

# Business Problem

In recent years, City Hotel and Resort Hotel have seen high cancellation rates. Each hotel is now dealing with a number of issues as a result, including fewer revenues and less than ideal hotel room use. Consequently, lowering cancellation rates is both hotel's primary goal in order to increase their efficiency in generating revenue, and for us to offer thorough business advice to address this problem.

The analysis of hotel booking cancellations as well as other factors that have no bearing on their business and yearly revenue generation are the main topics of this report.



## Assumptions :

1. The hotels are not currently using any of the suggested solutions,
2. The biggest factors for Cancellations is because of High price.
3. Cancellations result in vacant rooms for the booked length of time.
4. Clients make hotel reservations the same year they make cancellations.

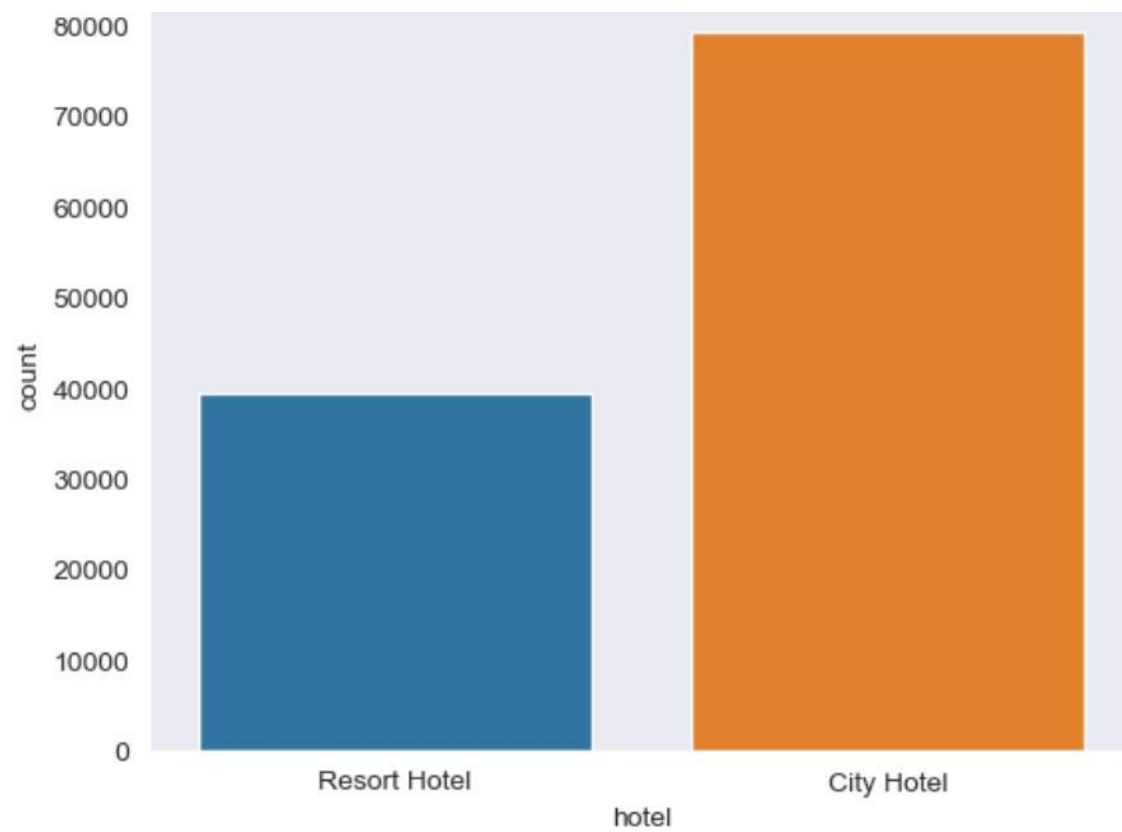
## Research Questions:

1. What are the variables affecting the hotel reservation cancellation ?
2. How we can make hotel reservations cancellations better?
3. How wills hotels be assisted in making pricing and promotional decisions?

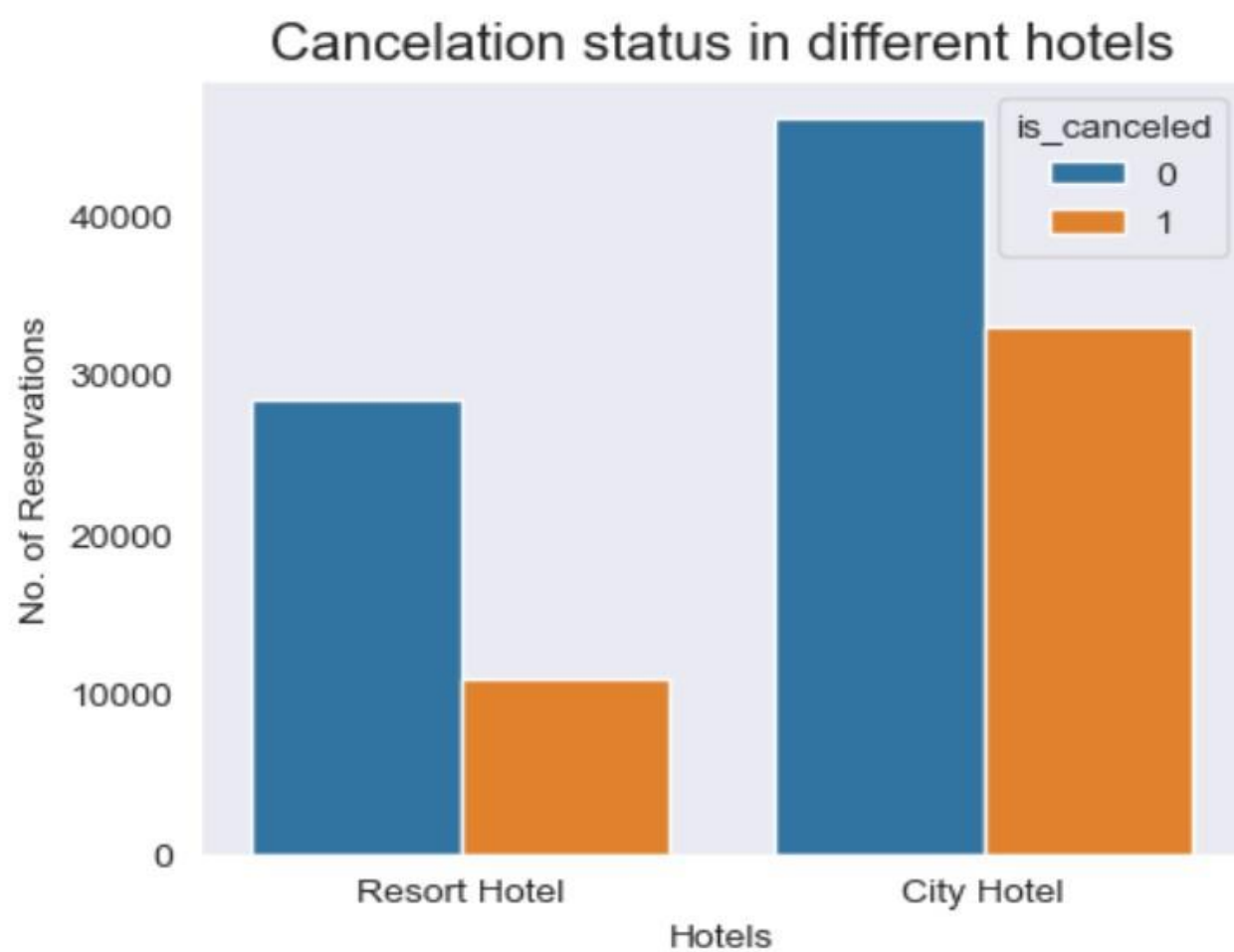
## Hypothesis :

1. When prices are higher more cancellations occur.
2. When there is longer waiting list customers tend to cancel

## Analysis and Findings :



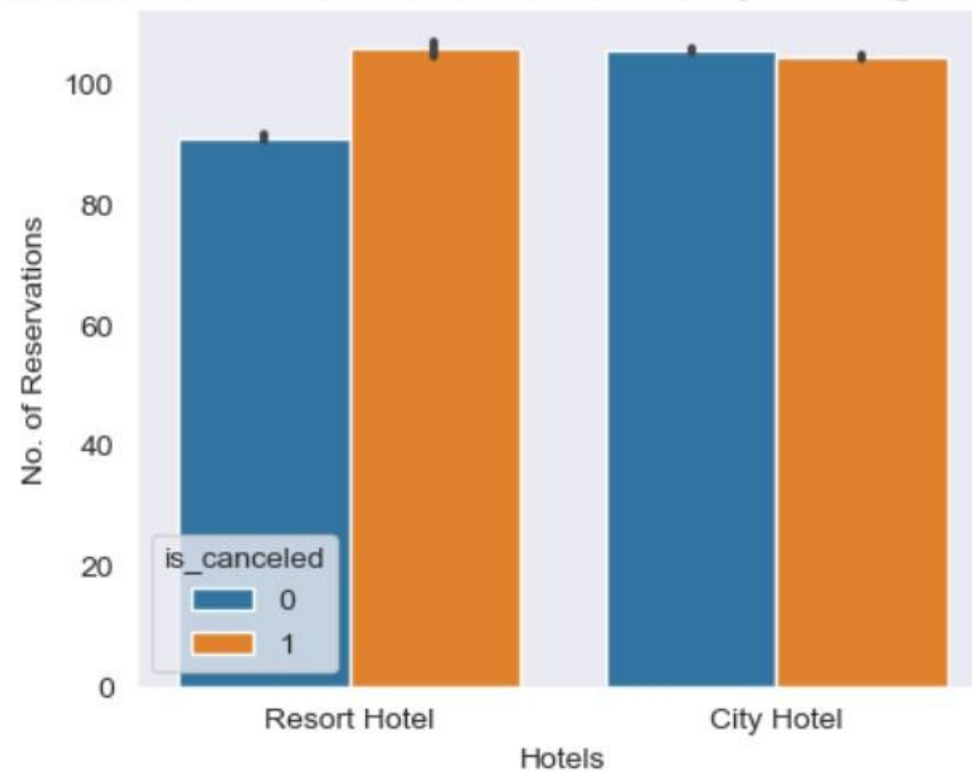
This graph shows the percentage of different types of Hotels which is resort hotel with 33.30% and city hotel with 66.69%.



The accompanying bar graph shows the percentage of Reservation status in different hotels where the city hotel (41.70%) has the higher cancellation than resort hotel (27.97%). There are still 58.29% customers in city hotel and 72.02% in resort hotel are not cancelled.

This cancellations has a significant impact on hotel's earnings.

Cancelation status in different hotels by Average Daily Rate

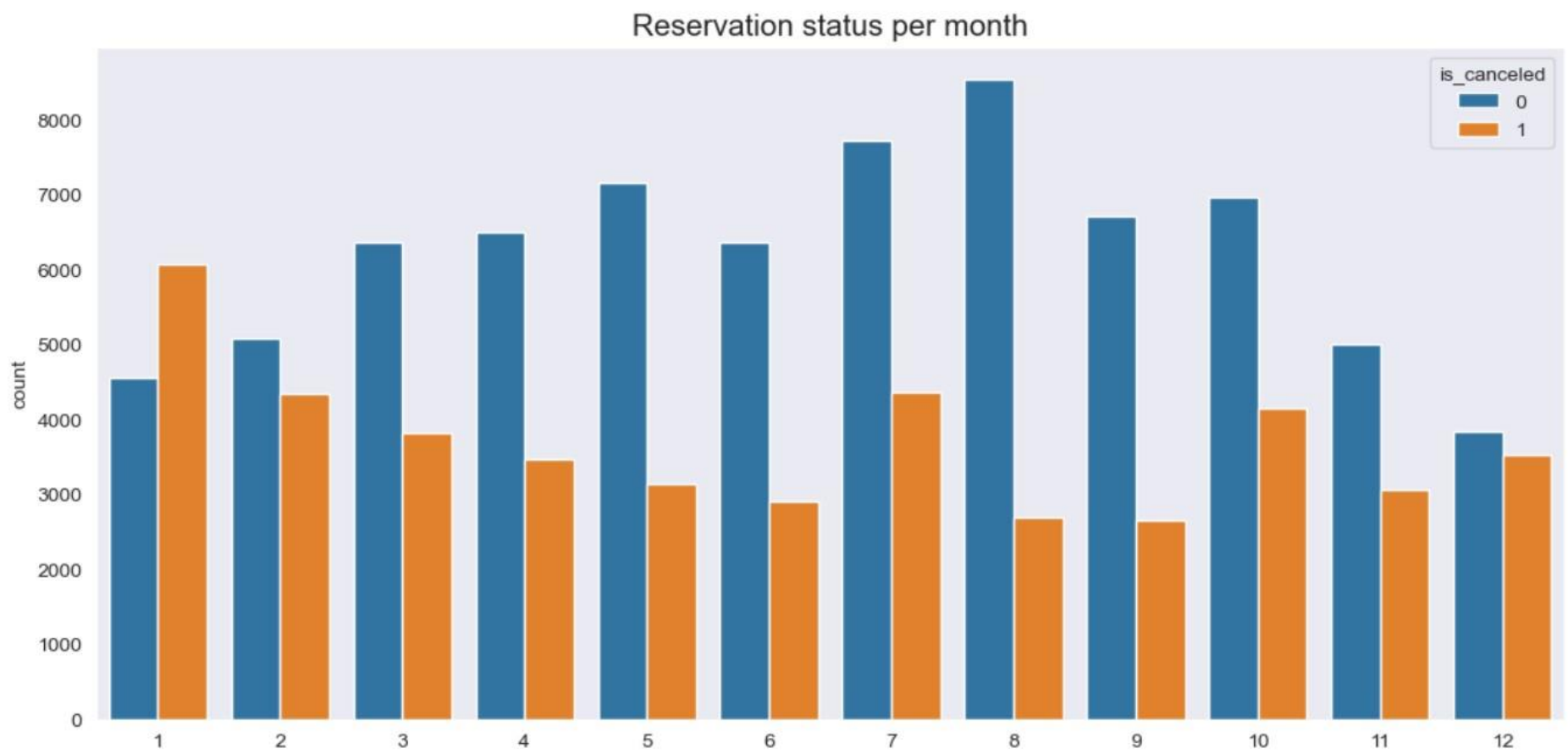


The accompanying bar graph shows the percentage of Reservation status in different hotels By Average daily rate where the Resort hotel has the higher cancellation rate than City hotel . This cancellations has a significant impact on hotel's earnings.

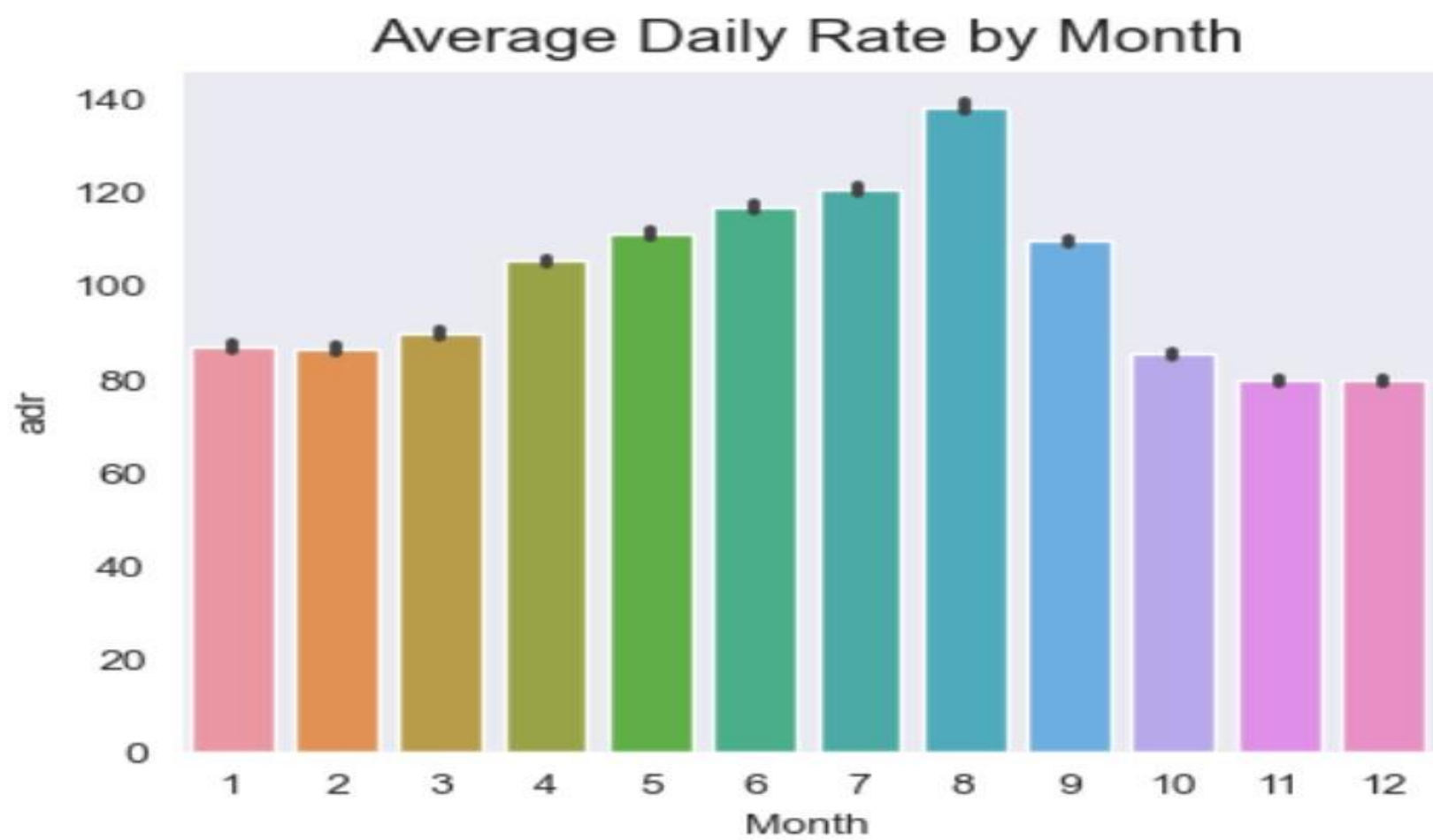
Average Daily Rate by Resort and City Hotel



From this line chart we can see that on certain days the average daily rate for a city hotel is less than that of a resort hotel and on other days, it is even less. It goes without saying that weekends and holidays may see a rise in resort hotel rates.

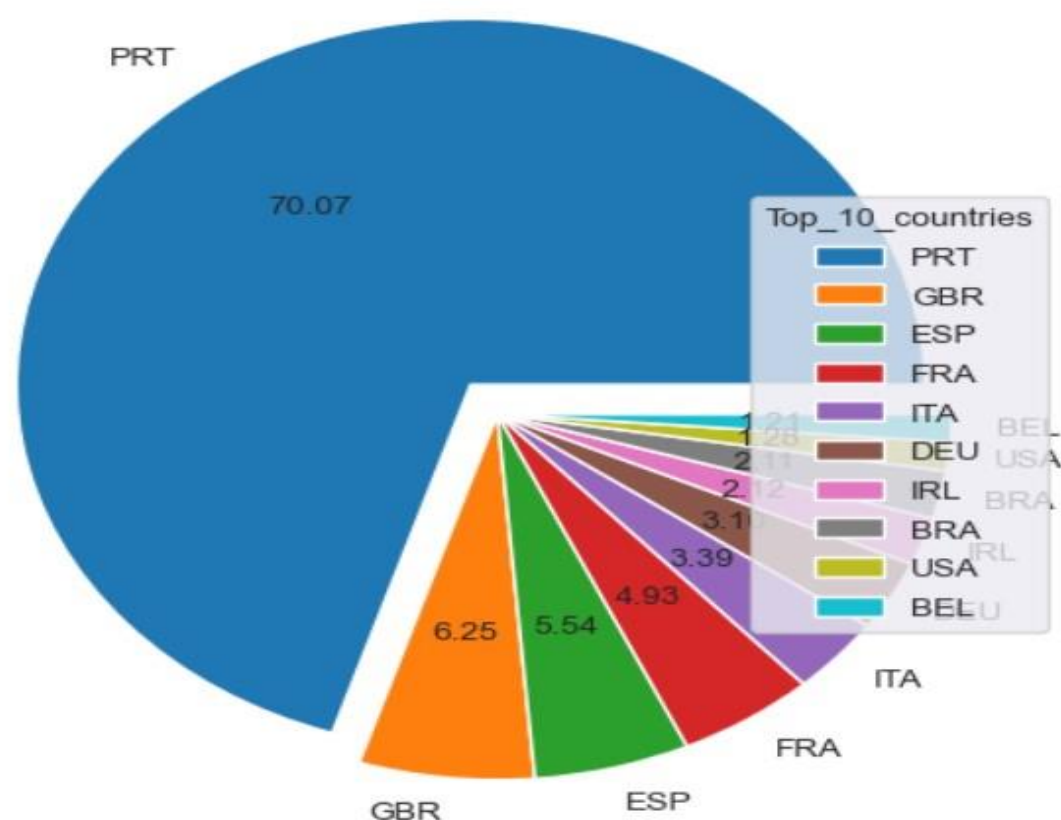


We have developed the grouped bar graph to analyze the months with the highest and lowest reservation levels according to reservation status , the no. of highest confirmed reservations is in the month of August and the lowest in the month of December where on other side the no. of highest cancelled reservations is in the month of January and lowest in the month of August and September.



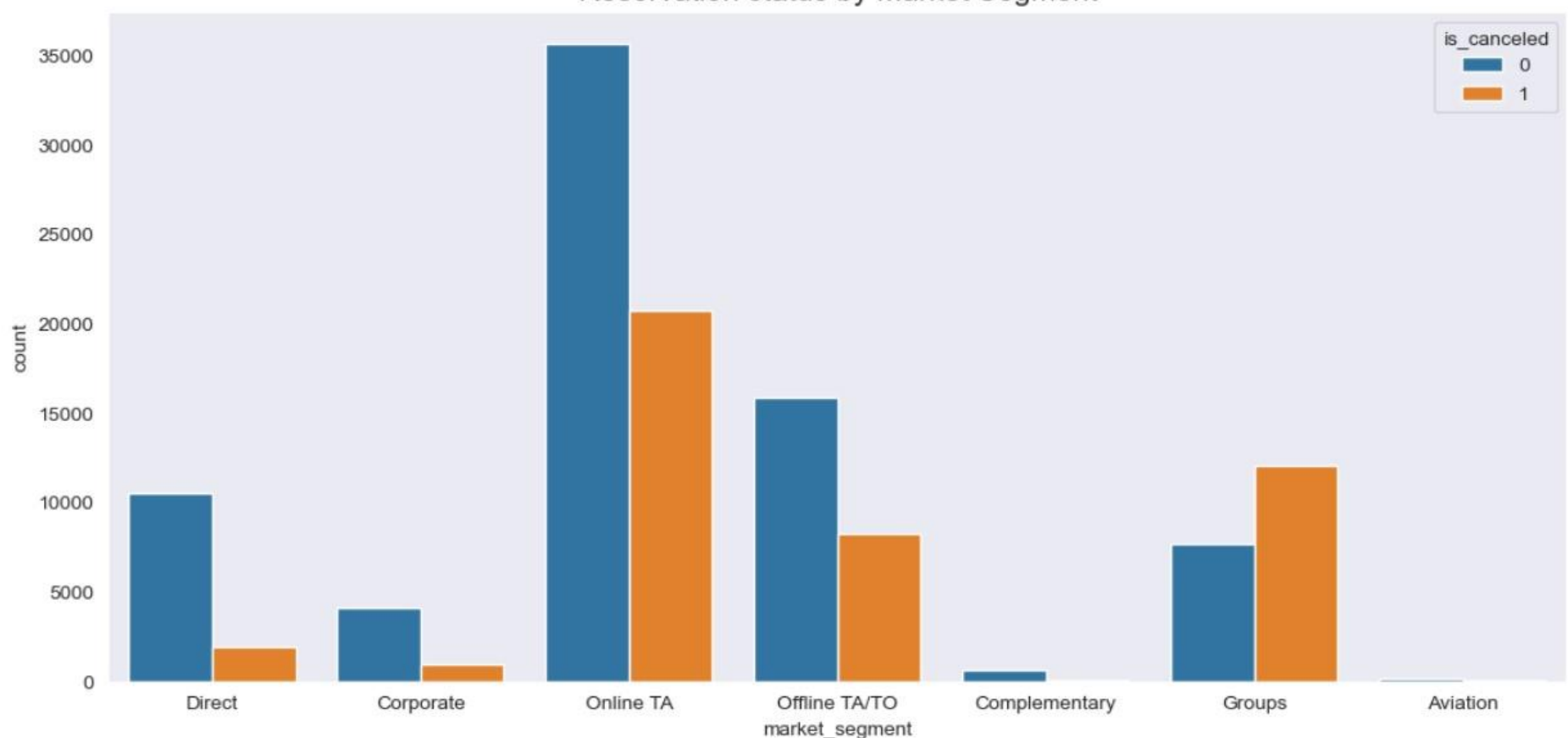


## Top 10 Countries by Reservations



From this Pie Chart we can analyze Top 10 country by Reservations according to the cancellations reservation, In Portugal (70.07%) the cancellaton is high, where In Belgium (1.21%) the cancellations is very less.

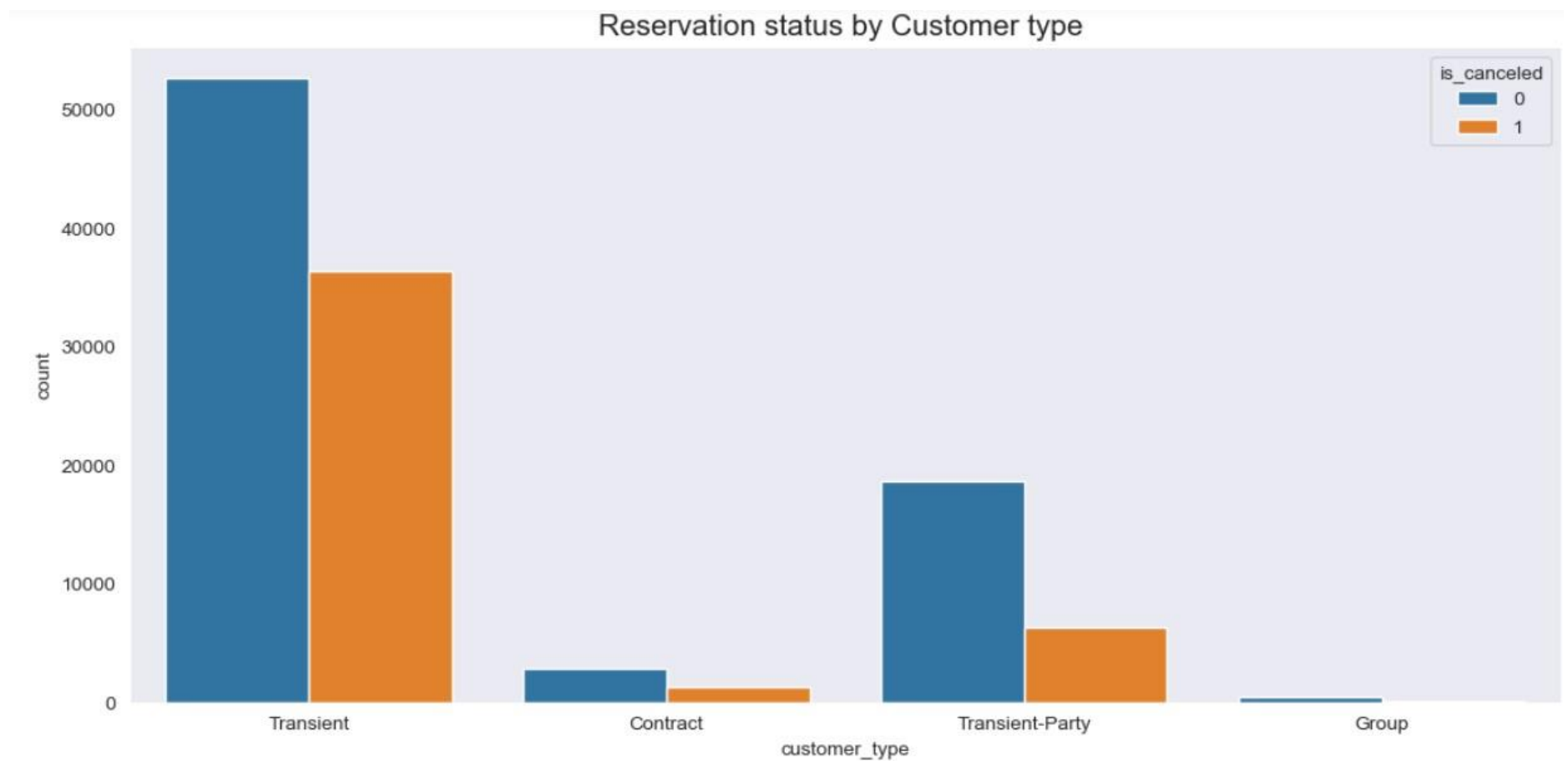
Reservation status by Market Segment



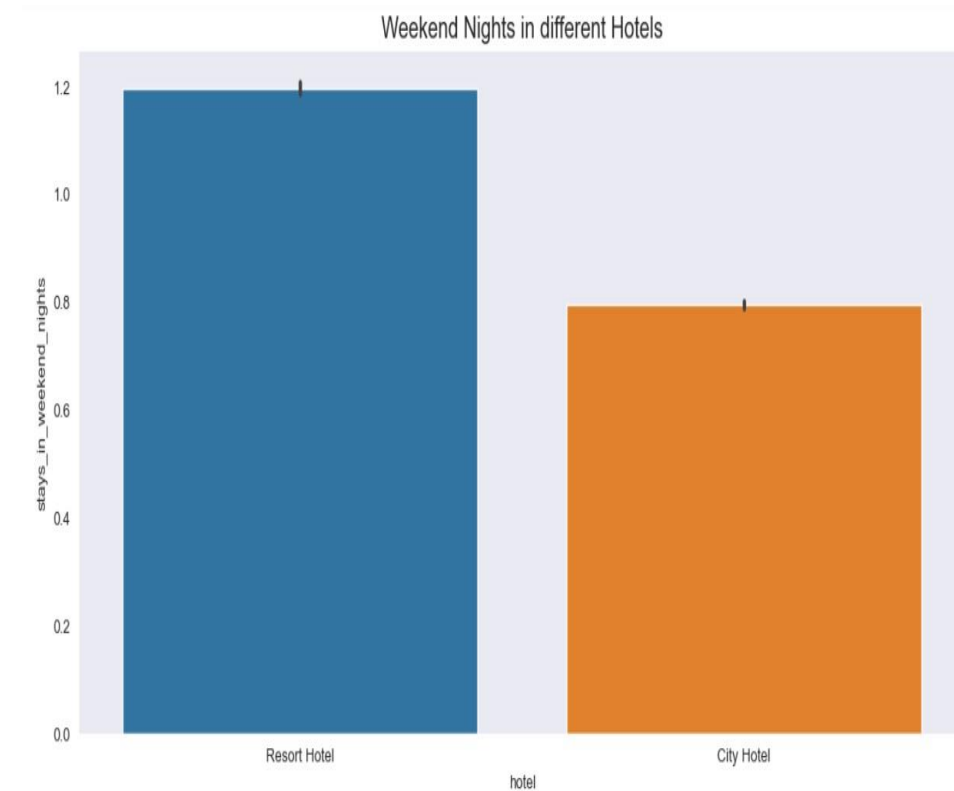
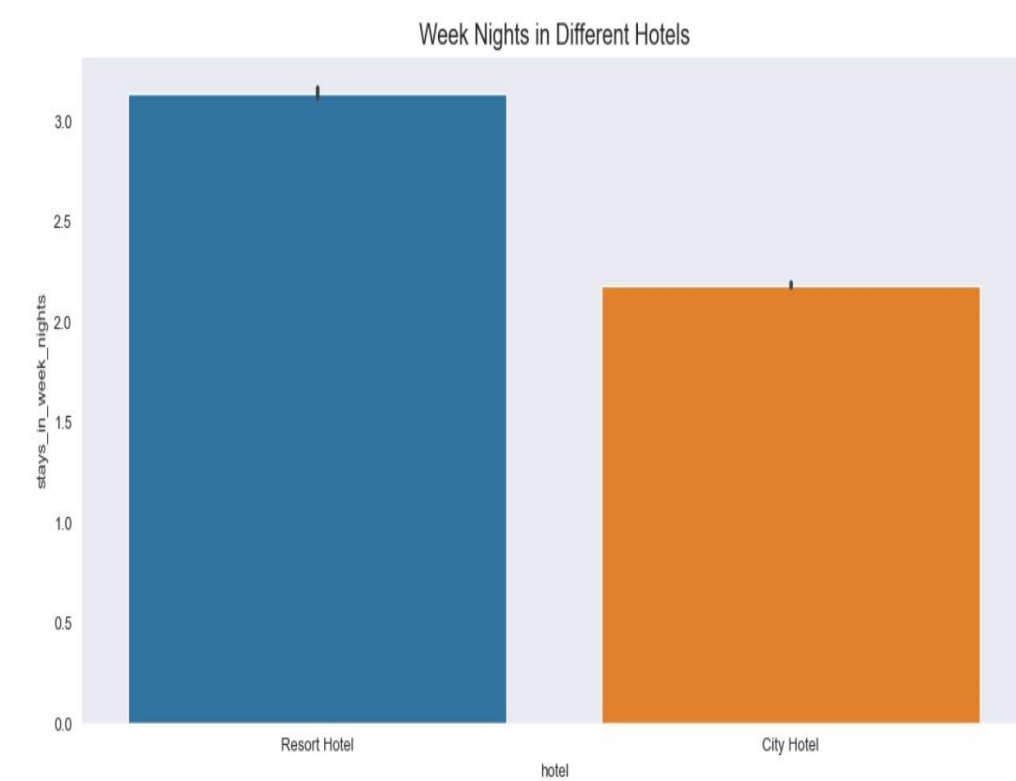
From count group chart analyze from where the guests are visiting the hotel and making reservations is it from direct or groups,online or offline?

Around 47% are booking from online travel agency which is the highest booking by segment and 20.31% from offline travel agent.

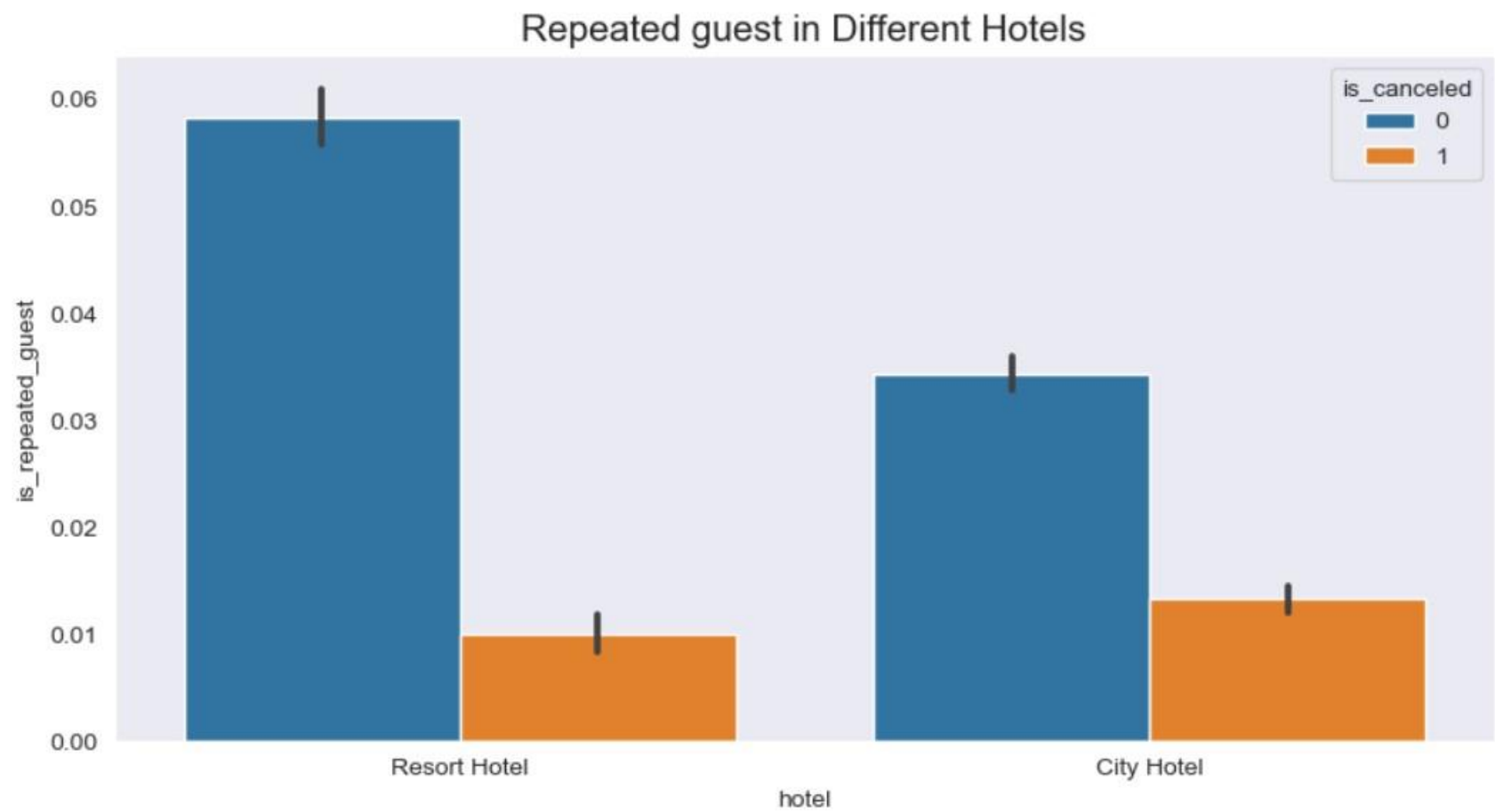
Where there are high cancellation reservations from online (46%) and by groups (27%).



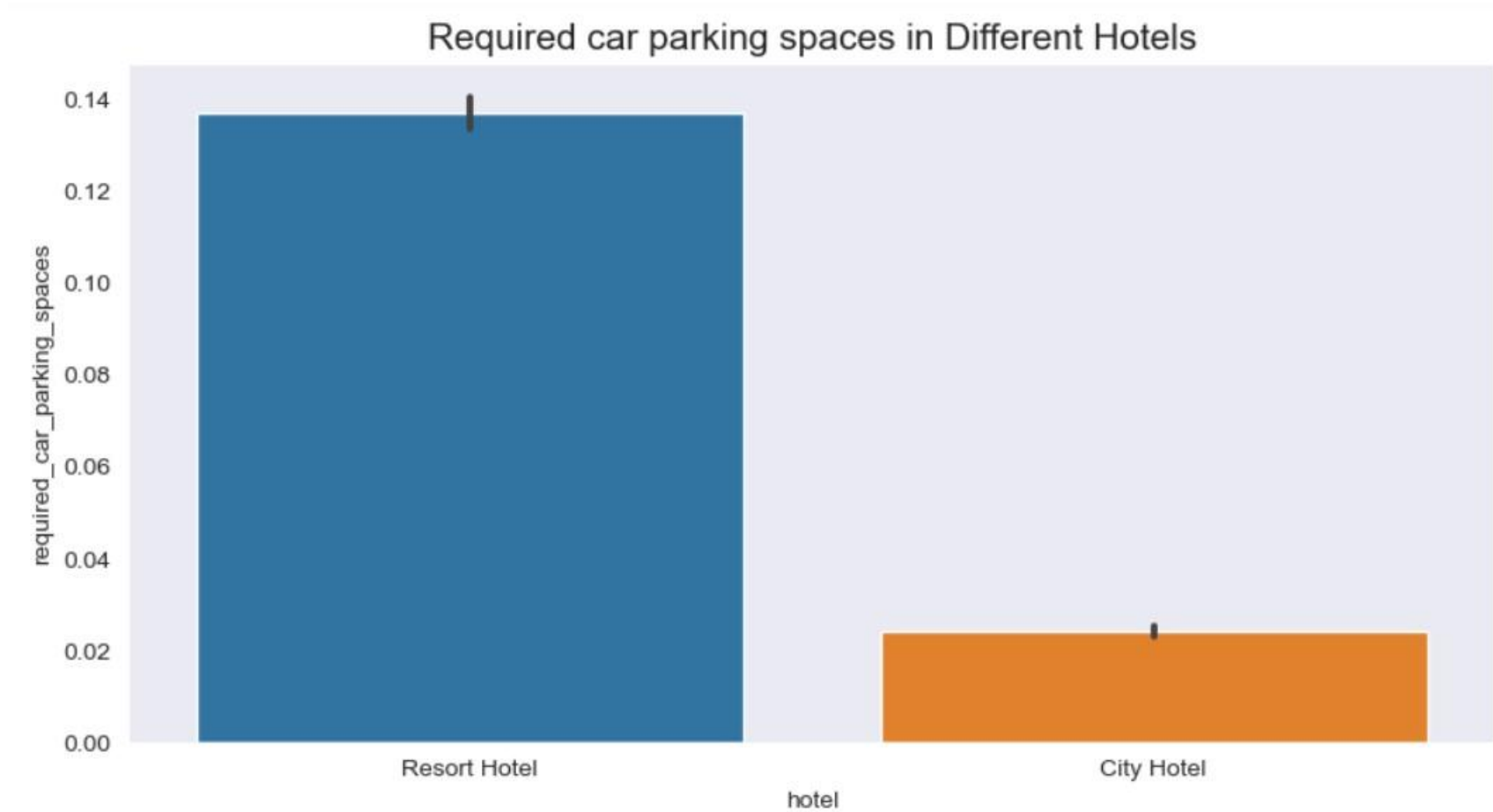
This graph shows the reservations by customer type, according to this visual we can say that the highest booking reservations are by transient, which means a customer who is temporarily traveling, and the lowest reservations are by groups. Further, there are cancellations which are highest in Transient and lowest in contract type of customers.



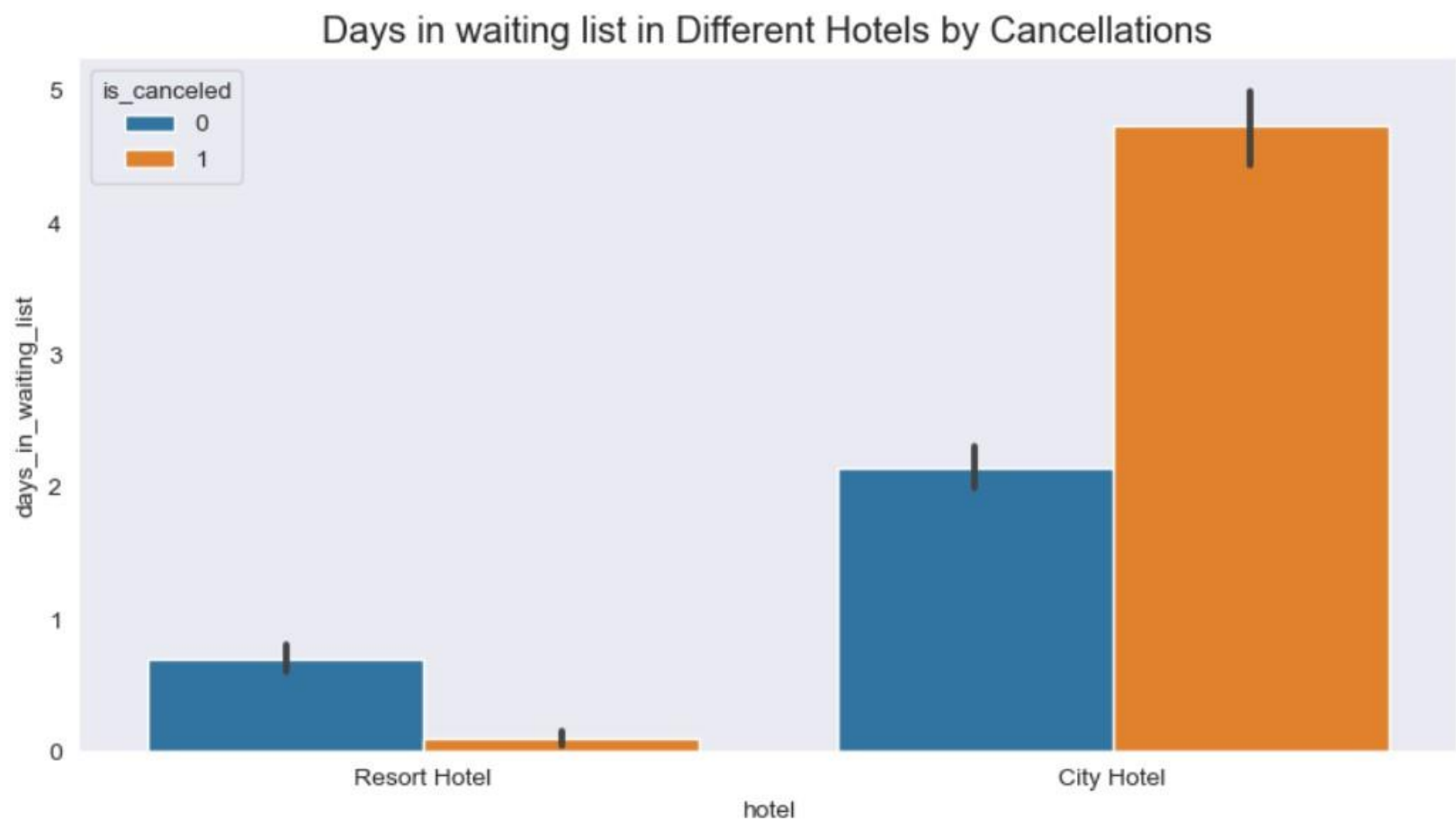
From these two bar graphs, which show week nights and weekend nights from different hotels, we can say that customers staying in resort hotels have higher stays in both week and weekend nights compared to city hotels.



From this Grouped bar graph we can analyse how many guests tend to stay in the same hotel regularly according to visuals the highest no. of regular guest stays in resort hotel other than city hotel.



Let's check in which hotel the car spacing required ? from these bar graph we can analyze that the resort hotel required no. of car spaces than city hotels.



This grouped bar graph shows that there are highest no. of waiting list in city hotel which tend to high cancellations where as in resort hotel it doesn't effect on its cancellations.

Suggestions :

1. Cancellations rises as the price does. in order to prevent cancellations of reservations ,hotels could work on their pricing strategies and try to lower their rates for specific hotels based on loactions. They can provide some discounts to the customers.
2. As the percentage of cancellations and not cancellation of the resort hotel is higher in the resort hotel than the city hotels. So the hotels should provide the reasonable discounts on the room price on weekdays or holidays.
3. In the month of January the hotels can start campaigning or marketing with a reasonable amount to increase there revenue as the cancellation is high in this month.
4. They can also increase the service of hotels in Portugal to increase the revenue as the cancellation of reservations are high in this country.