Analyzing Swiggy

Wireframe Documentation

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Analysis:

As per the problem statement, we have defined the several Use Cases to perform the analysis on which helps in not only understanding the meaningful relationships between attributes but it also allows us to do our own research and come-up with our findings.

Basic Information:

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<class 'pandas.core.frame.DataFrame'>
Int64Index: 117 entries, 0 to 117
Data columns (total 7 columns):
 #   Column              Non-Null Count  Dtype
---  ------              --------------  -----
 0   shop_name           117 non-null    object
 1   cuisine             117 non-null    object
 2   location            117 non-null    object
 3   rating              117 non-null    float64
 4   cost_for_two        117 non-null    int64
 5   avg_cost_per_person 117 non-null    float64
 6   cost_category       117 non-null    object
dtypes: float64(2), int64(1), object(4)
memory usage: 7.3+ KB
None
```

The project analyzed the data of food delivery service provider, Swiggy, in Bangalore. The dataset used in this project was obtained from Google Drive and consisted of information about restaurants in Bangalore, their cuisines, ratings, and costs.

TOP 5 ROWS OF THE DATA:

```
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           shop_name                                            cuisine  \
0       Kanti Sweets                                             Sweets
1      Mumbai Tiffin                 North Indian, Home Food, Thalis, Combo
2  Sri Krishna sagar  South Indian, North Indian, Fast Food, Beverag...
3           Al Daaz  American, Arabian, Chinese, Desserts, Fast Foo...
4      Beijing Bites                                      Chinese, Thai

                  location  rating  cost_for_two  avg_cost_per_person  \
0  Koramangala, Koramangala     4.3           150                 75.0
1            Sector 5, HSR     4.4           400                200.0
2    6th Block, Koramangala     4.1           126                 63.0
3                HSR, HSR     4.4           400                200.0
4    5th Block, Koramangala     4.1           450                225.0
```

The top 5 rows of the dataset were displayed using the head() function. This showed the column names and some sample data from the dataset, including the restaurant name, location, rating, cuisines, and average cost for two people.

NUMBER OF UNIQUE VALUES FOR EACH ATTRIBUTE:

```
Number of unique values for each attribute:

shop_name              114
cuisine                 79
location                65
rating                  12
cost_for_two            30
avg_cost_per_person     30
cost_category            2
dtype: int64
```

The unique values for each attribute were determined using the nunique() function. This showed the number of unique values for each attribute in the dataset, including the number of unique restaurant names, unique locations, unique cuisines, and unique ratings.

AVERAGE COST FOR EACH CUISINE:

```
Average cost for each cuisine:

cuisine
American                                                    450.000000
American, Arabian, Chinese, Desserts, Fast Food, Mughlai, North Indian    400.000000
American, Fast Food                                         350.000000
Andhra, Biryani                                             433.333333
Andhra, Biryani, Chinese, Desserts, Fast Food, Seafood, South Indian      225.000000
                                                                ...
South Indian, North Indian, Fast Food, Beverages, Jain      126.000000
South Indian, Snacks, North Indian, Chinese                 250.000000
Sweets                                                      150.000000
Turkish, Portuguese, American                               300.000000
Turkish, Portuguese, American, Grill                        300.000000
Name: cost_for_two, Length: 79, dtype: float64
```

The average cost for each cuisine was calculated using the groupby() function. This grouped the data based on the cuisine and calculated the average cost for two people for each cuisine. The output showed the average cost for each cuisine in descending order, with the cuisine with the highest average cost listed first.

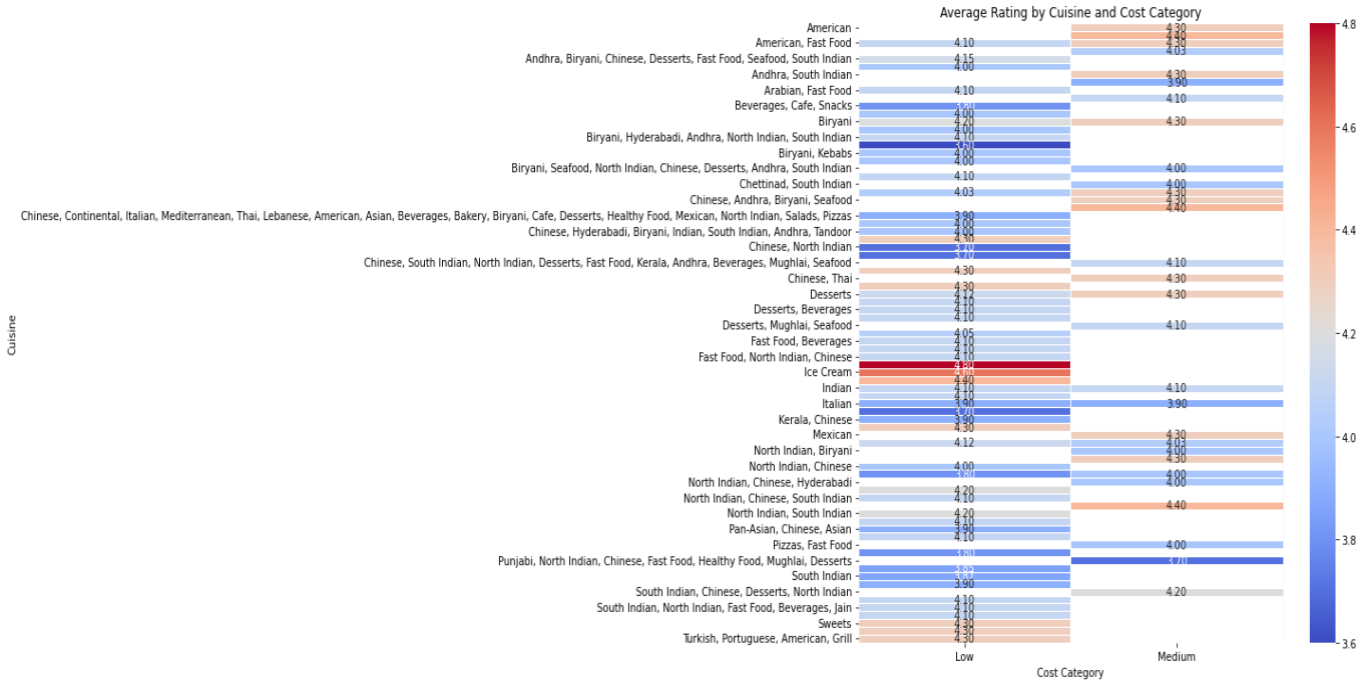
AVERAGE RATING FOR EACH CUISINE :

```
Average rating for each cuisine:

cuisine
American                                                          4.300000
American, Arabian, Chinese, Desserts, Fast Food, Mughlai, North Indian    4.400000
American, Fast Food                                               4.166667
Andhra, Biryani                                                   4.033333
Andhra, Biryani, Chinese, Desserts, Fast Food, Seafood, South Indian      4.150000
                                                                       ...
South Indian, North Indian, Fast Food, Beverages, Jain            4.100000
South Indian, Snacks, North Indian, Chinese                       4.100000
Sweets                                                            4.300000
Turkish, Portuguese, American                                     4.300000
Turkish, Portuguese, American, Grill                              4.300000
Name: rating, Length: 79, dtype: float64
```

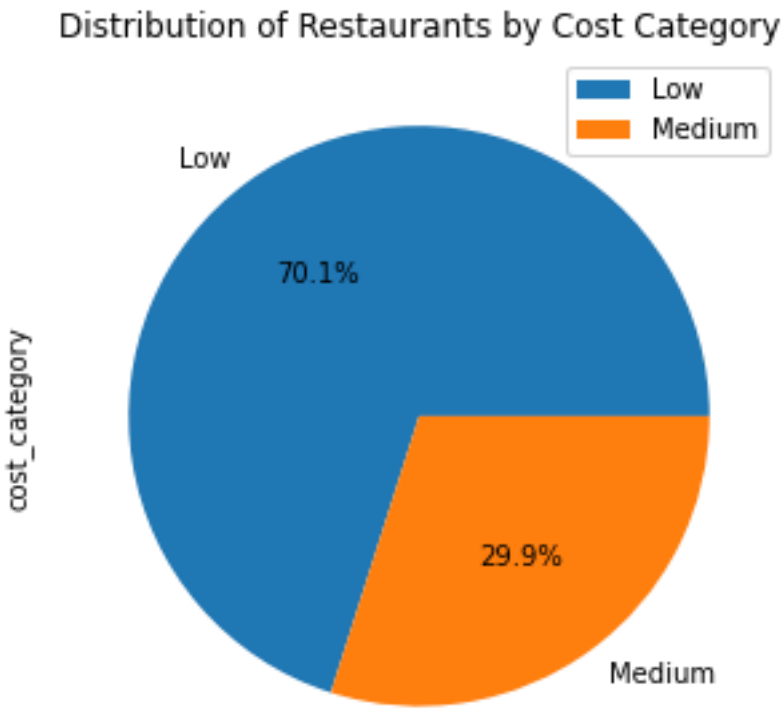
The average rating for each cuisine was also calculated using the groupby() function. This grouped the data based on the cuisine and calculated the average rating for each cuisine. The output showed the average rating for each cuisine in descending order, with the cuisine with the highest average rating listed first.

Average Rating by Cuisine And Cost Category :



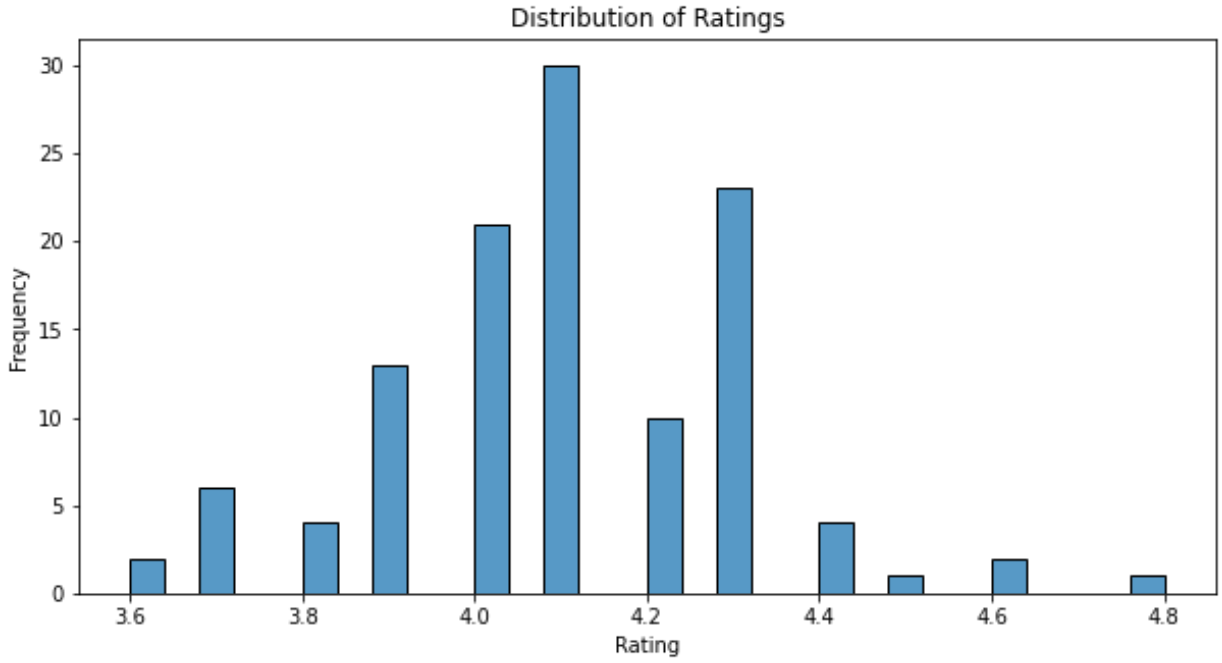
average cost and rating. This information can help customers make informed choices when deciding on which cuisine to order.

Pie chart of the distribution of restaurants by cost category:



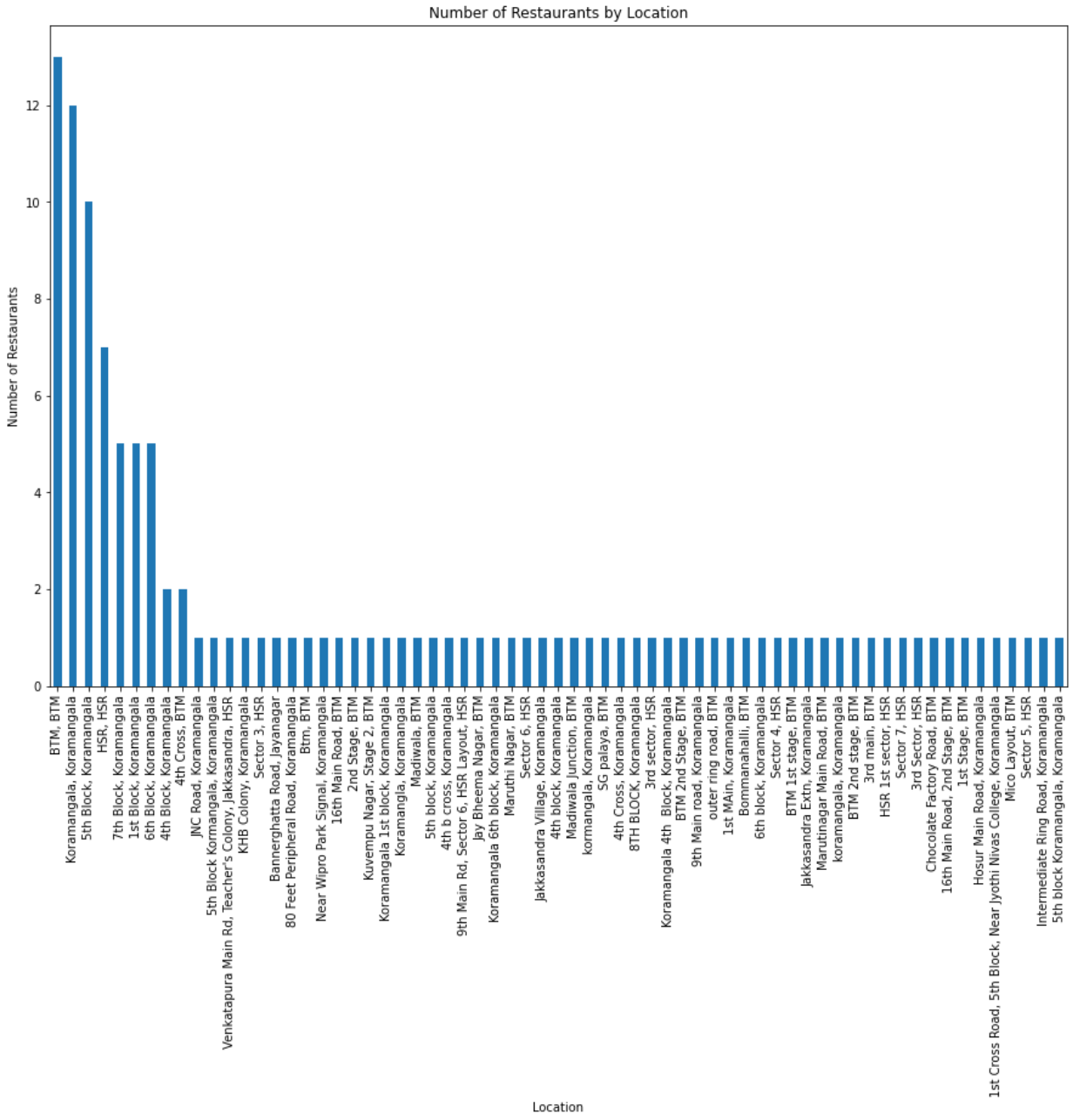
The pie chart displays the distribution of restaurants based on their cost category. The analysis helps to identify the percentage of restaurants that fall under each cost category. This information can help customers choose restaurants based on their budget.

Histplot for distribution of ratings:



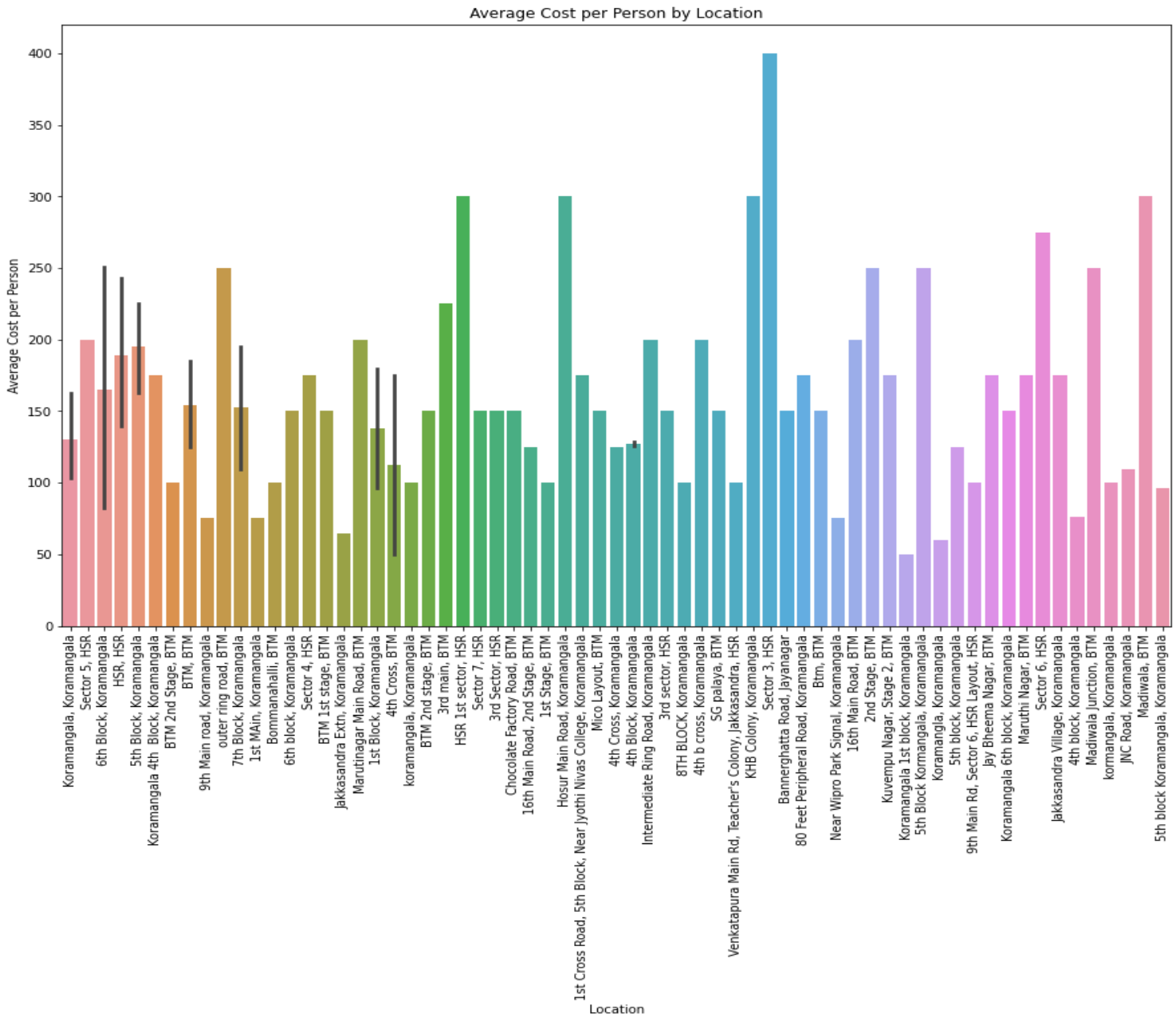
The histogram displays the distribution of ratings for all the restaurants in Bangalore. The analysis helps to identify the distribution of ratings and the most common rating score given by customers.

Number of restaurants by location:



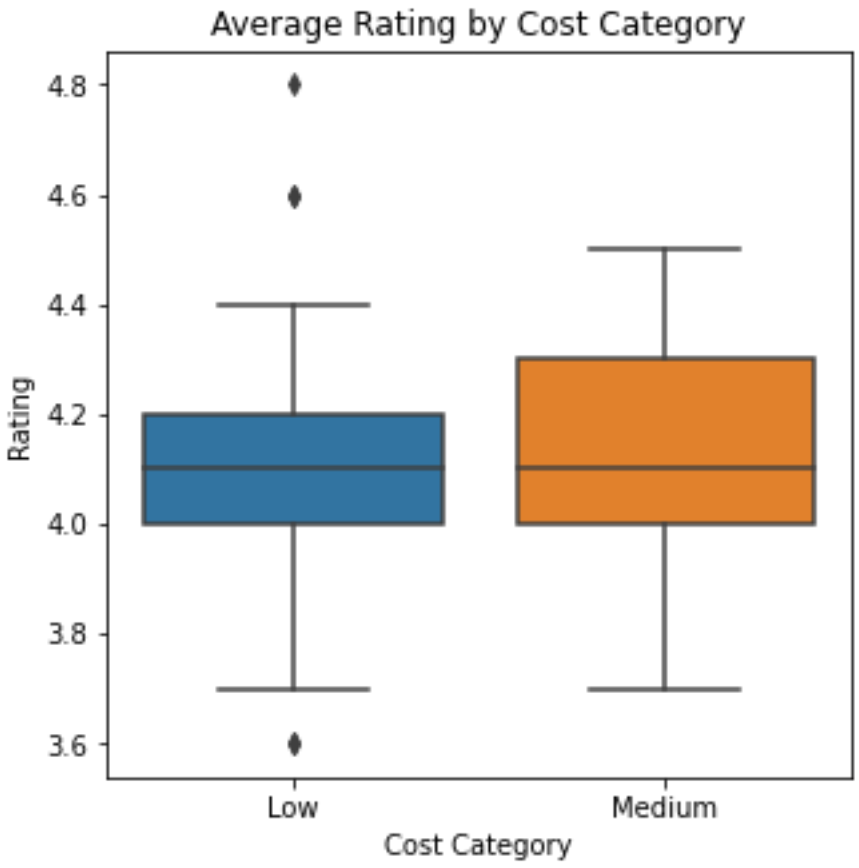
The analysis displays the number of restaurants by location. This information can help customers identify the areas with the highest number of restaurants and make informed choices when deciding on which area to order from.

Barplot for Average cost per person by location:



The barplot displays the average cost per person by location. This analysis helps to identify the areas with the highest and lowest average cost per person. This information can help customers choose restaurants based on their budget.

Box plot for average rating by cost category:



The box plot displays the average rating by cost category. This analysis helps to identify which cost category has the highest average rating and which has the lowest. This information can help customers choose restaurants based on their budget and still enjoy good ratings.

Overall, the analysis performed in the project provides useful insights for customers in Bangalore who use Swiggy for food delivery services. The information can help customers make informed choices on which cuisine, restaurant, and location to order from based on their budget, preferred rating, and location.