Title:

Comparative analysis of machine learning models for Hotel Price Prediction

Problem Statement:

Exploratory data analysis formulation of a prediction model using machine learning algorithms and comparative analysis.

**ABSTRACT**

The project aims at forecasting the price of a hotel based on its historical data such as review rating score, where the hotel is located, amenities provided by the hotel, apartment type, and many more. Exploratory data analysis, supervised machine learning models such as Linear Regression, Logistic Regression and decision trees will be implemented in this project to visualize patterns and find a relevant relation between the historical data and values that are to be predicted. The models will be trained and implemented with boosting algorithms such as AdaBoost and XGBoost to further improve the accuracy of the trained models. These models finally be tested and compared for their accuracy. The most accurate model obtained shall conclude the project.