

HISTOCONNECT – SMART GUIDE FOR HERITAGE SITE TOURISM

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ABSTRACT

In a world where historical knowledge is often inaccessible or lost in translation, HistoConnect bridges the gap by providing an interactive platform designed to enhance the experience of tourists visiting heritage sites. Leveraging advanced technologies like AI-powered chatbots, Natural Language Processing (NLP), and Geospatial Information Systems (GIS), it offers real-time navigation, historical insights, and voice-guided information. Acting as a smart guide, HistoConnect ensures visitors can easily access detailed knowledge about the cultural and historical significance of sites using the BERT NLP model with Retrieval Augmented Generation (RAG), which fetches relevant information from a structured knowledge base containing curated site descriptions, historical facts, and cultural context. This enables the chatbot to deliver accurate, context-aware answers to tourist queries. With support for multiple languages, facilitated by Google Translate API integration, it breaks down language barriers, making heritage tourism more inclusive and accessible. Beyond structured information, the platform fosters community interaction through features like comments and forums where Sentiment Analysis is conducted using Machine Learning (ML) algorithms. With location-based assistance via GPS and personalized recommendations driven by Collaborative Filtering and Content-based Filtering, HistoConnect transforms the way tourists explore heritage sites, making the experience more engaging, enjoyable, and educational for all.