**Machine Learning – Final Project Proposition**

**Participants:**

Omer Shalom – 204124945. Asif Rot – 315312249.

**Dataset Description:**

Hotel Reservations Dataset.

Dataset Taken from: <https://www.kaggle.com/datasets/ahsan81/hotel-reservations-classification-dataset>

**Questions:**

What factors most influence the booking status (cancelled or not cancelled)?

How does the number of adults, children, and special requests affect the average price per room?

What is the impact of the number of previous cancellations on the booking status?

How does the arrival date impact the average price per room?

**Techniques:**

***Linear Regression:*** Linear Regression is a technique that can be used to model the relationship between a dependent variable and one or more independent variables

***Random Forest:*** Random Forest is a technique that can be used for both classification and regression problems

***Logistic Regression:*** Logistic Regression is a technique that can be used for classification problems.

***Decision Trees:*** Decision Trees is a technique that can be used for both classification and regression problems.