocky beach. On the left, two utility poles stand tall. In the middle ground, a small white building with a red roof sits atop a rocky outcrop. The overall atmosphere is peaceful and scenic.

KEY FEATURES

- User Authentication and Profiles
- Country Exploration
- Wishlist and Visited Countries
- Commenting System
- Advanced Search Functionality
- AI-Powered Chatbot

Key Features: User Authentication and Profiles

- Secure registration and login system.
- Personalized user profiles with bio and interests.



Key Features: Country Exploration

- Detailed country information including demographics, culture, landmarks, and practical travel information.



Key Features: Wishlist and Visited Countries

- Add countries to a personal wishlist.
- Mark countries as visited.
- Visualize travel history and plans.



Key Features: Advanced Search Functionality

- **Search countries by criteria such as language, population, region, and landmarks**



Key Features: AI-Powered Chatbot

- Instant answers to country-related queries.
- Natural language processing for a user-friendly interaction.
- Continuous learning and improvement.



Technical Architecture -Flowchart

1. User Interface

- Purpose: Where users interact with the application.
- Components: Home Page, Country List, Country Details, User Profile, Search, Chatbot Interface.

2. Frontend (React Application)

- Purpose: Manages user interactions and displays data.
- Connection: Communicates with API Service to fetch and send data.

3. API Service

- Purpose: Handles communication between the frontend and backend.
- Function: Routes requests from the frontend to the appropriate backend endpoints and vice versa.

Technical Architecture -Flowchart

4. Backend (Express.js Server)

- Purpose: Processes requests, handles business logic, and manages data interactions.
- Components: User Routes, Country Routes, Wishlist Routes, Comment Routes.

5. Database (MongoDB)

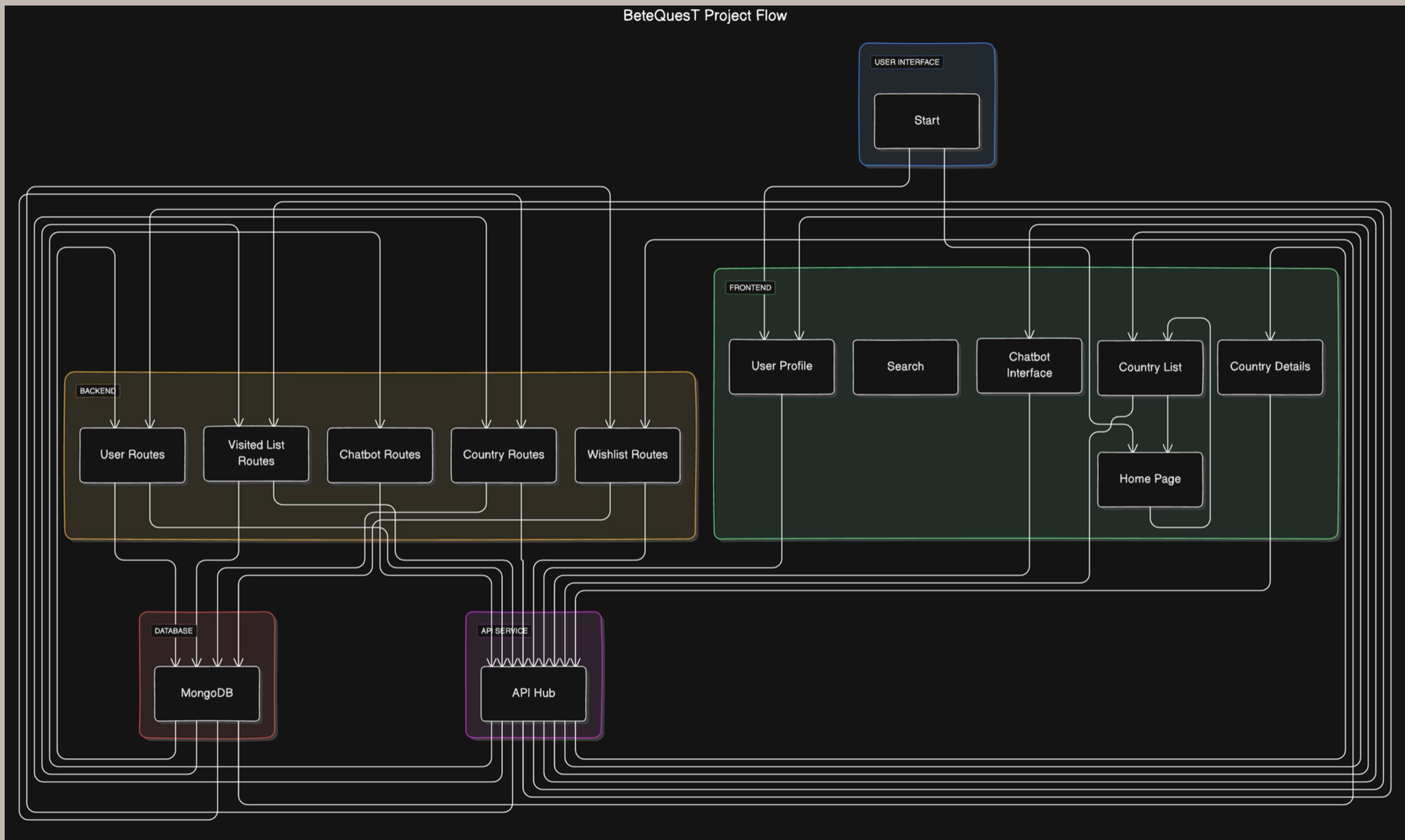
- Purpose: Stores and retrieves application data.
- Function: Connected to the backend for data storage and retrieval.

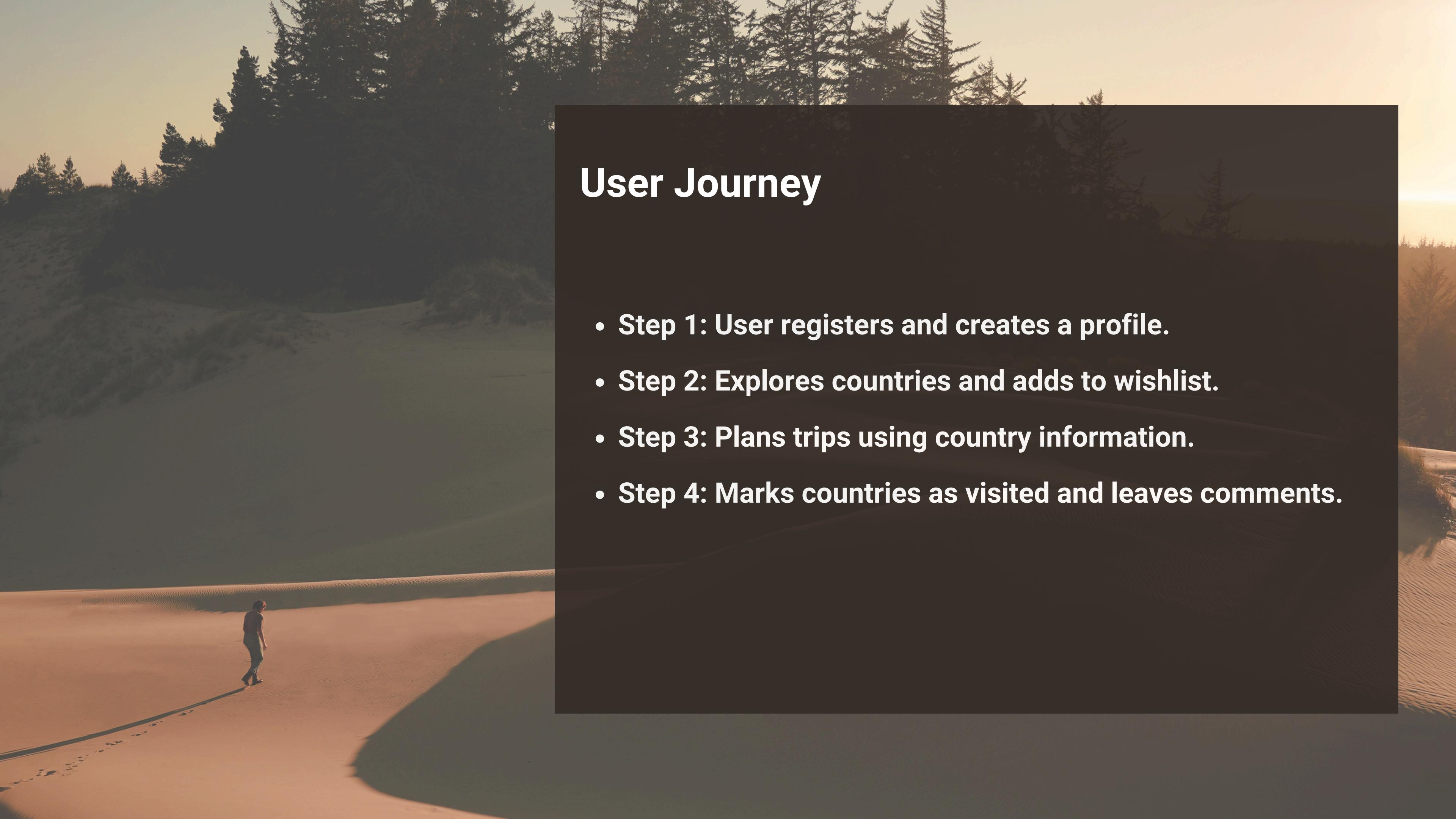
Technical Architecture -Flowchart

Key Interactions:

- Search Countries: Frontend (Search) → API Service → Backend (Country Routes) → Database.
- Manage Wishlist: Frontend (Country Details) → API Service → Backend (Wishlist Routes) → Database.
- Add Comments: Frontend (Country Details) → API Service → Backend (Comment Routes) → Database.
- Chatbot Interaction: Frontend (Chatbot Interface) → API Service → Backend → External AI Service (if applicable).

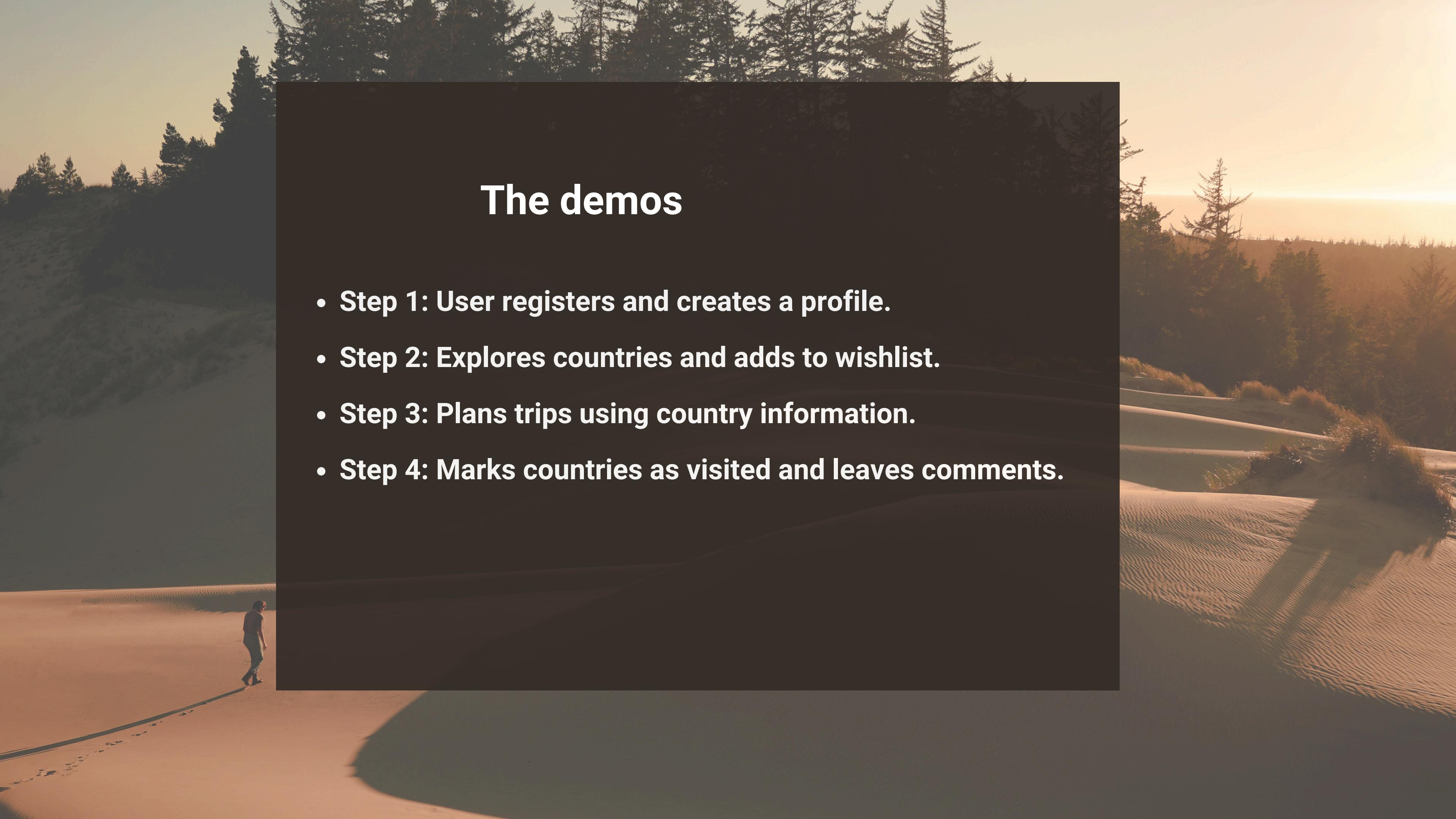
Technical Architecture -Flowchart



A photograph of a person walking across a vast, light-colored sand dune. In the background, a dense forest of tall evergreen trees stands against a clear sky. The foreground is dominated by the sandy terrain, with the person appearing small in comparison.

User Journey

- Step 1: User registers and creates a profile.
- Step 2: Explores countries and adds to wishlist.
- Step 3: Plans trips using country information.
- Step 4: Marks countries as visited and leaves comments.

A photograph of a person walking across a vast expanse of sand dunes under a warm, golden sunset sky. The dunes are light-colored and textured, stretching towards a dark silhouette of trees in the background.

The demos

- Step 1: User registers and creates a profile.
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Technical Challenges and Solutions

- **Challenge 1: Efficient data management for a large country dataset.**
- **Solution:** Optimized MongoDB queries and indexing.
- **Challenge 2: Real-time updates for user interactions.**
- **Solution:** Implemented websockets for instant updates.
- **Challenge 3: Scalable architecture for a growing user base.**
- **Solution:** Microservices architecture for key components.

Impact and Benefits

- Improved travel planning efficiency.
- Enhanced cultural understanding and global awareness.
- Community-driven knowledge sharing.
- Personalized travel tracking and goal setting.

Future Enhancements

- Integration with travel booking services.
- Machine learning for personalized country recommendations.
- Mobile app development.

Q&A

Thank you for your attention. Any questions?





Thank you!