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AI-Based Intelligent Trip Planning and Recommendation System

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Abstract: The AI Trip Planner and Recommendation System is an intelligent travel management system that uses Artificial Intelligence (AI) and Machine Learning (ML) to automate the trip planning, discovery of destinations, and hotel booking. The system brings together various APIs like Gemini AI, Razorpay, OpenStreetMap and Weather API to enable a full end to end personalized travel experience. The system was developed using Python (Django Framework) programming language with a SQLite database to provide the user with an engaging web-based platform where the users can plan trips, discover routes, bring up maps, and securely book hotels. The AI model utilizes user preferences around budget, type of destination and length of stay to generate a personalized leisure travel plan. The system will also provide live weather information, a payment gateway for bookings to hotels, and an AI chat-bot for real-time travel recommendations.

Keywords: Artificial Intelligence (AI), Machine Learning (ML), Trip Planning, Travel Recommendation System, Personalized Travel, Destination Discovery, Hotel Booking, Gemini AI, Razorpay API, OpenStreetMap, Weather API, Django Framework, Python Programming, SQLite Database, AI Chatbot, User Preferences





