Data Analysis of Hotel Booking

Analysis and Findings

Reservation status count
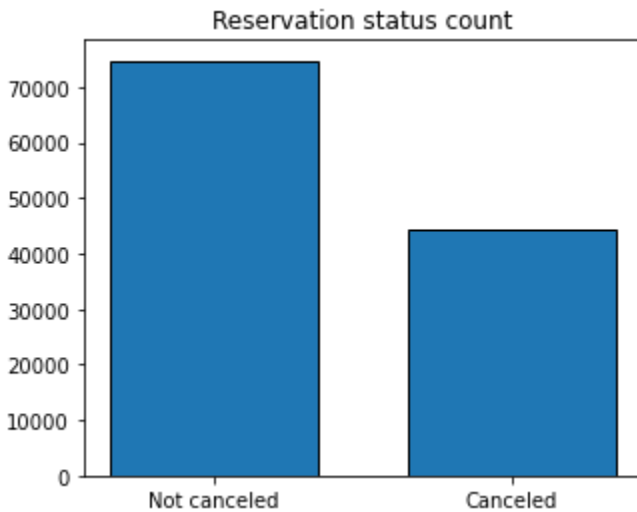
The bar graph provided illustrates the percentage of reservations that have been canceled and those that have not. The data reveals that a significant number of reservations remain unaffected. However, it is concerning that 37% of clients have canceled their reservations, which may have a substantial impact on the hotel's earnings.


Reservation status in different hotels
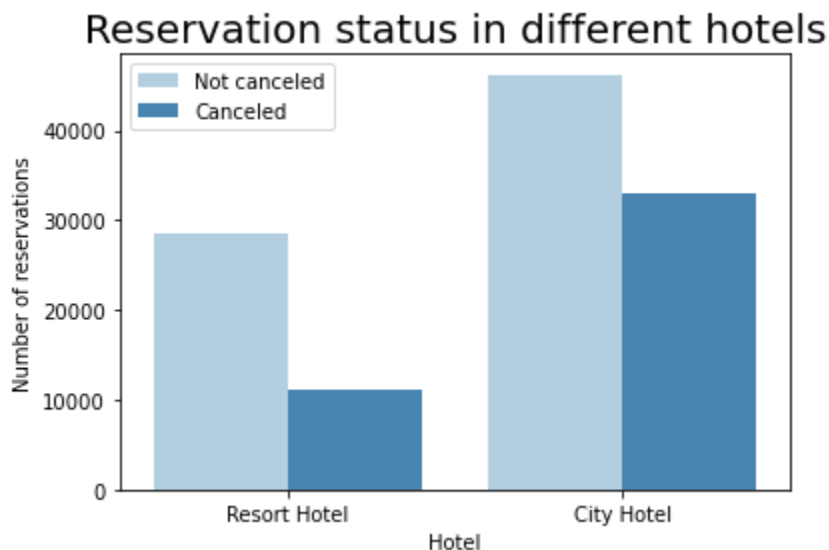
In comparison to resort hotels, city hotels have more bookings. It's possible that resort hotels are more expensive than those in cities.

Average Daily rate in City and Resort Hotel
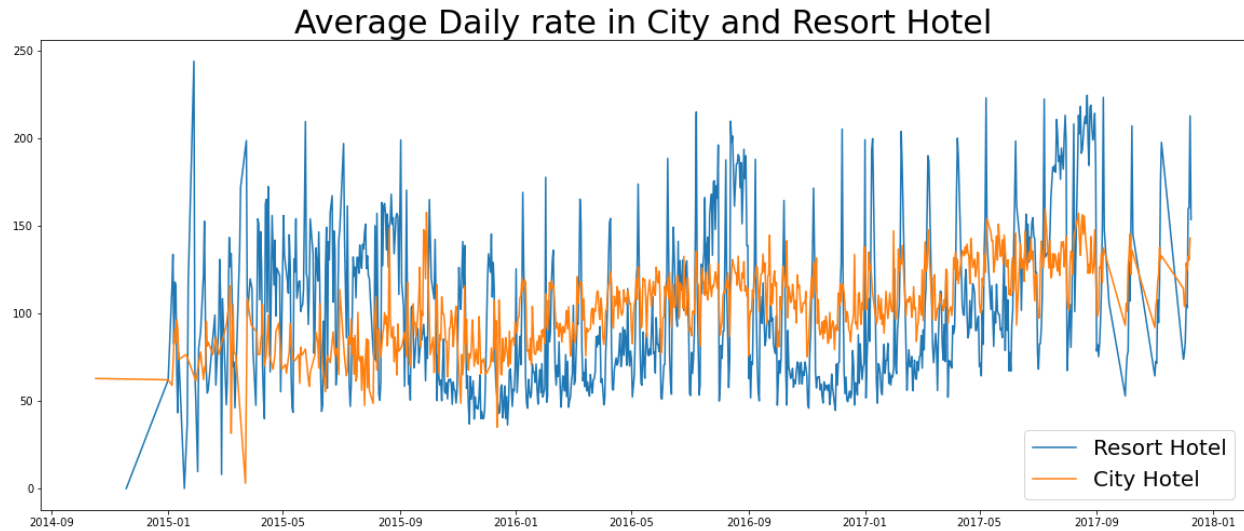
The line graph above presents an interesting comparison between the average daily rates of city hotels and resort hotels. It reveals that some days the rates of city hotels are lower than resort hotels, while on other days, the difference is even more significant. However, it is important to keep in mind that resort hotels may charge higher rates during weekends and holidays due to increased demand.

Reservation status per month
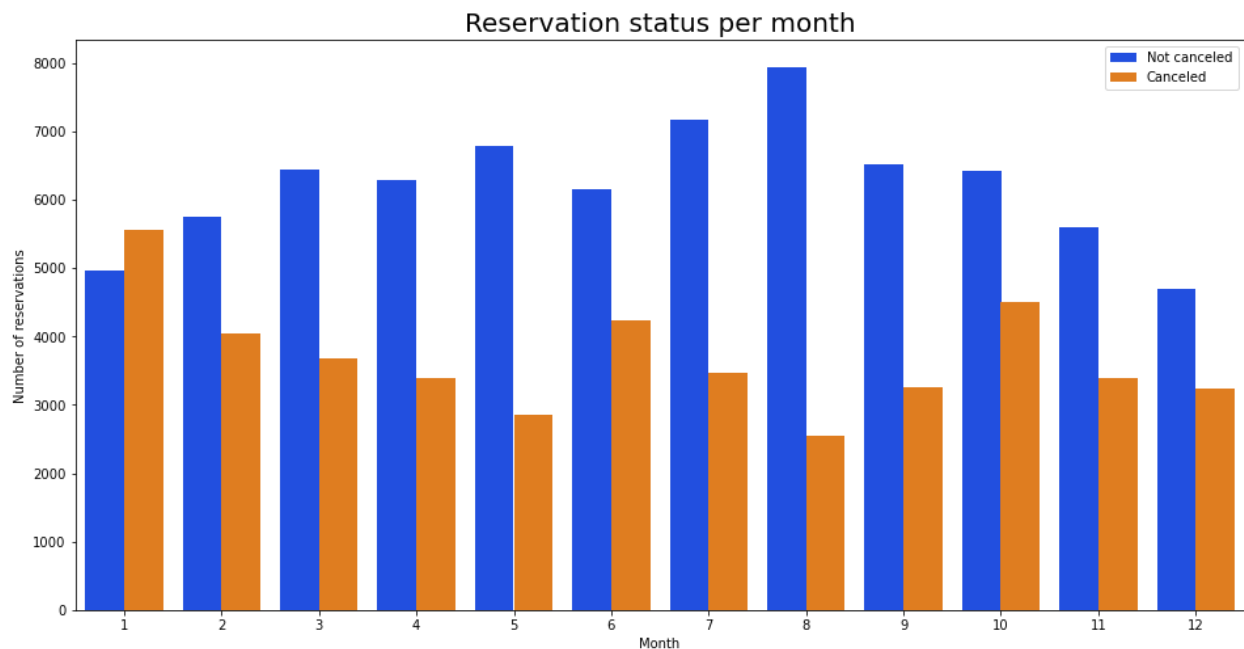
We've created a grouped bar graph to study the reservation levels for different months based on their status. It's evident that August has the highest number of both confirmed and canceled reservations. However, January stands out as the month with the most number of canceled reservations, even though the overall reservation levels are relatively lower.

ADR Per Month
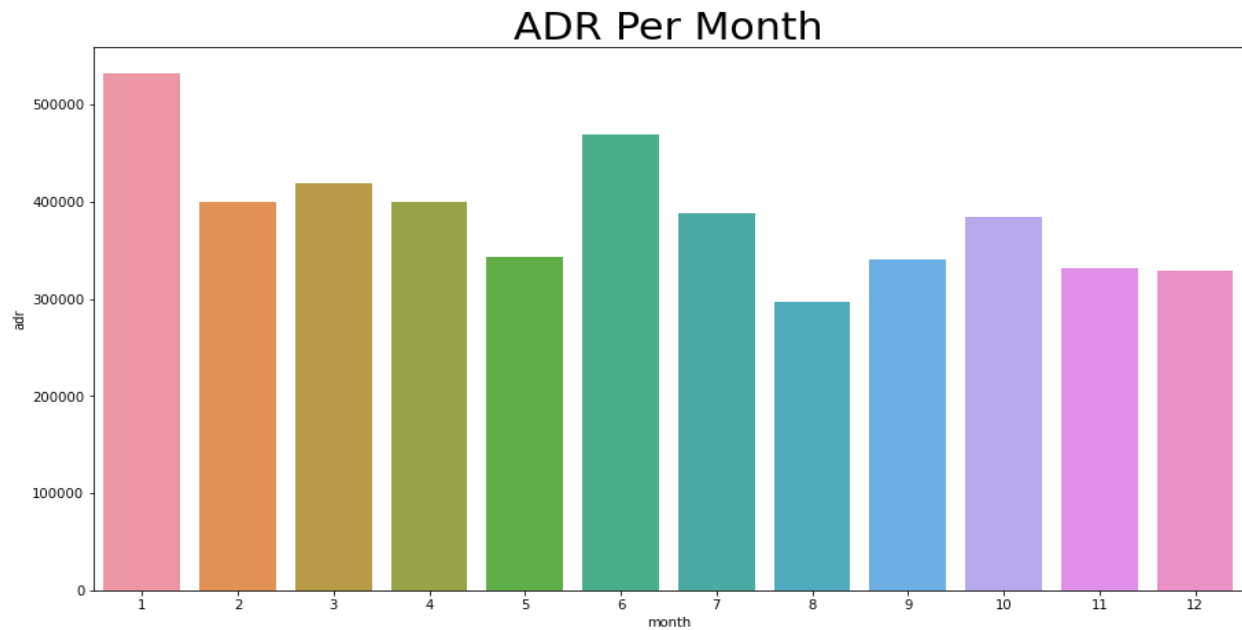
The bar graph above provides valuable insights on the correlation between cancellation rates and accommodation prices. It clearly shows that the higher the price of the accommodation, the more likely it is to be canceled, and vice versa. This suggests that the cost of the reservation plays a significant role in a client's decision to cancel.

Additionally, we also investigated which country had the highest number of reservation cancellations. Portugal emerged as the top country with the highest number of cancellations.

Top 10 countries with Reservation canceled
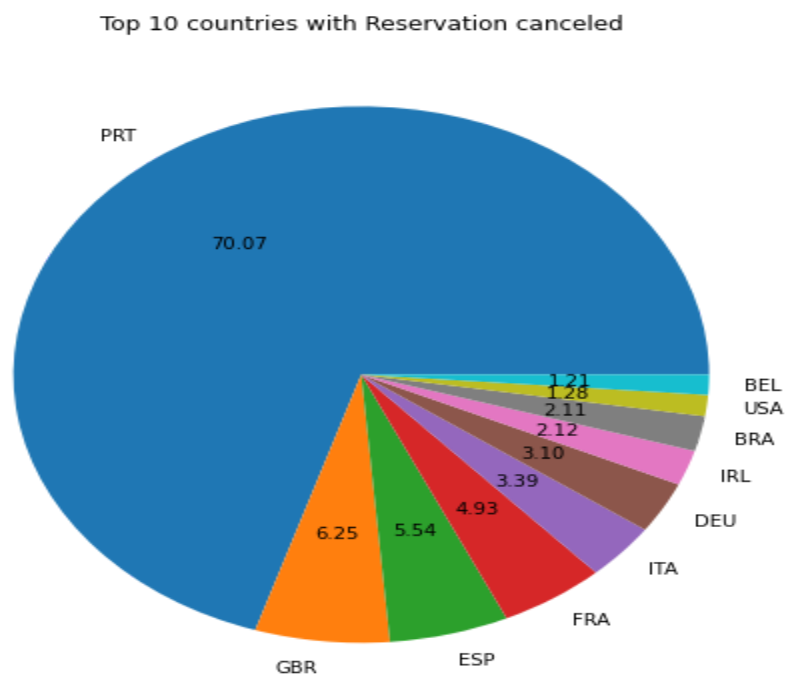
Let's take a look at where the hotel's guests are coming from to make reservations. Are they coming directly or through groups, online or offline travel agents? Based on the data, it appears that the majority of clients, about 46%, make their reservations through online travel agencies. Meanwhile, around 27% of clients come through groups, and only 4% of clients book their hotels directly by visiting the hotels themselves. This information helps to understand the booking behavior of the hotel's guests and can assist in developing marketing strategies for future bookings.
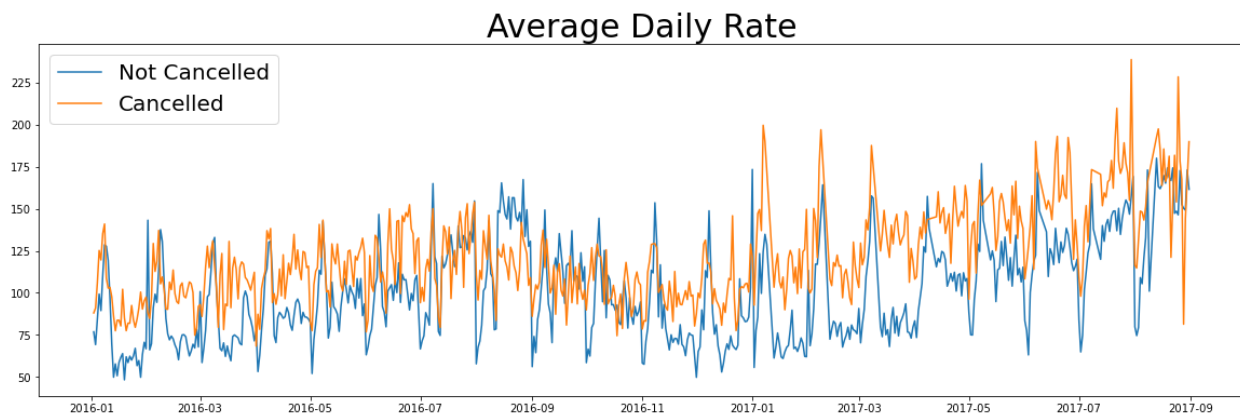
The graph above provides strong evidence to support our earlier analysis, that reservations are more likely to be canceled when the average daily rate is high. This confirms that higher prices are indeed a major contributing factor to cancellations.

Suggestions

1. The data analysis highlights that higher prices lead to higher cancellation rates for hotel reservations. To address this issue, hotels can consider implementing pricing strategies that involve lowering rates for specific hotels based on their location. Additionally, offering discounts to customers could help prevent cancellations.
2. Furthermore, the cancellation ratio is higher for resort hotels than for city hotels. To address this, hotels can offer reasonable discounts on room prices during weekends and holidays to encourage customers to book with them.
3. In January, hotels can also run campaigns or marketing efforts with reasonable discounts to increase revenue, as this is the month with the highest cancellation rate.
4. To further reduce cancellation rates, hotels can improve the quality of their hotels and services, especially in Portugal, the country with the highest cancellation rate. By taking these steps, hotels can improve their reputation and increase customer loyalty, resulting in higher revenue in the long run.