TravelZenAI: A Preference-Driven Travel Planning System using GENAI

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Abstract

Travel planning often involves repetitive manual effort, including comparing destinations, managing budgets, and aligning plans with personal preferences. To streamline this process, this paper presents an AI-based travel planning web application using Gen AI that provides personalized and budget-conscious travel recommendations. The system enables users to input parameters such as destination, travel duration, budget, and interests, based on which a customized itinerary is generated. A dynamic preference management module enables users to edit and update their travel preferences, which are reflected in real time within the recommendations to ensure adaptability and personalization. The application also includes a notes-based travel journal for users to record trip-related information and experiences. In addition, a separate memory management module allows users to upload and store travel photographs for future reference. The system integrates external services through Open API to support data retrieval and functionality. By combining artificial intelligence with modern web technologies, the proposed solution reduces planning complexity and delivers a user-centric travel planning experience.

Keywords

Gen AI, Artificial Intelligence, Travel Planning Application, Personalized Recommendations, Preference Management, Web Application, Travel Journal, Memory Management, Open API, Budget calculation.

Domain of the Project: Artificial Intelligence (Gen AI).