

# **Project Name - Optimizing Hospitality: Data-Driven Insights into India's Hotel Economy**

## **Problem Statement -**

The hospitality industry in India is dynamic and competitive, comprising a diverse range of hotels catering to varying customer preferences. Amidst this landscape, there exists a need to harness data-driven insights to optimize the operations, marketing strategies, and overall efficiency of hotels across the country. The lack of comprehensive insights derived from available data poses a challenge in effectively understanding customer preferences, pricing strategies, and service offerings that could potentially enhance the Indian hotel economy.

The project aims to utilize data analytics techniques on a dataset encompassing hotel names, reviews, and pricing information across India. Through thorough analysis and interpretation of this dataset, the primary objectives are:

**Understanding Customer Preferences:** Uncover customer sentiments and preferences by analyzing reviews to identify key factors influencing customer satisfaction and dissatisfaction with hotels in different regions of India.

**Price Optimization:** Explore pricing structures among various hotels to identify pricing trends, competitive pricing strategies, and correlations between prices and customer satisfaction.

**Market Insights:** Gain insights into market segments, regional trends, and demand patterns across different types of hotels in India to aid in strategic decision-making for hotel management.

The ultimate goal of this project is to provide actionable insights to stakeholders in the hospitality industry. These insights will empower them to make informed decisions, refine their strategies, enhance service offerings, and ultimately optimize the Indian hotel economy for improved competitiveness and customer satisfaction.

**Need to collect data using web scrapping from Goibibo, Make my Trip or any other hotel booking site**

## **Steps to be followed -**

1. Web Scrapping to collect data
2. Data Cleaning and Manipulation
3. Visualization and Analysis on various factors like Price, Location, Review's....etc.... to analyze above problem statements.
4. Need Visualizations of each tier1 city for compulsory and regarding other locations it's not mandatory
5. Challenges
6. Conclusion from your point of view

Tools used for each step (Wherever it's required)

### **Project Timeline -**

22/12/2025 to 10/01/2026

Everyone needs to submit detailed Project Report, PPT and give PPT Presentation as well with in given time.

Note –

**Please don't do cut – copy – paste works and it is a individual project, if we observe any then you will be removed from the project and you won't be assigned with any other projects.**

All the best!