**Presented By: Samiksha**

Still Travelling

# AI Travel Planner - Smart Tourist Recommendations

# Tourism

## Discovering unexplored corners in India















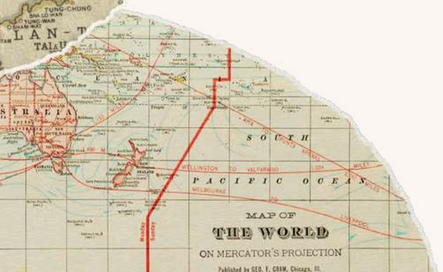
# Introduction

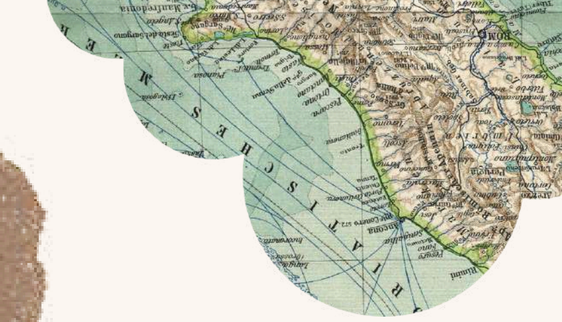

In today's fast-paced world, travelers seek personalized recommendations to explore destinations that align with their interests and preferences. The AI Travel Planner is an intelligent recommendation system that leverages Machine Learning and Natural Language Processing (NLP) to suggest the best tourist spots based on user preferences.

This project processes real-world data from Indian tourist spots, considering factors like location, type of place, significance, ratings, reviews, entrance fees, and accessibility to provide data-driven, personalized travel recommendations.

Technology Used:

- Machine Learning (Content-Based Filtering, Clustering)
- Streamlit (Web App)
- Pandas, NumPy, Scikit-learn (Data Processing & ML Models)




# AI Travel Recommendation System

🔗 Try the AI Travel Recommendation System:
*AI Travel Recommendation System*

🚀 Discover top tourist spots effortlessly!

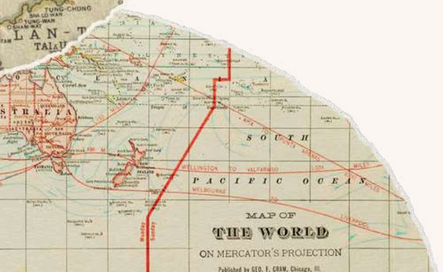
- ✅ Personalized travel suggestions
- ✅ AI-powered recommendations
- ✅ Smart filters for better results
- ✅ Easy & interactive experience

# Problem Statement

- Overwhelming Choices: Too many options to explore.
- Varied Preferences: Budget, Location, Ratings, etc.
- Time-Consuming: Manual search is inefficient.

# Solution - AI Travel Planner

- Personalized Destination Recommendations
- User Inputs: Zone, City, Ratings, Budget, etc.
- Output: Top-matched tourist places.
- Process:
  - Filters based on user preferences.
  - Machine Learning models rank locations.
  - Displays top 10 best-matched places.



# Machine Learning Models

- TF-IDF Vectorization: Converts text data into numerical format.
- Cosine Similarity: Measures how similar tourist spots are.
- K-Means Clustering: Groups similar destinations for better categorization.

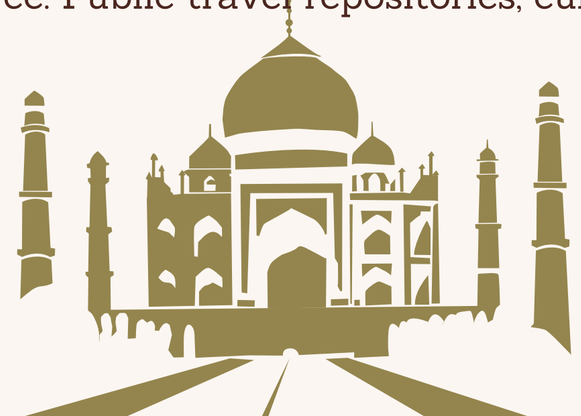
Challenges Faced

- Data cleaning & missing value handling.
- Optimizing ML models for better accuracy.
- Deploying Streamlit app smoothly.

# Dataset

The dataset used in this project contains detailed information on Indian tourist spots, including location, type, significance, best time to visit, Google review ratings, entrance fees, and nearby airports. It also includes user-generated reviews, helping in ranking destinations. The data is cleaned, preprocessed, and enriched with new features to enhance recommendation accuracy.

- Dataset: indian_tourist_spots.csv
- Key Columns:
  - Place Name, City, State
  - Type (Beach, Temple, Hill Station, etc.)
  - Google Ratings, Reviews
  - Entrance Fee, DSLR Allowed
- Data Source: Public travel repositories, curated datasets.

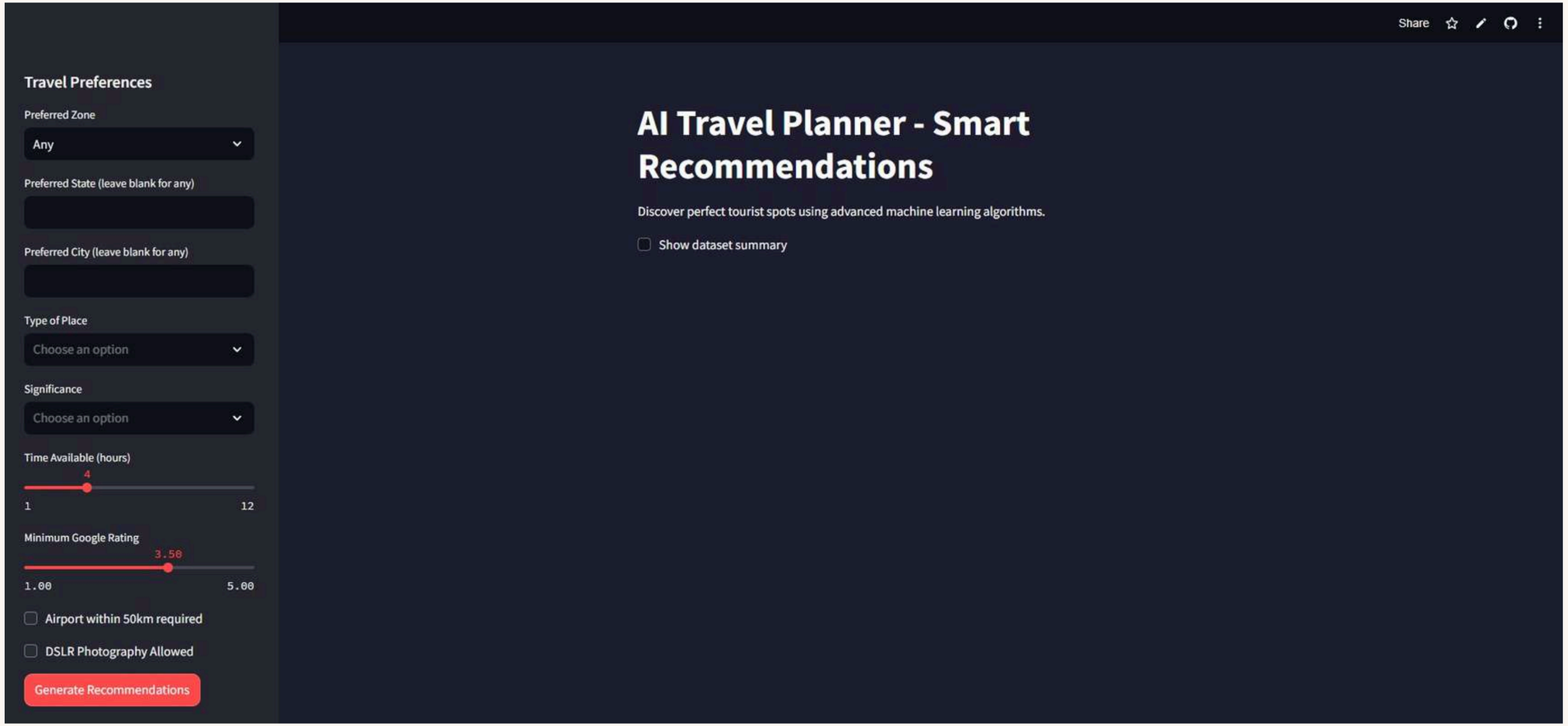


# AI Travel Recommendation System

## Benefits of exploring uncharted places

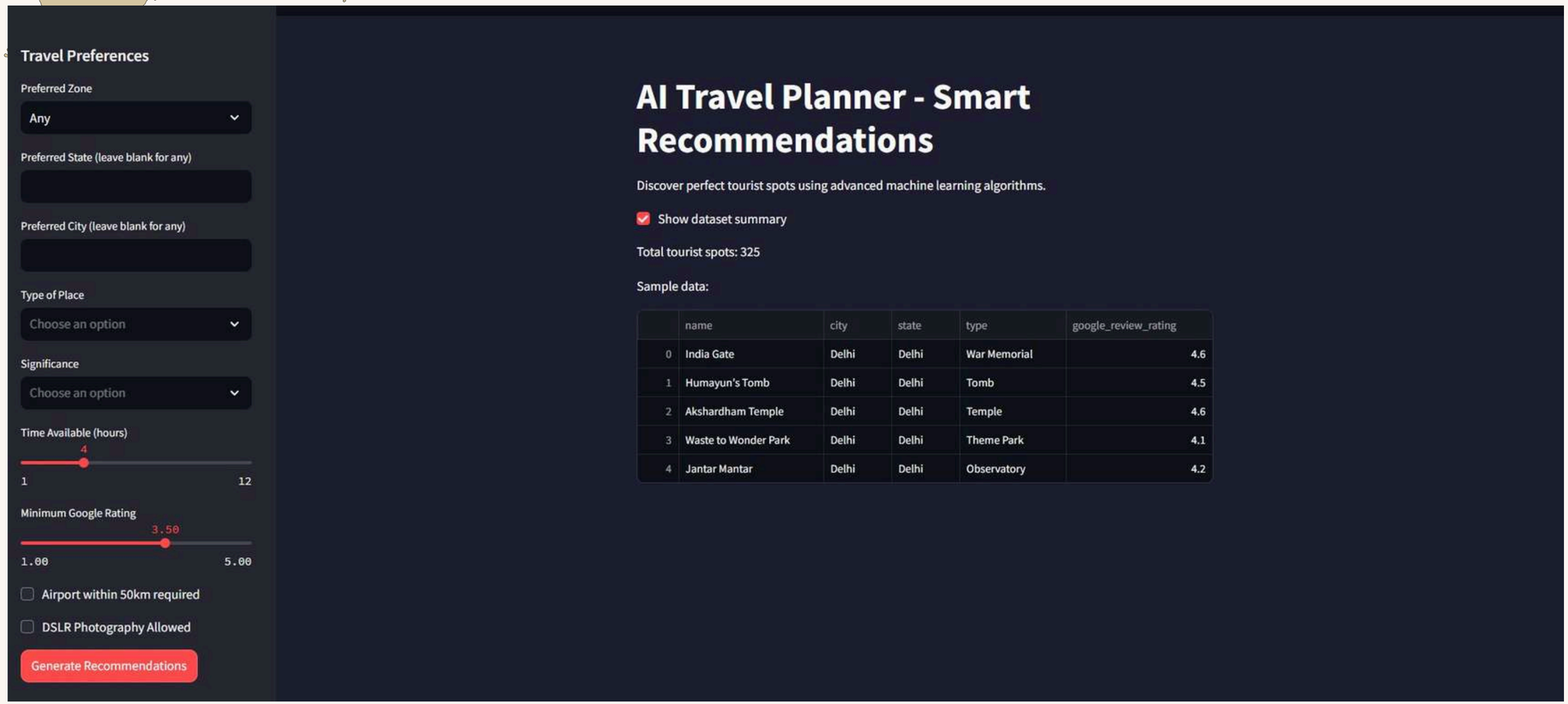
Exploring uncharted places offers unique experiences, away from crowded tourist spots. It fosters adventure, cultural immersion, and personal growth while uncovering hidden gems. These destinations provide tranquility, allowing deeper connections with nature and local communities. Traveling off the beaten path also supports sustainable tourism, benefiting lesser-known regions.

# AI Travel Planner website





# Travel Recommendations website displays the dataset

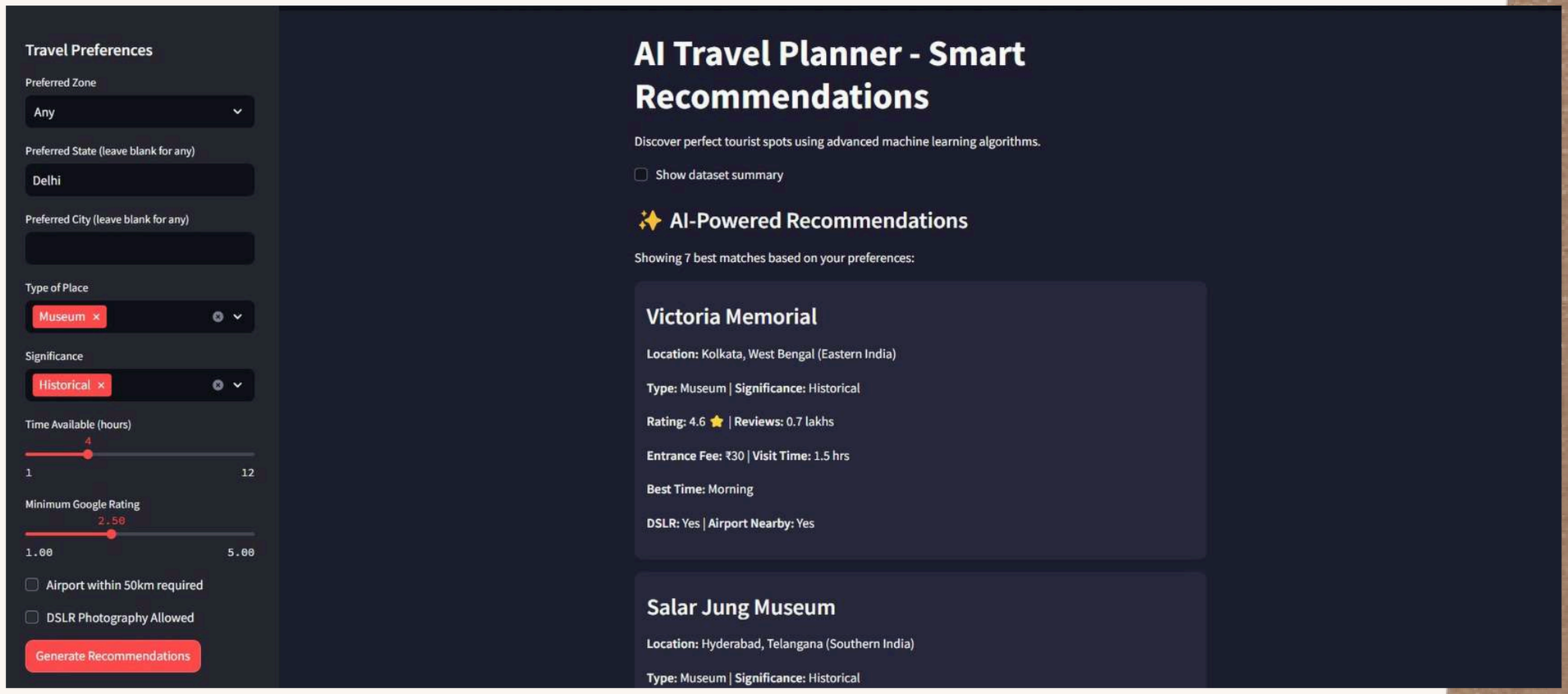



📊 Tourist Spots Data – A structured dataset with details like name, location, type, significance, ratings, reviews, and entrance fees.

🔍 Filters & Sorting – Users can explore and analyze tourist spots based on their preferences.

📈 Interactive Insights – A preview of key travel trends and popular destinations.

# Travel Recommendations website displays the results,




🌍 Personalized Travel Suggestions – AI-powered recommendations based on user preferences.
⭐ Tourist Spot Details – Information like location, type, significance, ratings, and best time to visit.
📊 Smart Filtering – Dynamic filtering for time, budget, and interests.
🎯 Enhanced Decision Making – Helps travelers choose destinations efficiently.

# Travel Recommendations website displays various results,

📍 Top Destinations – Best-matched tourist spots based on user preferences.

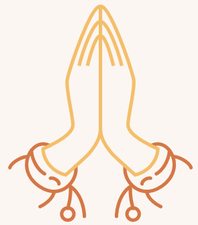
📊 Comparison of Places – Side-by-side analysis of attractions based on ratings, reviews, and accessibility.

🎯 Alternative Suggestions – Similar locations if no exact match is found.

🌟 Popularity Score – AI-generated ranking of places using ratings and visitor reviews.

Still Travelling

# Thank you very much!



🔗 AI Travel Recommendation System

**Presented By: Samiksha**