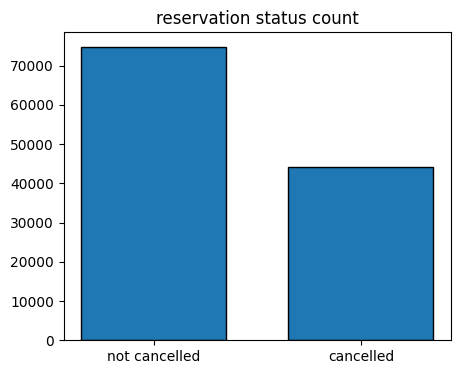
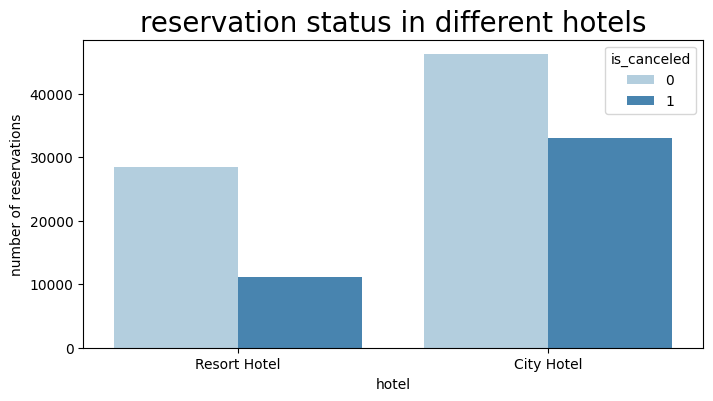
**Report**

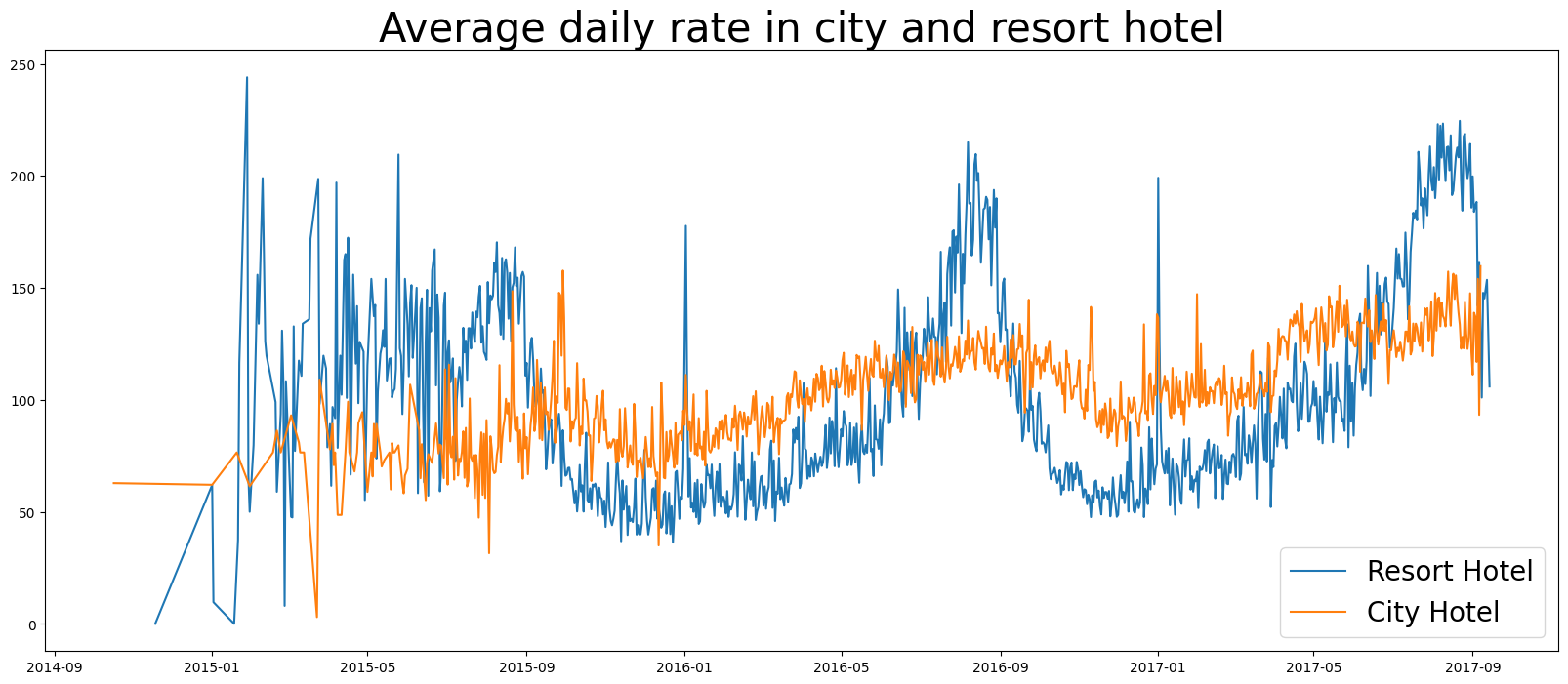
**Analysis and findings**



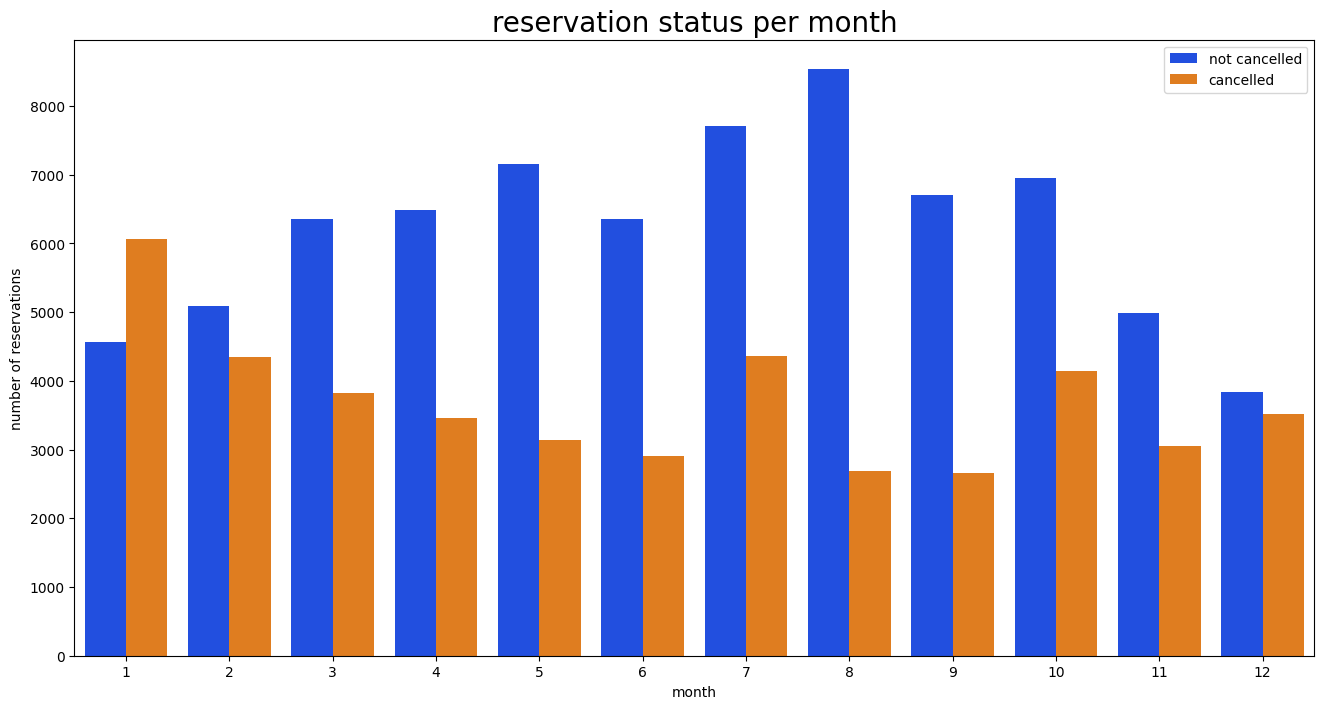
* The accompanying bar graph shows the percentage of reservations that are cancelled and those that are not. It is obvious that there are still a significant number of reservations that have not been cancelled. There are still 37% of clients who cancelled their reservation, which has a significant impact on the hotels' earnings.



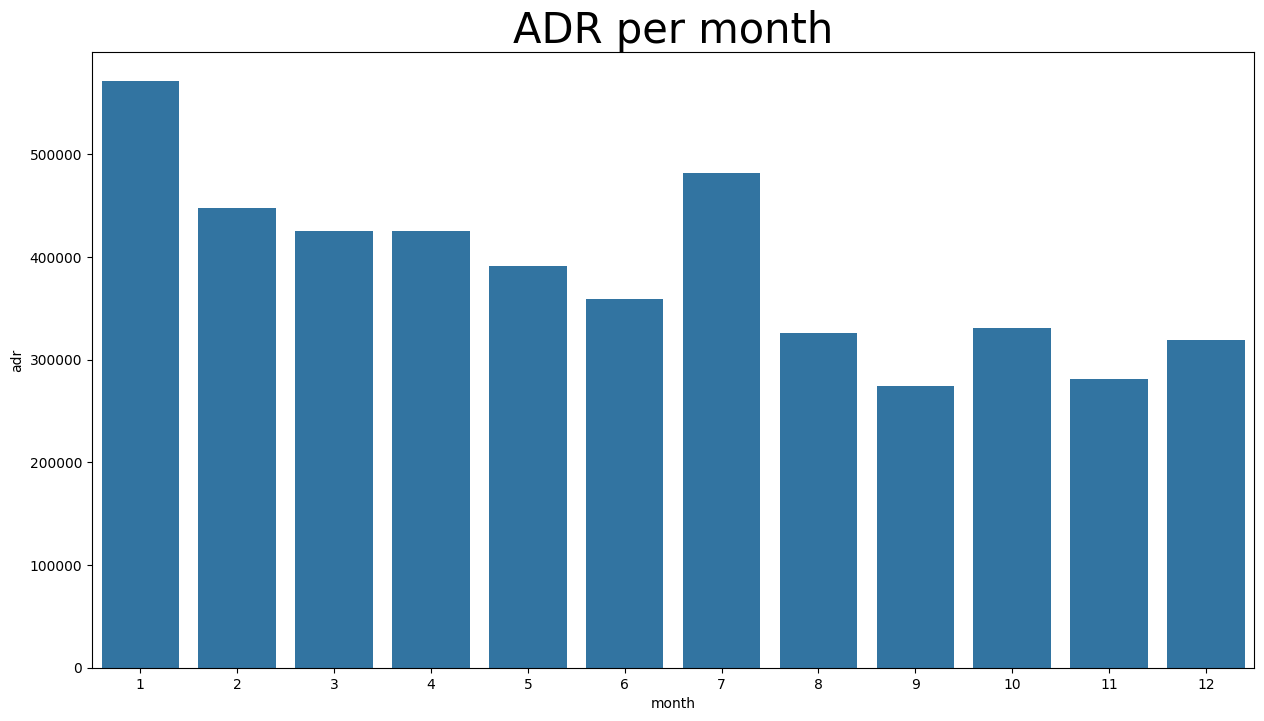
* In comparison to resort hotels, city hotels have more bookings. It's possible that resort hotels are more expensive than those in cities.
* The bar graph shows a significantly higher number of "not cancelled" reservations compared to "cancelled" reservations for both Resort Hotel and City Hotel. City Hotel also has a higher number of total reservations compared to Resort Hotel.



* The line graph shows the Average Daily Rate (ADR) for both Resort Hotel and City Hotel fluctuating over time. The x-axis represents time, spanning from approximately September 2016 to September 2018. The y-axis represents the ADR, but the specific numerical values are not clearly legible.
* 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.
* It appears that the ADR for Resort Hotel is generally higher than the ADR for City Hotel throughout the observed period. Both lines show a similar pattern of peaks and valleys, indicating potential seasonal or event-driven variations in pricing.

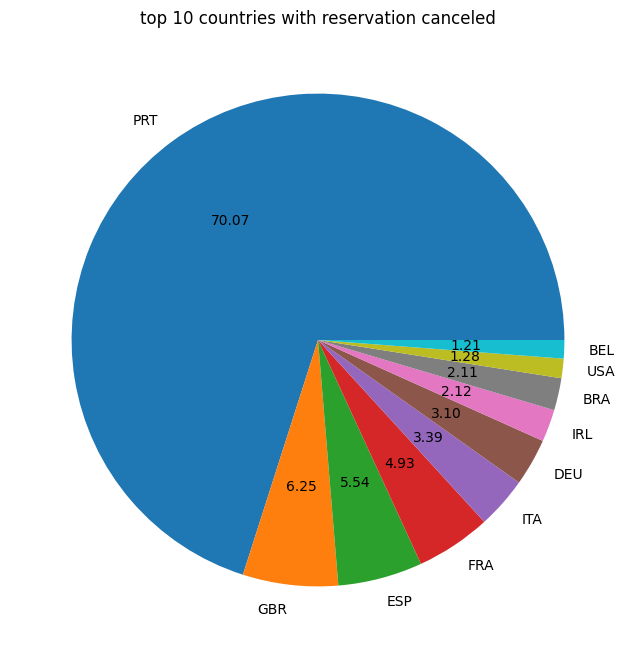


* We have developed the grouped bar graph to analyze the months with the highest and lowest reservation levels according to reservation status. As can be seen, both the number of confirmed reservations and the number of cancelled reservations are largest in the month of August, whereas January is the month with the most cancelled reservations.

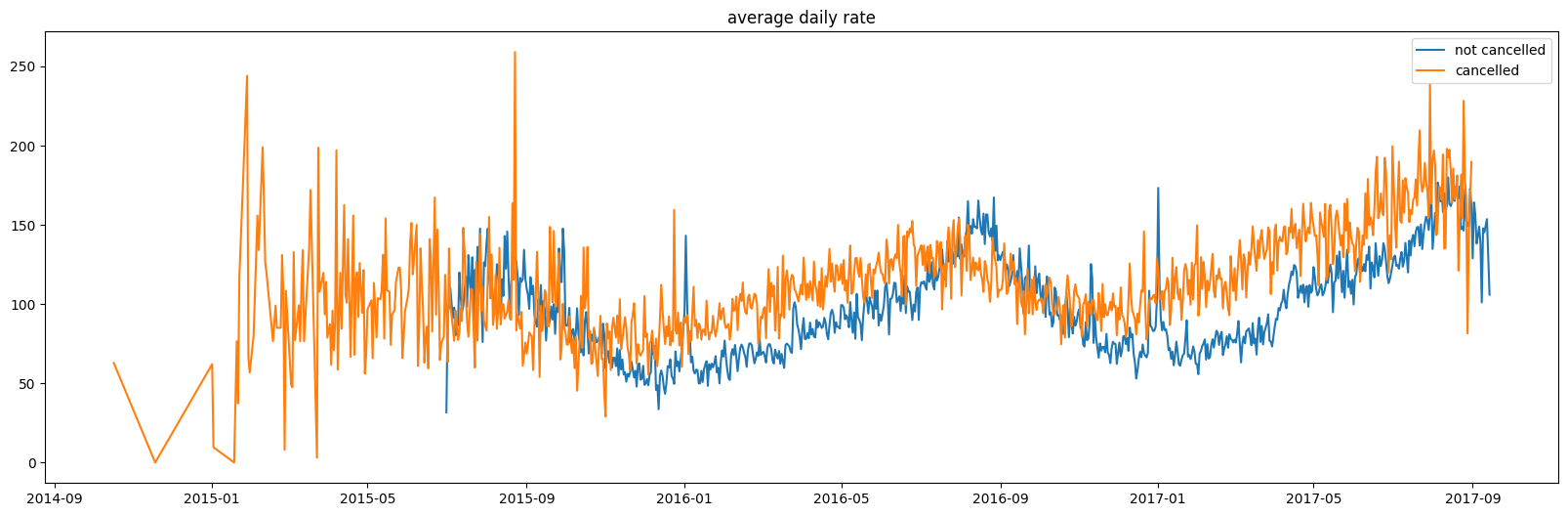


* This bar graph demonstrates that cancellations are most common when prices are greatest and are least common when they are lowest. Therefore, the cost of the accommodation is solely responsible for the cancellation.

Now, let's see which country has the highest reservation cancelled. The top country is Portugal with the highest number of cancellations.



* Let's check the area from where guests are visiting the hotels and making reservations. Is it coming from Direct or Groups, Online or Offline Travel Agents? Around 46% of the clients come from online travel agencies, whereas 27% come from groups. Only 4% of clients book hotels directly by visiting them and making reservations.



As seen in the graph, reservations are cancelled when the average daily rate is higher than when it is not cancelled. It clearly proves all the above analysis, that the higher price leads to higher cancellation.

**Suggestions**

* Cancellation rates rise as the price does. In order to prevent cancellations of reservations, hotels could work on their pricing strategies and try to lower the rates for specific hotels based on locations. They can also provide some discounts to the consumers.
* As the ratio of the cancellation and not cancellation of the resort hotel is higher in the resort hotel than the city hotels. So, the hotels should provide a reasonable discount on the room prices on weekends or on holidays.
* In the month of January, hotels can start campaigns or marketing with a reasonable amount to increase their revenue as the cancellation is the highest in this month.
* They can also increase the quality of their hotels and their services mainly in Portugal to reduce the cancellation rate.