Hotel Booking Analysis

EDA for the fulfillment of the Capstone project for Module1

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Objective

Out main objective is perform EDA on the given dataset and draw useful conclusions about general trends in hotel bookings and how factors governing hotel bookings interact with each other.

Processing of Data

Dataset description and Analysis



Cleaning of the data



Data Analysis



Data Visualization

Dataset description and Analysis

Shape of the Data is 119390 Rows and 32 Columns which include information like Hotel type, Customer type, Monthly bookings, Agent, Company and many more.

This is raw data and now we need to clean the data in next step

<u>Cleaning the Data</u>

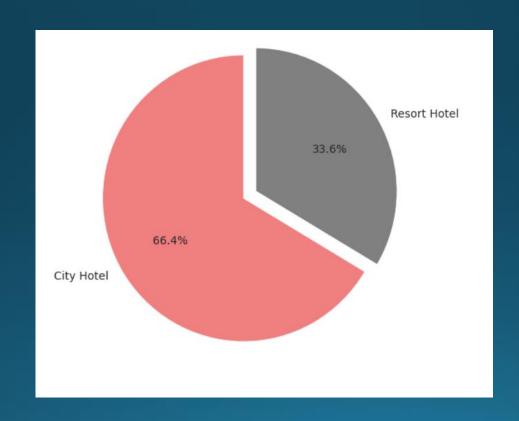
Garbage in, Garbage out.

Data cleaning is the process of fixing or removing incorrect, corrupted, incorrectly formatted, duplicate, or incomplete data within a dataset. When combining multiple data sources, there are many opportunities for data to be duplicated or mislabeled.

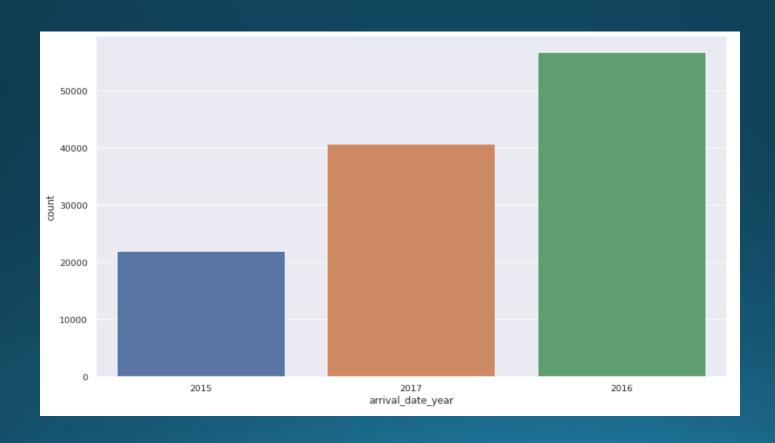
Evaluate the data

- In this part of the data processing we analyze the data with the use of python and make various findings.
- We use these findings to in the benefit of our business.

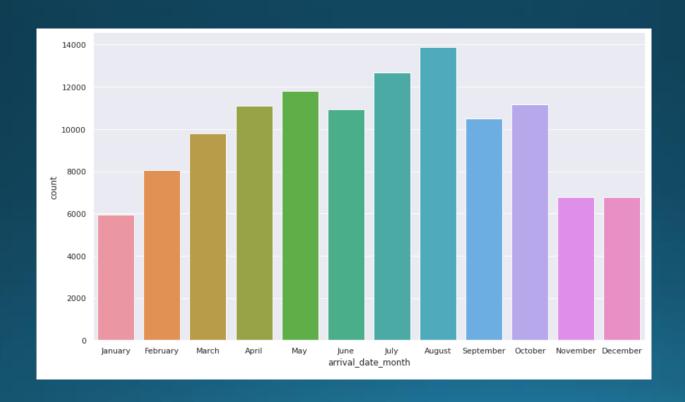
Type of Hotels

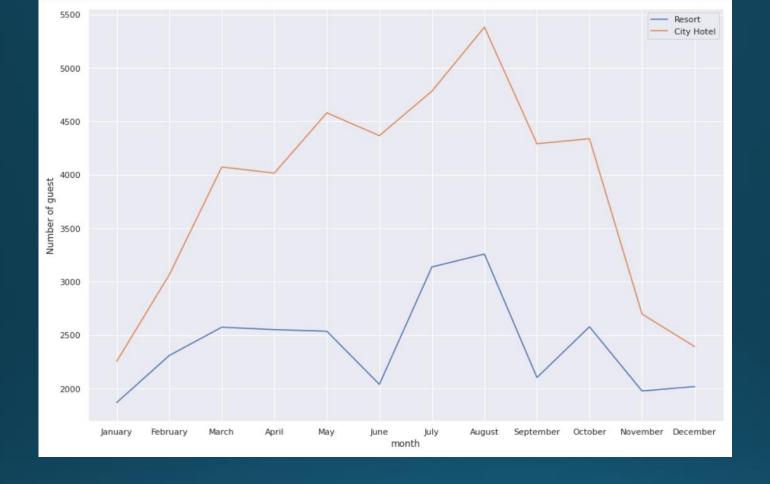


The number of customers arrived in given years

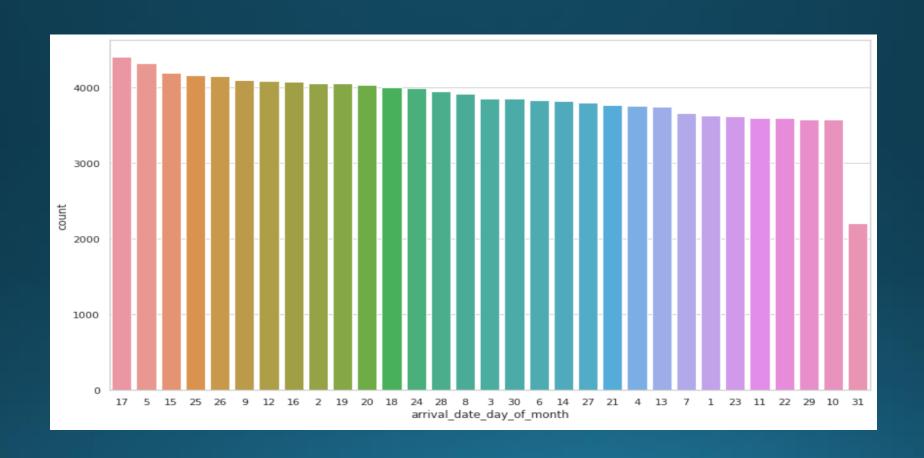


Which is the busiest month for hotel?





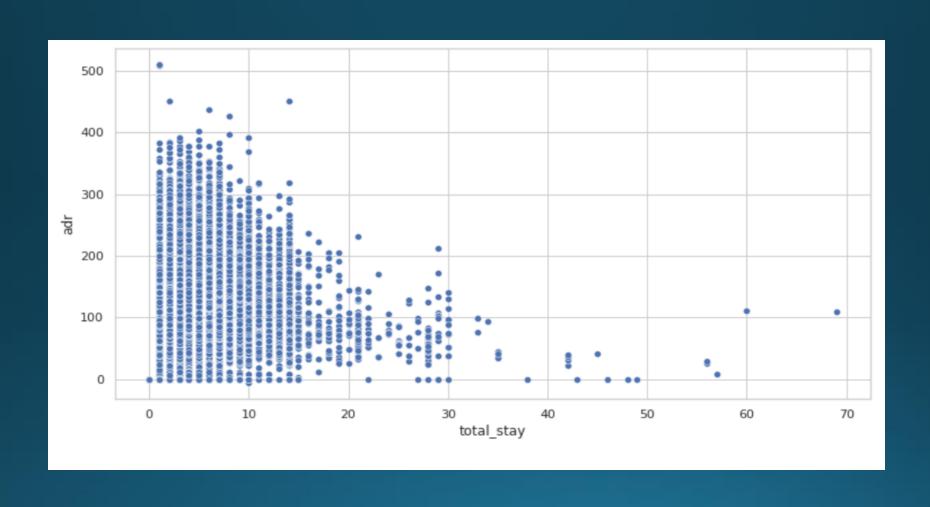
At which date the more customers arrive?



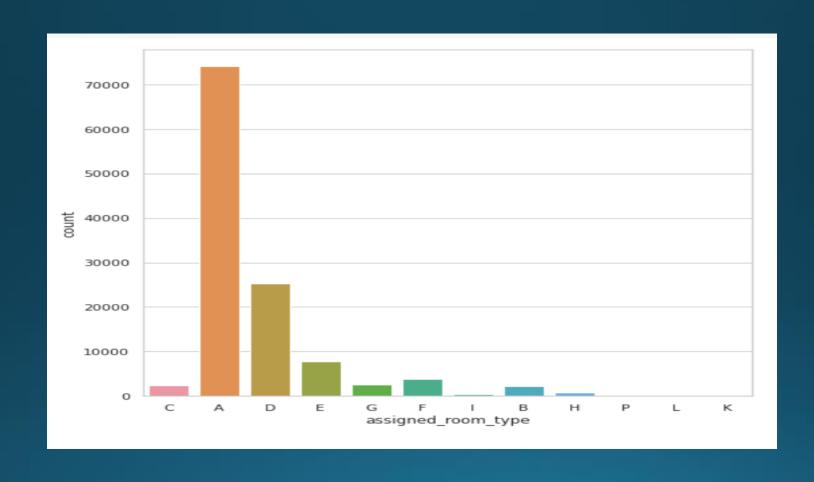
Type of payments customer prefer



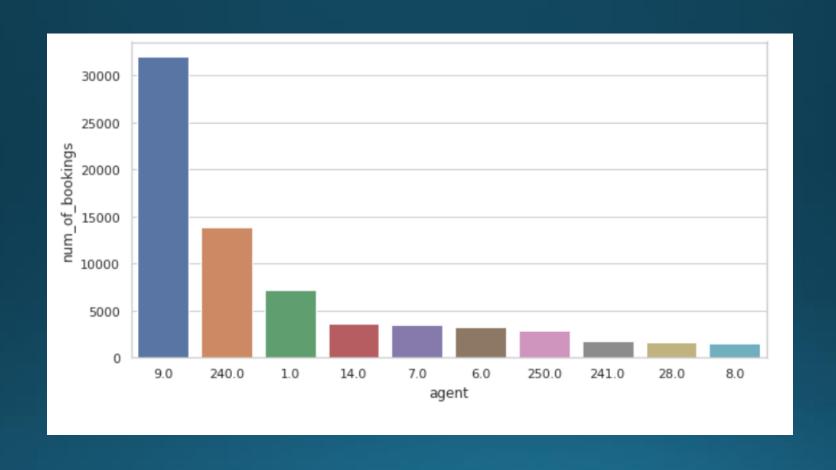
How Long People Stay in the hotel?



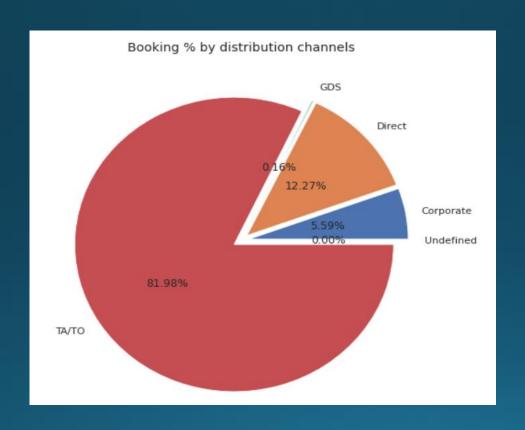
The most booked Room type by the customers



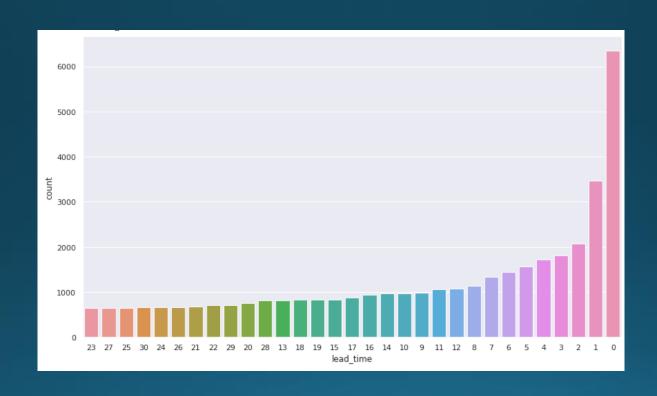
Which agent has maximum bookings?



The most common channel for booking hotels



How many days prior customers book hotel?



What we analyzed from the data?

- City Hotel are more as compared to the Resort Hotel
- Transient type of customers are more as compared to others.
- Most number of customer arrived in 2016 followed by year 2017, and 2015 respectively.
- August has the maximum number of customer arrival followed by July ans May.
- January has least number of customer arrival.
- Most customers arrived at 17th of the month.
- Most of the customers don't deposit any amount before.
- Most demanded room type is A.
- Most common stay length is less than 4 days and generally people prefer City hotel for short stay, but for long stays, Resort Hotel is preferred.
- Agent 9 has the maximum bookings.
- TA/TO most common channel for booking hotels1.
- TA/TO has highest booking cancellation %.13.
- Most of the customers book hotels immediately or 1-6 days prior

THANKYOU