

**PRESENTED BY:**

**KRUTHI A. S.**

**160122737001**

**FACULTY:**

**Dr. KOLIKIPOGU RAMAKRISHNA**

**TITLE:**

**ANALYSING AND MITIGATING HIGH HOTEL CANCELLATION RATES: A Data-Driven Approach for City Hotel and Resort Hotel**

**PROBLEM STATEMENT:**

To assist City and Resort Hotels facing the pressing challenge of high cancellation rates, which lead to reduced revenues and suboptimal room utilisation, in enhancing their overall operational efficiency by analysing hotel booking cancellations and other relevant factors.

**ABSTRACT:**

The hotel industry faces a consistent challenge with high cancellation rates impacting both revenues and room occupancy. This project delves into the root causes of these cancellations through detailed data analysis, aiming to offer actionable insights for City and Resort Hotels.

Using analytics tools, we will scrutinise various data points such as booking trends, customer behaviour, seasonal variations, and external factors like economic conditions and travel restrictions. This multifaceted analysis will help uncover patterns and correlations that contribute to increased cancellations.

Armed with these insights, hotels can devise effective strategies tailored to their unique circumstances. These strategies may include offering targeted promotions, implementing flexible booking policies, or enhancing customer engagement through personalised communication.

Furthermore, the project will explore the potential of predictive analytics in forecasting cancellation rates, enabling hotels to preemptively adjust their operations and marketing efforts accordingly.

Ultimately, this data-driven approach aims to empower City and Resort Hotels with the knowledge and tools needed to mitigate the impact of high cancellation rates, optimise their room inventory, and drive overall operational efficiency.

**OBJECTIVES:**

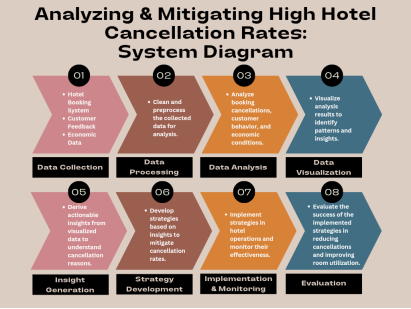
1. Identify key factors contributing to high cancellation rates in City and Resort Hotels through data analysis. (Analyze)
2. Develop targeted strategies to mitigate cancellation rates based on data insights. (Apply)

**OUTCOMES:**

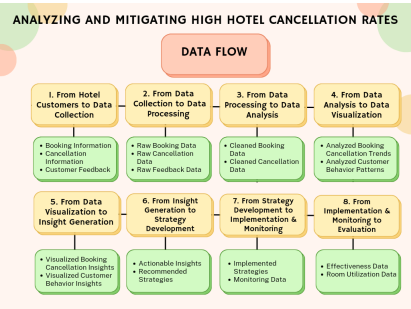
1. Assess the effectiveness of implemented strategies in reducing cancellations and optimising room occupancy. (Evaluate)
2. Establish a data-driven framework for proactive booking management to enhance operational efficiency. (Create)

**SOLUTION DESIGN:**

**SYSTEM DIAGRAM**



## DATA FLOW



## DATASET LINK:

<https://drive.google.com/file/d/1-QwWigkene6K-EXRQTXEEEghq9SMiirb/view?usp=drivesdk>

**Source: Kaggle**