## **Data Analysis Project**

### **Hotel Cancellation Rates**

#### ❖ Problem Statement : -

In recent times, City hotel and resort hotel have seen high cancellation rates. Each hotel is facing number of issues; including fewer revenues and less than ideal hotel room use. For both the hotels, the primary goal is to increase their efficiency in generating their revenue, and for me to offer thorough business advice to address the problem.

The analysis of hotel booking cancellations as well as other factors affecting their revenue is the key topics of this report.

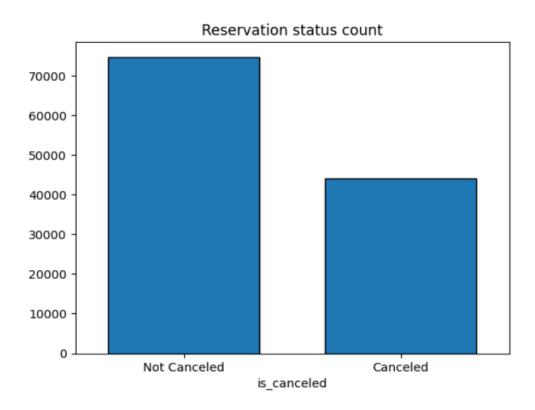


# Hypothesis:-

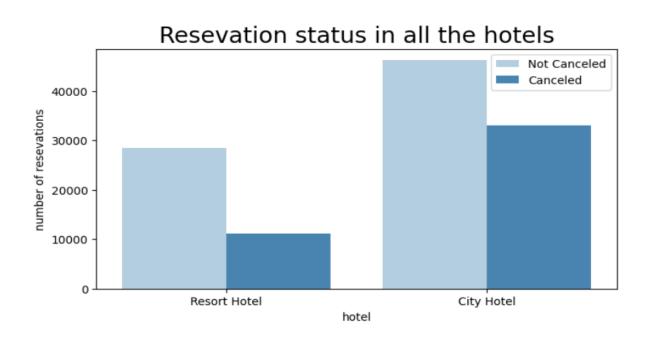
- 1. More cancellations occurs when prices are higher i.e. it highly depends on average daily rate.
- 2. One tends to cancel the reservations if there is long waiting list.
- 3. Many of them take help of offline agent for reservations.

## ❖ Data Analysis and Finding:-

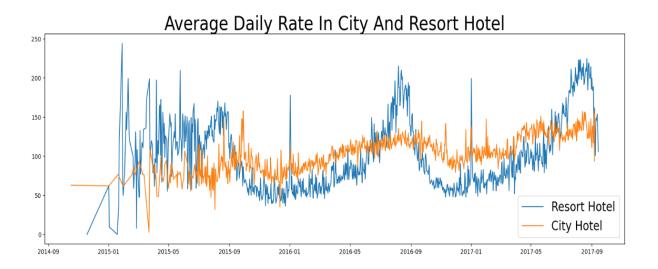
The below bar graphs show the percentage of reservations which are cancelled and which are not. It is about 37% of reservations cancelled which affects their earnings.



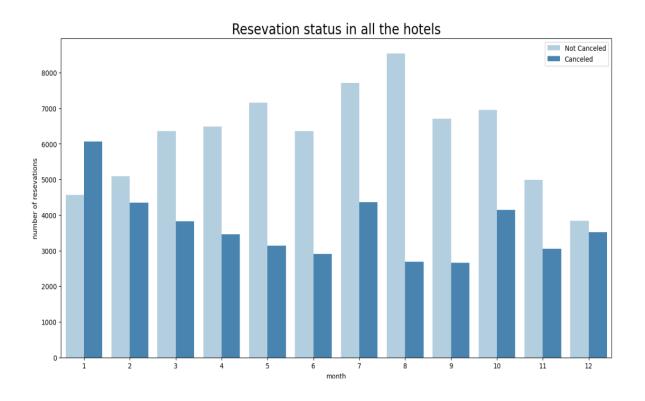
In comparison to resort hotels, city hotels have more bookings. It is possible that resort hotels are more expensive than that of city hotels.



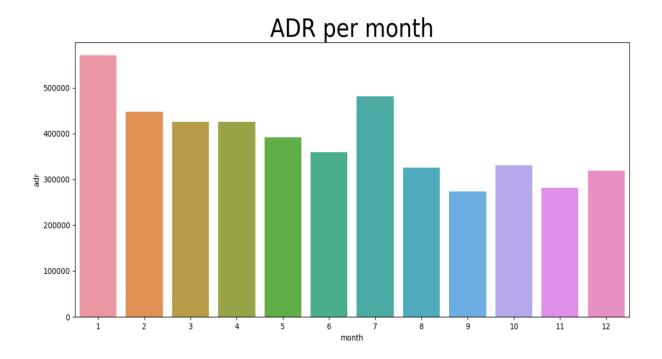
The below line graph shows the average daily rates in resort and city hotels. It can be address that the average daily rates of city hotels are less in certain days as compared to resort hotels. It can be seen that people often go for resort bookings for the weekends.



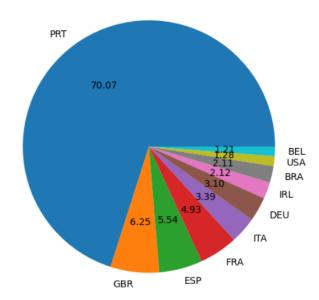
I have developed group of bar graph which shows the cancellation and non cancellations rates within each month. It can be address from the below graph that both reservation and cancelled reservation rates are largest in month of August and highest cancellation are in the month of January.



The below bar graphs shows that the cancellations are most common when prices are high and are least common when the are lowest. Thus, price are crucially increasing the cancellations rates.



The pie graph shows the top 10 countries where cancellations are highest. It can be seen that Portugal hotels face highest reservations to be cancelled.



Top 10 countries with reservation canceled

The last but not the least is the graph of cancellation rates from 2016 - 2017-09. It can be address that bot the cancelled and non-cancelled rate seems equal if compared. However, the cancellation rate increased in the month of September in 2017.

