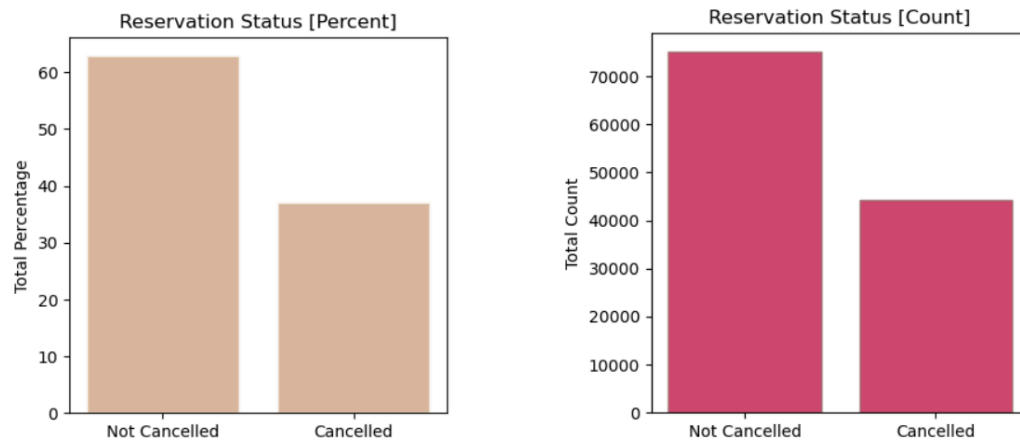
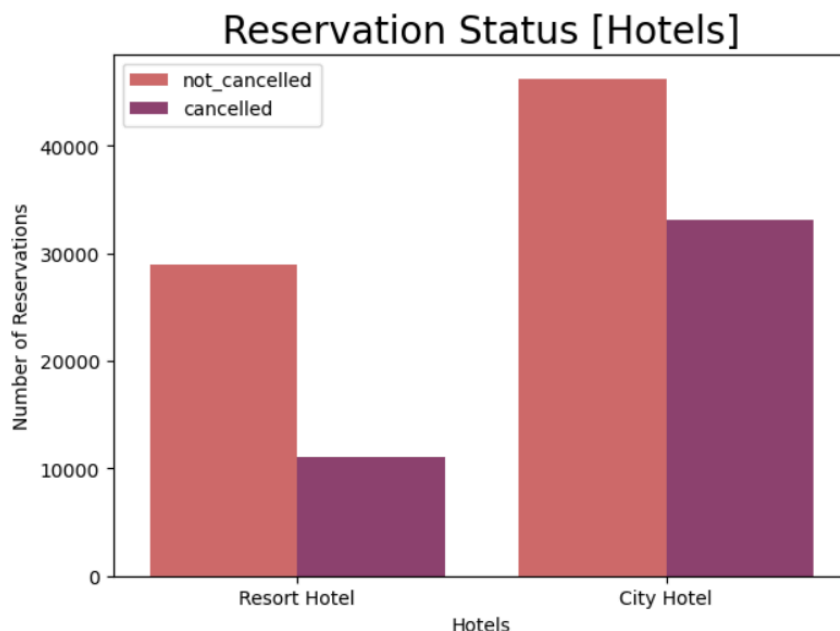


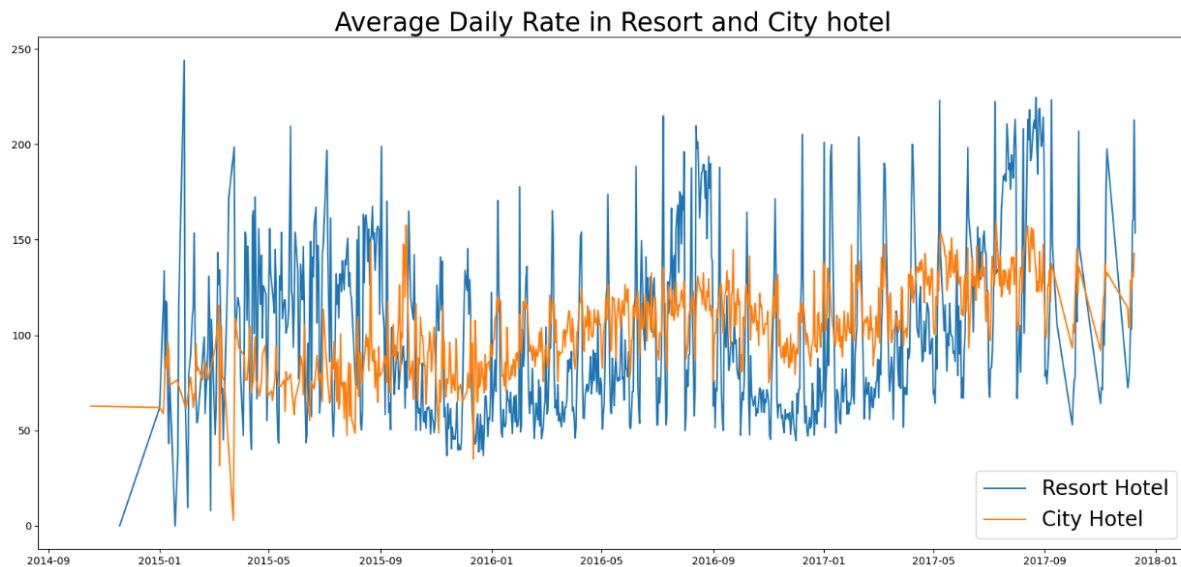
# Report



The Accompanying bar graph shows the percentage and the total counts of the reservations that are either canceled or not canceled. Although there are still a considerable number of reservations that have not been canceled, 37% of clients have canceled their reservations, which has resulted in a significant impact on the hotel's earnings.



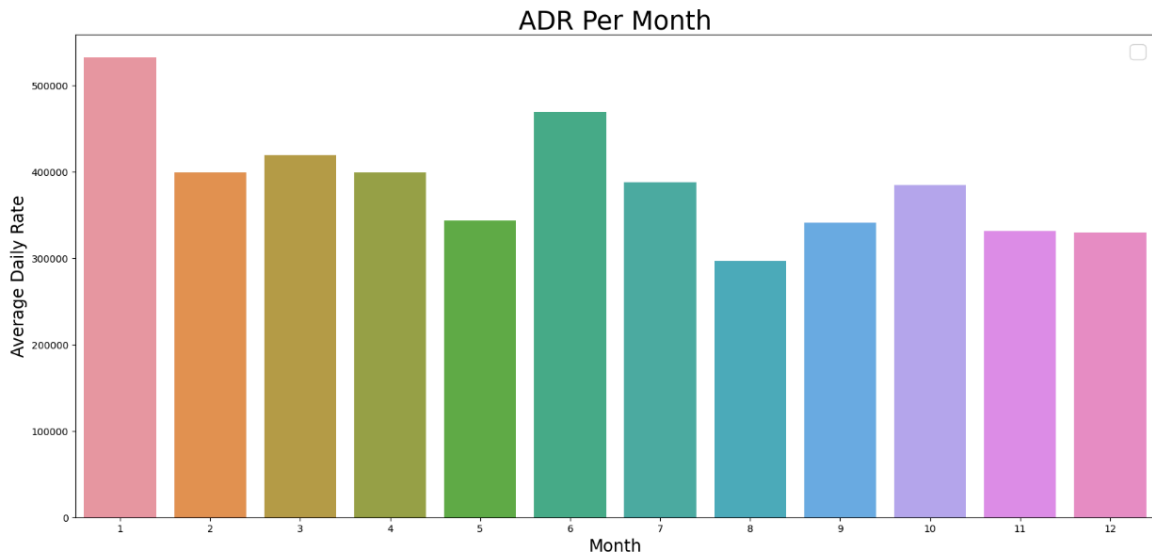
In contrast to city hotels, resort hotels may be more expensive but have fewer bookings.



The line graph depicted above shows a fluctuation in the average daily rates of city and resort hotels. The rates of city hotels are observed to be lower on certain days while higher on others, and similarly, the rates of resort hotels may see a rise on weekends and holidays.

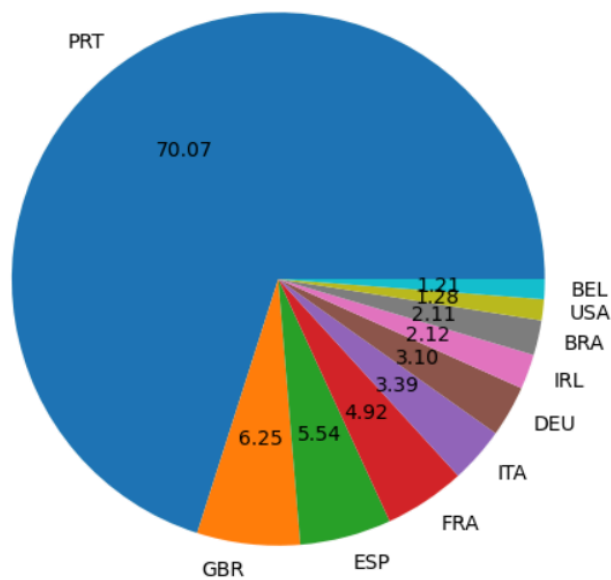


We have created a grouped bar graph to analyze the reservation levels by month and status. It is evident from the graph that January has the highest number of canceled reservations, whereas August has the lowest number of cancellations.



The bar graph demonstrates that the cancellations are most when prices are the greatest and least when prices are the lowest. Thus, the cost of accommodation is the main factor in cancellations.

Reservation Cancellations [Top 20 Countries]



The country with the highest number of cancellations is Portugal.

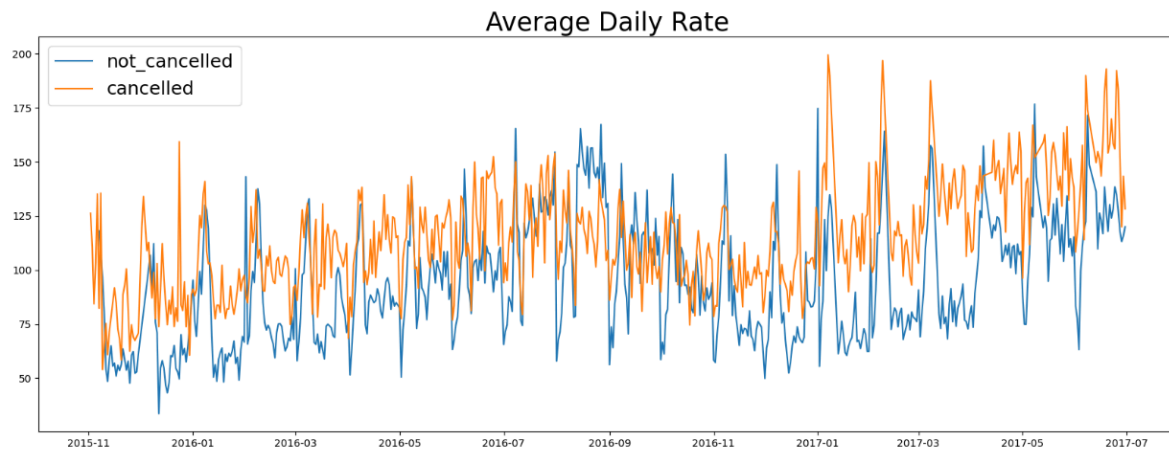
```
Online TA      47.304632
Offline TA/TO  20.285619
Groups         16.593517
Direct         10.558673
Corporate      4.435045
Complementary  0.622330
Aviation       0.198509
Undefined      0.001675
Name: market_segment, dtype: float64
```

```
# Market segments with their Bookings
```

```
Online TA      46.895351
Groups         27.353925
Offline TA/TO  18.792963
Direct         4.373191
Corporate      2.243126
Complementary  0.219338
Aviation       0.117583
Undefined      0.004522
Name: market_segment, dtype: float64
```

```
Market Segments with their Cancellation Percentages
```

It can be observed that the majority of clients are sourced from 'Online Travel Agents', with the second highest number coming from either 'Offline Travel Agents' or 'Offline Tour Operators'. Additionally, most cancellations are made by 'Online Travel Agents' and 'Groups', with roughly 20% of cancellations being made by 'Offline Travel Agents'. Around 46% of clients book through online travel agencies, while 27% come in groups. Only 4% make reservations by visiting hotels directly. The main takeaway is that the percentage of bookings made by customers is either greater than or equal to the percentage of bookings cancelled by customers themselves.



As seen in the graph, reservations are more likely to be canceled when the average daily rate is higher. This supports the notion that higher prices lead to more cancellations.

## # Suggestions:

1. Cancellation rates tend to increase as the price of hotel reservations goes up. To prevent this, hotels could focus on adjusting their pricing strategies and lowering rates for specific locations. Additionally, offering additional discounts to consumers might help in reducing cancellations.
2. Resort hotels tend to have higher cancellation rates than city hotels. To address this, hotels can offer reasonable discounts on room prices during weekends or holidays.
3. Hotels can also launch campaigns in January with reasonable pricing to increase revenue, as this month sees the highest number of bookings.
4. Improving the quality of hotels and services, especially in Portugal, can also help in reducing cancellation rates.