

Yatra AI-Tourism Recommendation System

Ms. Karuna Lohar¹, Mr. Sanskar Shinde², Mr. Avadhut Koli³, Ms. Pranjali Mali⁴

Ms. V. B. Asavale⁵

Lecturer, Computer Engineering¹

Students, Computer Engineering²⁻⁵

K.E. Society's Rajarambapu Institute of Technology, Rajaramnagar, India

Abstract: *The Tourism Recommendation System is developed to simplify travel planning for travelers and groups. Planning a trip often requires searching multiple websites for destinations, costs, and activities, which can be time-consuming and confusing. This system provides a single platform where users can enter their preferences such as location, budget, travel duration, and interests.*

Based on user inputs, the system suggests suitable tourist destinations and generates structured travel plans. It also provides basic travel details including places to visit, activities, and estimated budget information. The user-friendly interface helps users easily explore destinations and organize their trips.

The main goal of this system is to reduce manual effort and provide a simple and efficient way to plan trips. By offering personalized recommendations and organized travel information, the system improves decision-making and enhances the overall travel experience.

Keywords: Travel planning, User Preferences, Personalized Recommendation, Location Based Services, Travel suggestion.

I. INTRODUCTION

The Tourism Recommendation System is developed to simplify the process of travel planning for individual travelers as well as groups.

Planning a trip usually requires searching for destinations, comparing travel costs, checking attractions, and organizing daily activities. This process often takes a lot of time because travelers need to visit many different websites or sources to gather information. Sometimes the information available online may also be incomplete or confusing.

To overcome these difficulties, the Tourism Recommendation System provides a single platform where users can easily plan their trips. In this system, users can enter their travel preferences such as starting location, budget, travel duration, group type, and personal interests. Based on the information provided by the user, the system analyzes the data and suggests suitable tourist destinations.

The system also helps users by generating a simple travel plan that includes places to visit and possible activities during the trip. It may also provide useful travel information such as estimated travel costs, basic safety guidelines, and important travel details. This makes the travel planning process more organized and convenient for users.

The main objective of this project is to reduce the manual effort involved in travel planning and provide personalized travel suggestions. The system is designed to be user-friendly so that users can easily interact with it and quickly find destinations that match their preferences. By using this platform, travelers can save time, explore different travel options, and plan their trips in a better and more efficient way.

II. LITERATURE REVIEW

Recent studies show that tourism recommendation systems are becoming more important as travelers increasingly rely on digital platforms for trip planning. Traditional travel websites usually provide general information, which may not match individual user preferences. To overcome this limitation, researchers have introduced AI-based systems that consider factors such as budget, travel duration, and user interests.



These intelligent systems help users find suitable destinations, generate travel itineraries, and reduce the time required for planning. Research also highlights that centralized platforms combining recommendations, budgeting, and planning improve user experience. Therefore, the proposed Yatra AI – Tourism Recommendation System focuses on providing personalized and efficient travel planning using artificial intelligence.

III. PROBLEM STATEMENT

Planning a trip has become challenging as travelers often rely on multiple platforms to gather information about destinations, budgets, and travel schedules. Most existing travel applications provide general recommendations that do not consider individual user preferences such as interests, budget, travel duration, and group type. This makes the planning process time-consuming and less efficient.

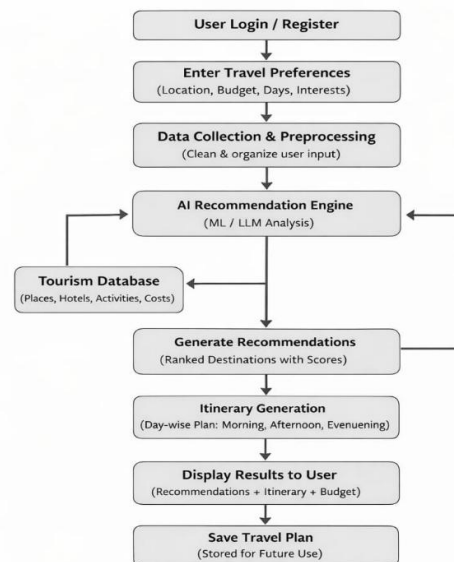
Additionally, current systems lack proper integration of itinerary planning, budget estimation, and contextual information such as season and safety. As a result, users are required to manually organize their travel plans, which increases effort and may lead to poor decision-making.

Therefore, there is a need for an intelligent tourism recommendation system that can provide personalized destination suggestions, generate structured itineraries, and simplify the travel planning process.

IV. OBJECTIVES

- To develop an intelligent tourism recommendation system that provides personalized destination suggestions.
- To simplify travel planning by considering user preferences such as budget, duration, and interests.
- To generate structured, day-wise travel itineraries for better trip organization.
- To provide estimated budget details and useful travel information to users.
- To improve overall user experience by reducing manual effort and saving planning time.

V. METHODOLOGY



The Tourism Recommendation System follows a structured workflow to generate personalized travel plans. The overall process includes the following steps:

- User logs into the system and enters travel preferences such as location, budget, duration, and interests.
- The system collects and preprocesses the input data for accurate analysis.



- AI-based recommendation engine analyzes user preferences along with tourism database information.
- The system generates ranked destination recommendations based on user requirements.
- A structured day-wise itinerary is created including places and activities.
- The system displays recommendations, itinerary details, and estimated budget to the user.
- Users can save their travel plan for future reference and easy access.

Implementation of the system:

The Yatra AI – Tourism Recommendation System is implemented as a web-based application designed to simplify travel planning. The system collects user preferences such as location, budget, travel duration, and interests through a user-friendly interface. This information is then processed and used to generate suitable travel recommendations.

The recommendation engine analyzes user inputs and compares them with the tourism database to suggest the most relevant destinations. After selecting a destination, the system generates a structured day-wise itinerary that includes places to visit, activities, and basic travel details. The system also provides estimated budget information to help users plan their trips effectively.

The platform also allows users to view recommendations, generate itineraries, and save travel plans for future use. Overall, the implementation focuses on providing a simple, organized, and efficient solution for personalized travel planning.

VI. CONCLUSION

The Yatra AI – Tourism Recommendation System successfully demonstrates how Artificial Intelligence can improve and simplify travel planning by providing personalized destination recommendations and structured itineraries. The system reduces manual effort, saves time, and enhances decision-making through intelligent analysis of user preferences such as budget, duration, and interests.

Additionally, features like budget estimation, cultural guidance, safety tips, and easy itinerary storage make the platform more practical and user-friendly. Overall, the system presents an efficient, reliable, and modern approach to smart tourism planning with good potential for future enhancements.

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Students: Ms. Lohar Karuna Krishnat
Mr. Koli Avadhut Sambhaji
Ms. Mali Pranjali Vitthal

Mr. Shinde Sanskar Santosh

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