Hotel Booking Cancelations in Lisbon, Portugal

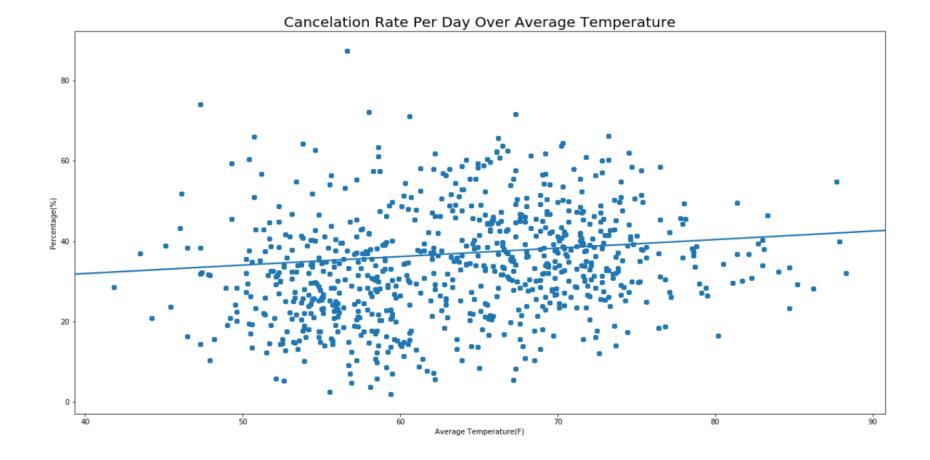
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Problem

• What are some of the elements that are affecting the cancelation of a hotel reservation?

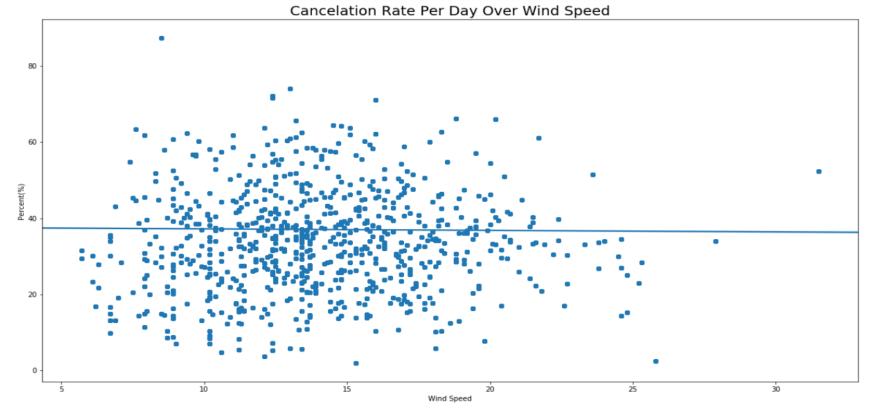
Hypotheses

- 1. More extreme weather will affect the cancelation of a hotel reservations
 - Temperature
 - Wind Speed
- 2. People from certain country tend to cancel their hotel reservation than others
- 3. Clients that canceled previously is very likely to cancel again.



Weather: Average Temperature

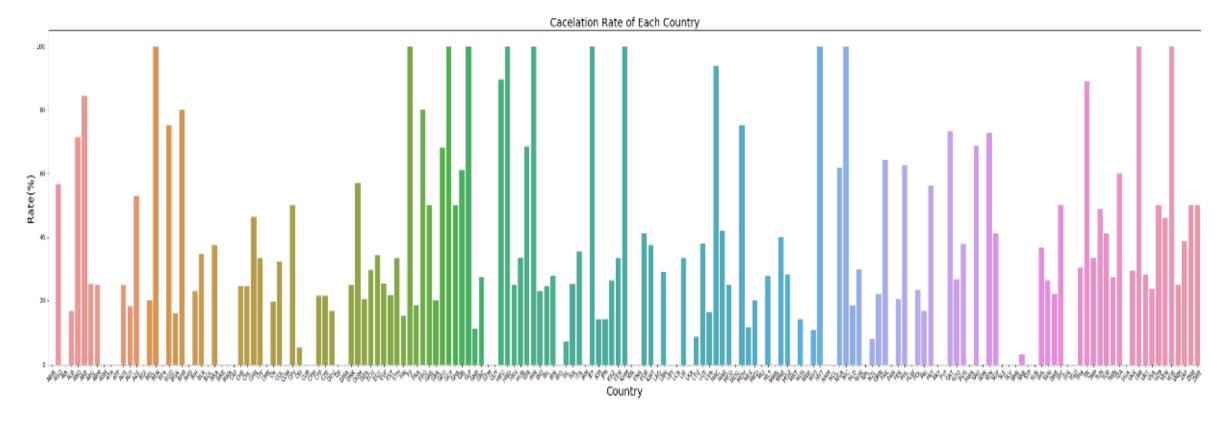
As we can see above, average temperature has a positive correlation with cancelation rate. As temperature increases, the cancelation rate increases.



Weather: Wind Speed

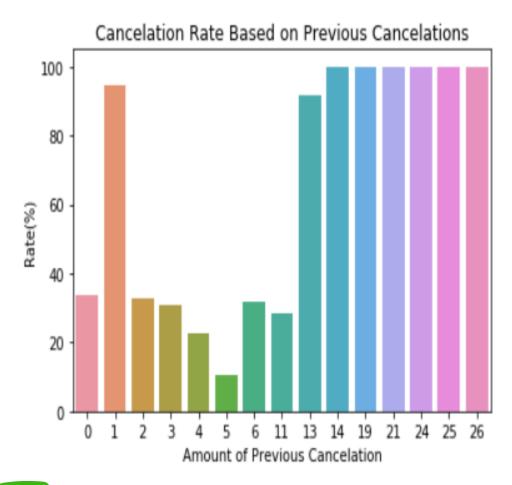
From the graph above, wind speed and cancelation rate has a flat to negative regression line. This tells us that there is not much correlation between wind speed and rate of cancelation.

Country



The graph shows the rate of cancelation based on the country. We should watch out for countries that have 100% rate of cancelling.

Status of Previous Appointments



From the graph we can conclude that people with 14 or more time of cancelation records have 100% chance of cancelling again. Moreover, people who canceled 1 time and 13 times before are also extremely likely to cancel their reservation.

Further Question

• Why is that people canceled once has high chance of canceling compare to people canceled 2-11 times? Shouldn't the rate of canceling illustrate a log curve?