# NextTrip - User-Based Travel Recommendation System

Submitted by: Group 2

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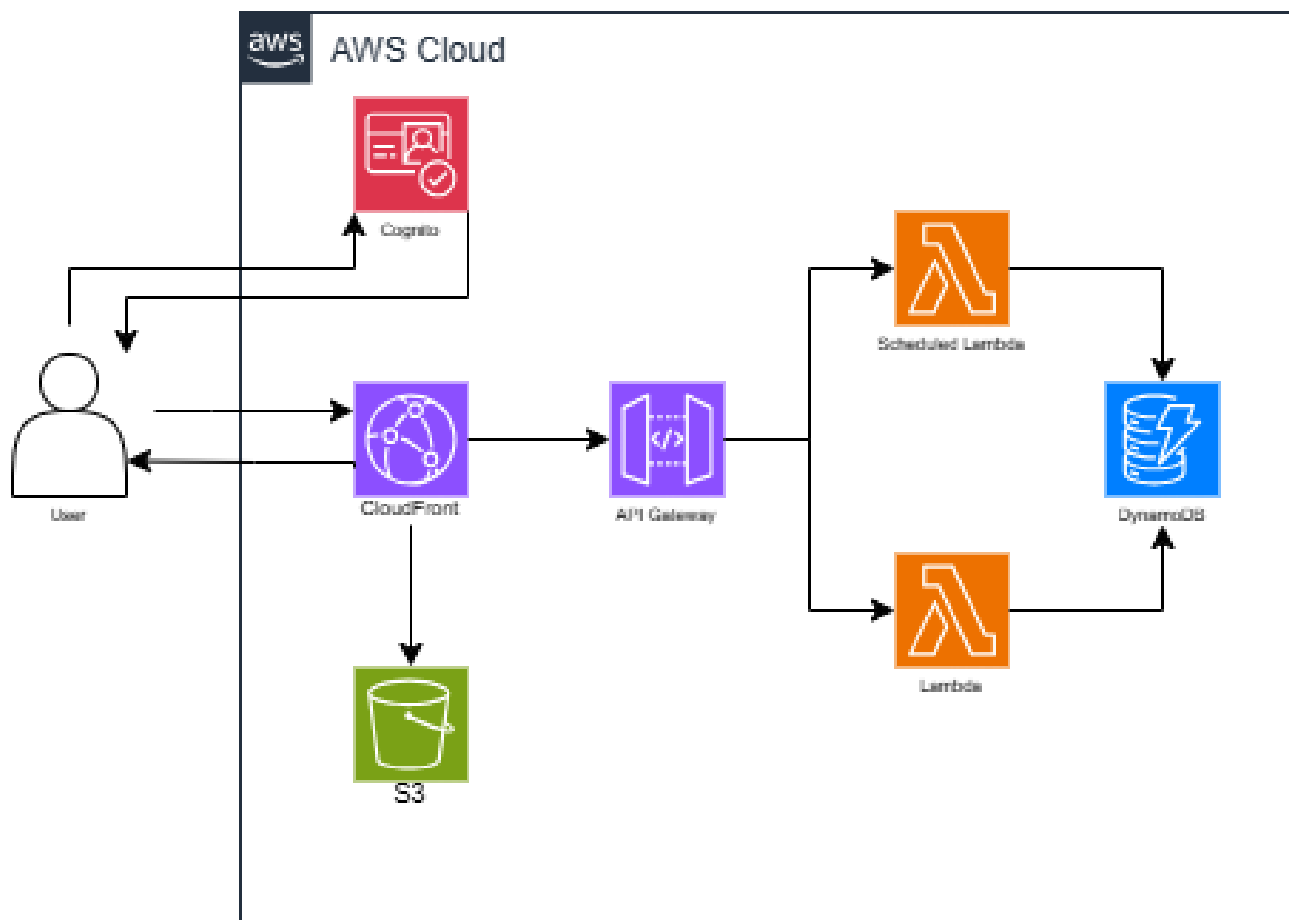
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## Project Overview

NextTrip is an innovative web-based platform designed to enhance the travel experience by helping users discover their next destination. Users can share personal experiences, rate countries, add tags, and provide travel tips. The system generates personalized recommendations based on user behavior and ratings.

The platform also supports local businesses, allowing them to be rated and discovered by travelers, improving trip quality and visibility of tourism services.

Target audience includes travel enthusiasts and families, while potential investors are those focusing on mobile tech and smart tourism tools.

## System Architecture Diagram

## Technical Implementation

1. Frontend: Built using React with Context API and Hooks.

2. Authentication: Managed with Amazon Cognito user pools.

3. API Layer: RESTful APIs exposed via Amazon API Gateway with proper access control.

4. Business Logic: AWS Lambda functions (Node.js/Python) manage data, ratings, and recommendations.

5. Database: Amazon DynamoDB stores users, ratings, tags, and business data.

6. Static Content: Hosted via Amazon S3, distributed using CloudFront for global performance.

7. Scheduled Processes: Scheduled Lambda updates the recommendation engine periodically.

## GitHub Repository

https://github.com/ilaygozlan/NextTrip.git