Predicting hotel
booking
cancellations and
analyzing the hotel
reservations

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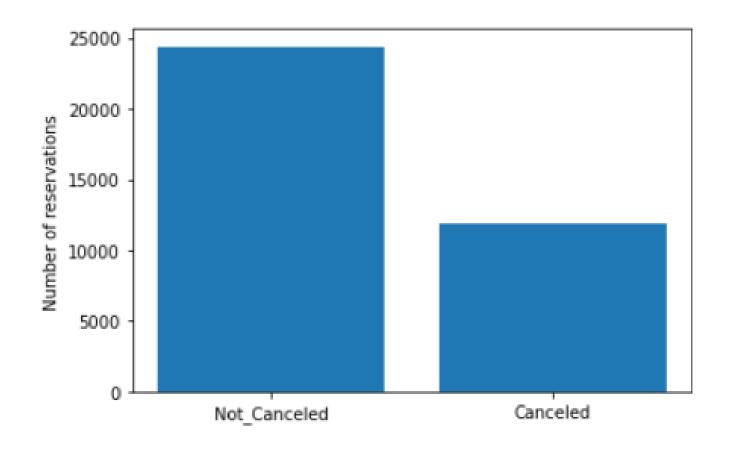
Hotels thrive on reservations. There is a lot of data on how these reservations are made, this data can be analyzed to manage the properties in effective manner. One of the main problems the hotels face is that the reservations are cancelled, if we can predict if a reservation can be cancelled, the hotels can better manage rooms and forecast revenue as well.

For example, dummy reservations are made by people who are uncertain about their stay, these reservations can be filtered out so that there is no loss of potential revenue.

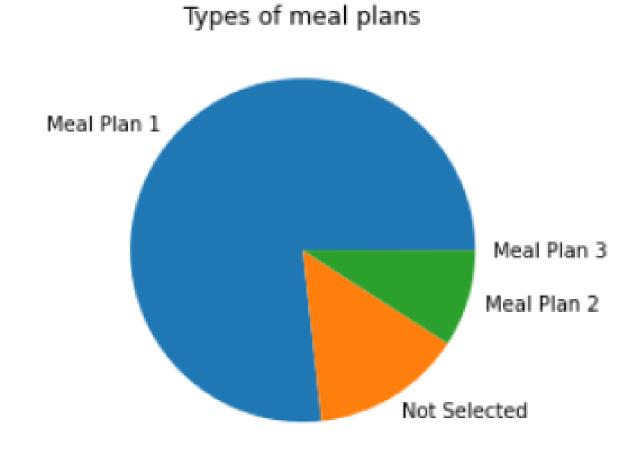
If the type of reservations that are more profitable can be found out, those kind of reservations can be given high priority as well.

SAMPLE PLOTS

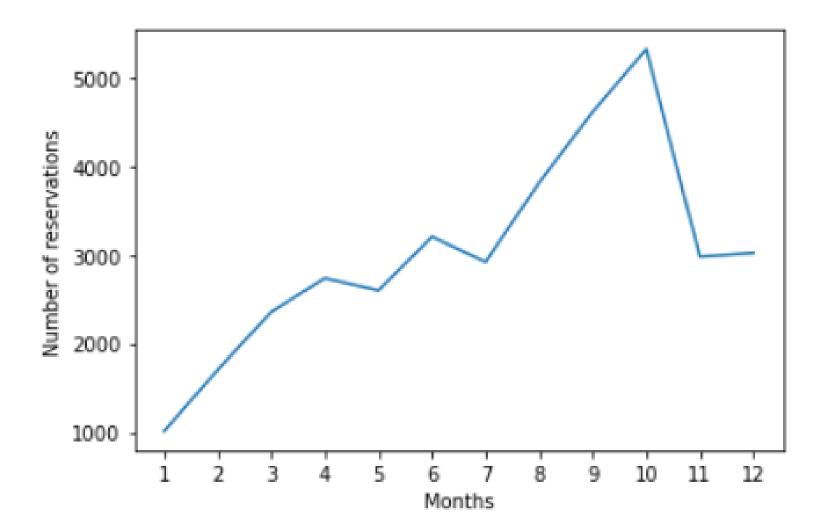
Number of cancelled and non cancelled reservations



Types of meal plans choose by the guests



Variation of reservations with month



- All these plots are made using pandas.
- I will try to do these on spark.
- These are very simple plots made using basic techniques, I will try to make more plots which are interactive and has meaningful information.

CONCLUSION

My main intention with the project is to find if a reservation will be cancelled or not, at the same time, I would also do a little of exploratory data analysis as well.

This is my first time working with spark, but I will try my level best to integrate spark in this project After today's class, I would also try to do regression in spark ml.