LOW LEVEL DESIGN (LLD) DOCUMENT

ANALYZING SWIGGY

Version:	**1.0**
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Document Version Control:

Date Issued	Version	Author
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Contents

1. Introduction

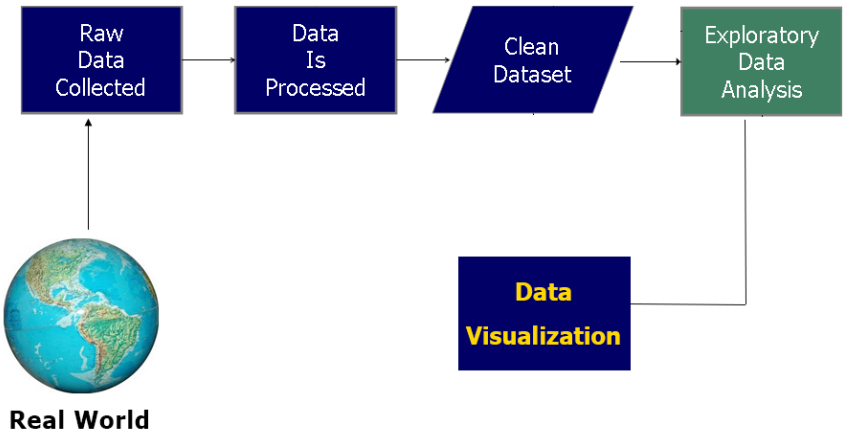
1.1 What is Low Level Design Document

The goal of the LDD or Low-level design document (LLDD) is to give the internallogic design of the actual program code for the House Price Prediction dashboard. LDD describes the class diagrams with the methods and relations between classes and programs specs. It describes the modules so that the programmer can directly code the program from the document.

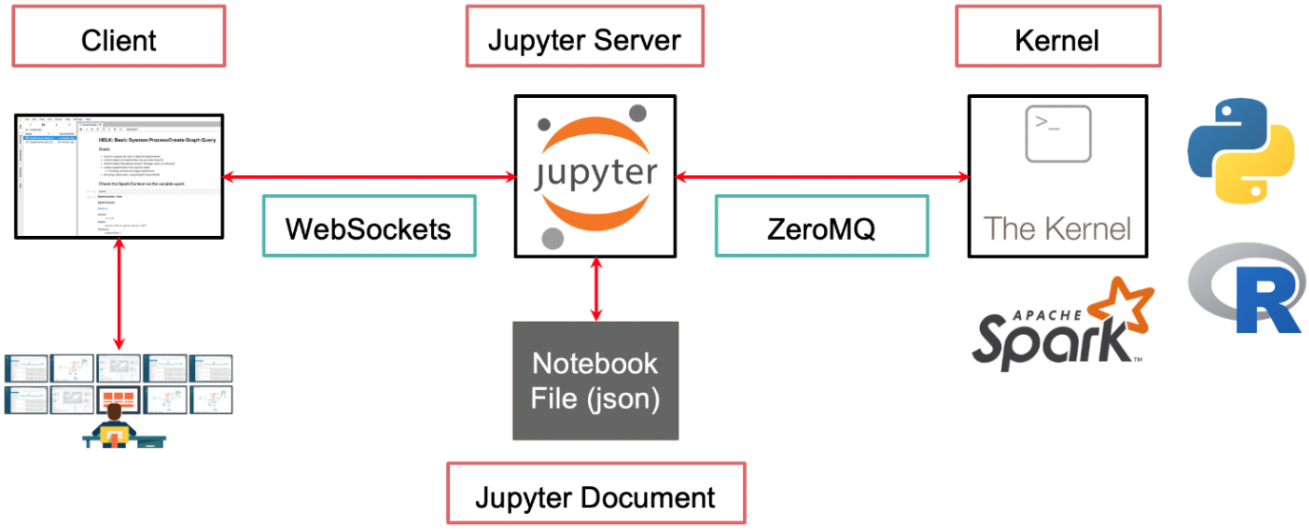
1.2 Scope

Low-level design (LLD) is a component-level design process that follows a step- by-step refinement process. The process can be used for designing data structures,required software architecture, source code and ultimately, performance algorithms. Overall, the data organization may be defined during requirement analysis and then refined during data design work.

2. Architecture



2.1 Jupyter Notebook Architecture



3. Architecture Description

3.1 Data Description:

The Swiggy Data Set Contains following columns.

- Shop Name: It gives the information of the shops in Bangalore.
- Cuisine: It describes different styles of food that are available.
- Rating: Rating for the Shop.
- Cost for Two: Describes the cost per two items in different shops.
- Location: Describes the location of the shop.

3.2 Web Scraping:

Web scraping is a technique to automatically extract content and data from websites using bots. It is also known as web data extraction or web harvesting. Web scrapping is made simple now days, many tools are used for web scrapping.Some of python libraries used for web scrapping are Beautiful Soup, Scrapy, Selenium, etc.

3.3 Data Transformation:

In the Data Transformation Process, we will convert our original datasets with other necessary attributes format. For the given Data Set names of the Columns have been changed and Null Values have been removed from the DataSet.

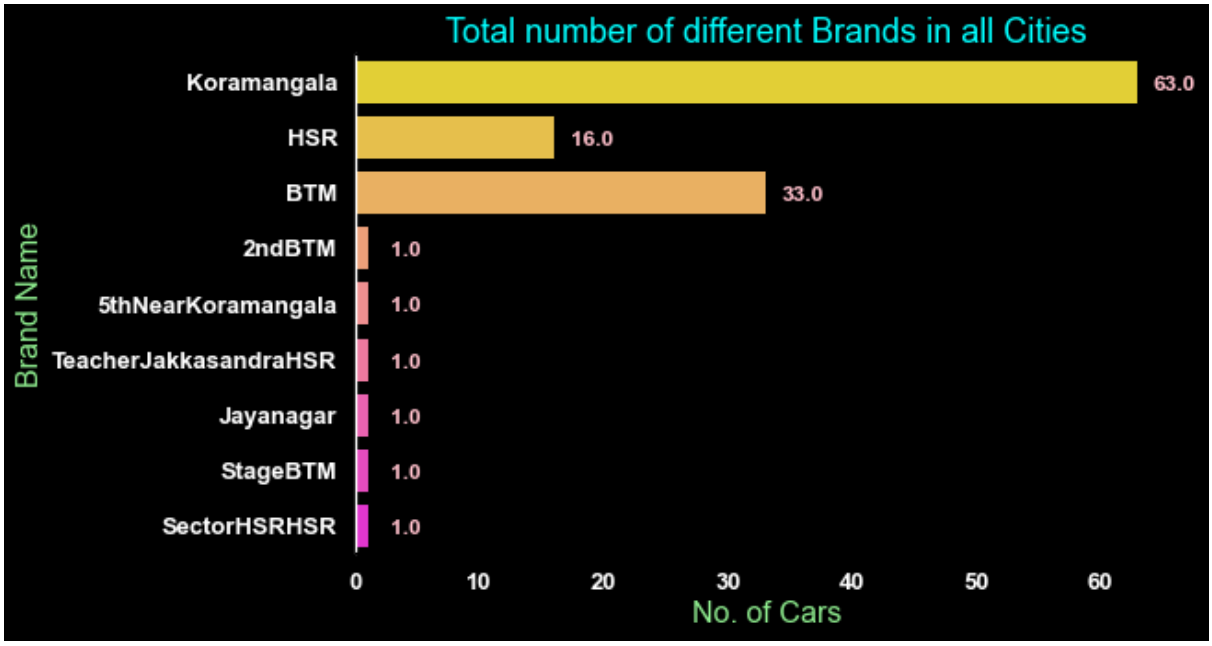
Shop_Name	Cuisine	Rating	Cost_for_One	Area	Area spot

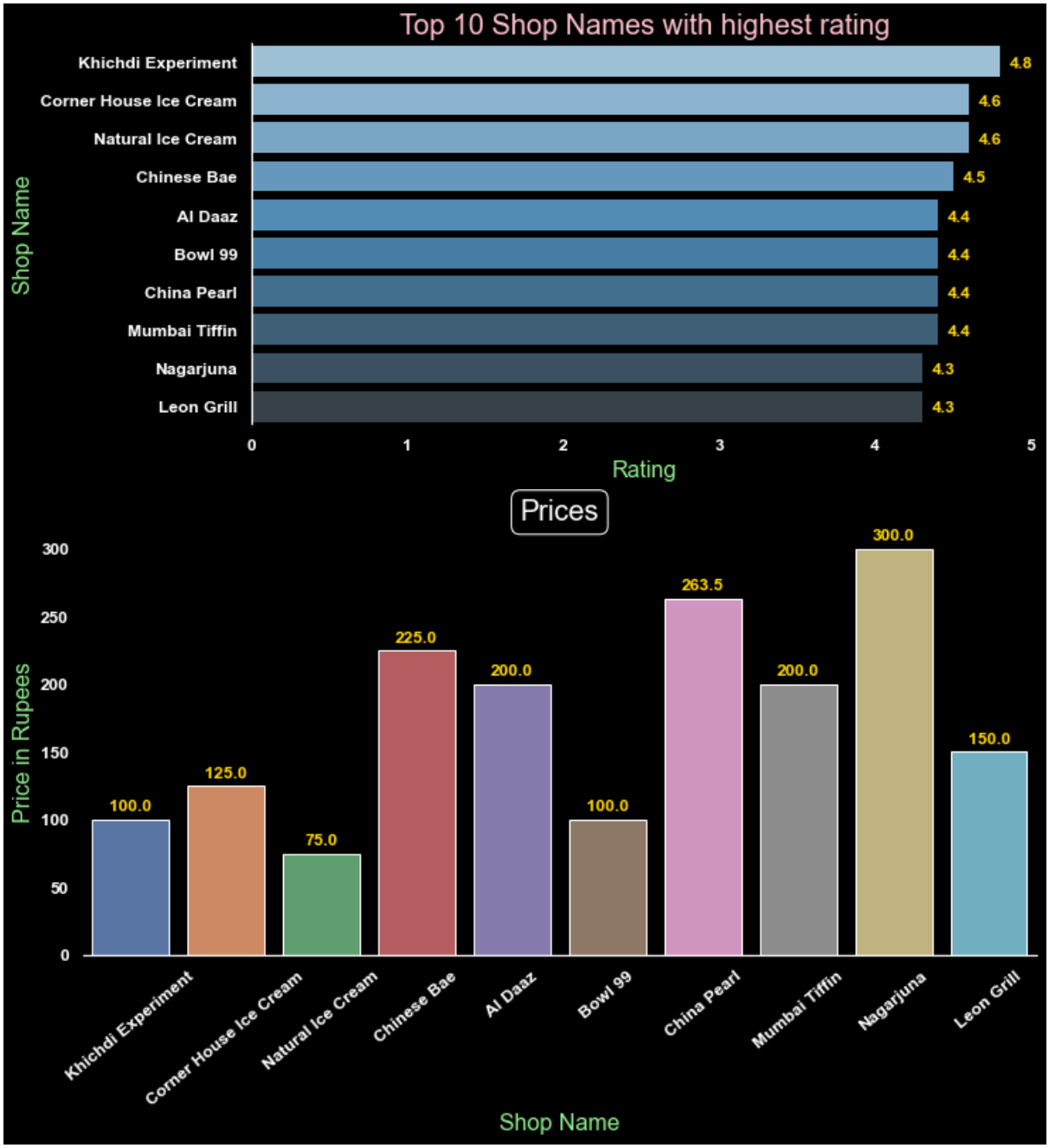
3.4 Creating relations between Parameters.

In this Project we had used many types of Visualizations like:

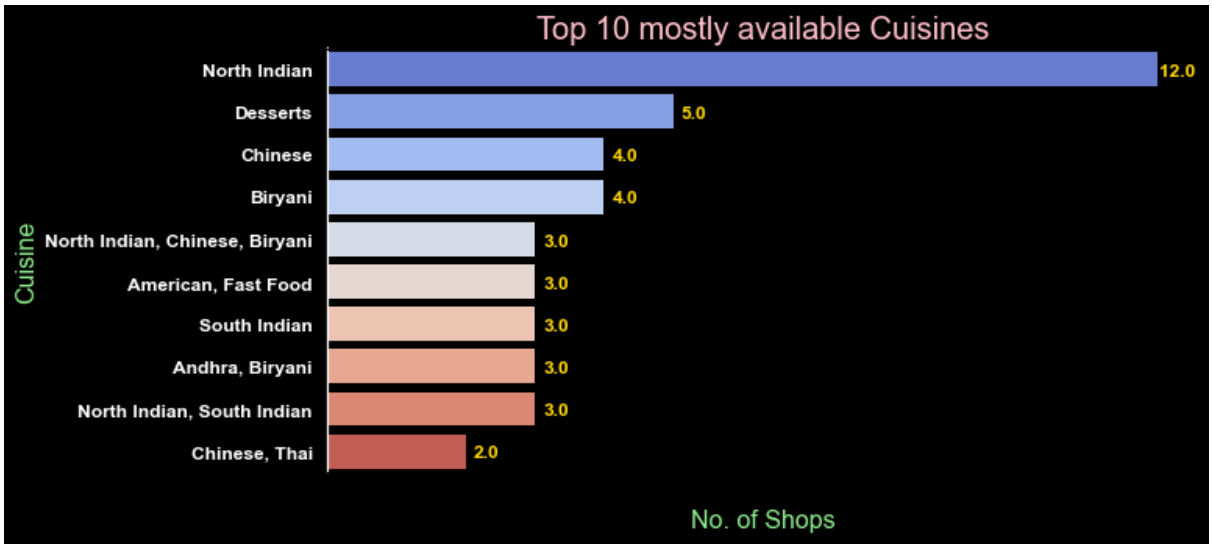
1. Bar Charts
2. Pie Charts
3. Horizontal Bar Charts
4. Count plot
5. Scatter plot
6. Point plot
7. Line plot
8. Lollipop Chart
9. Heatmap

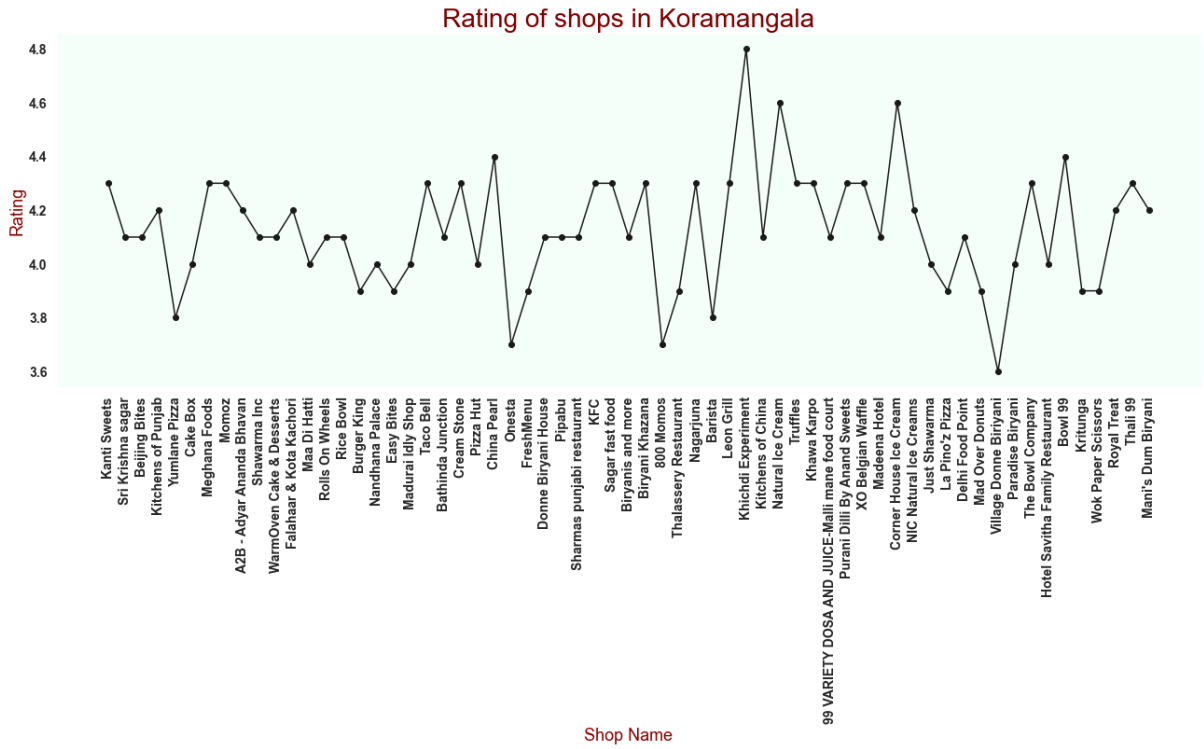
With the use of all the available parameters we had plotted visualizations.

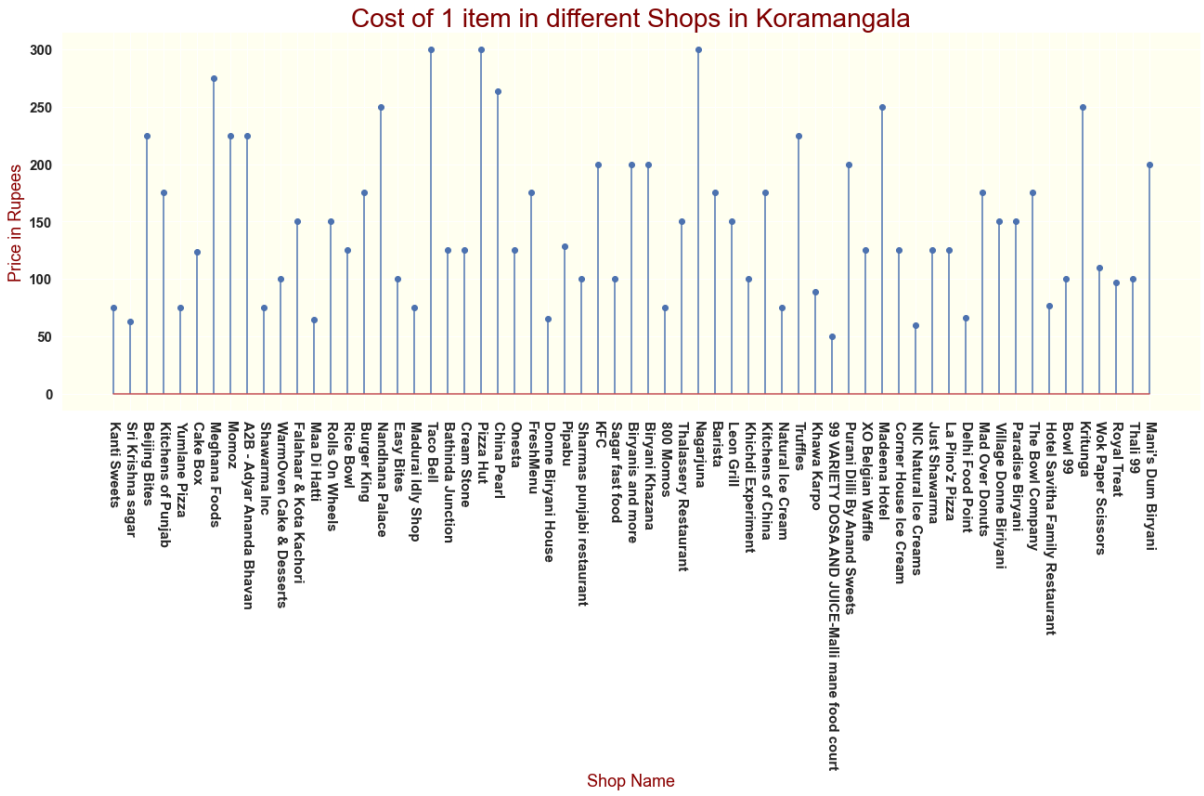


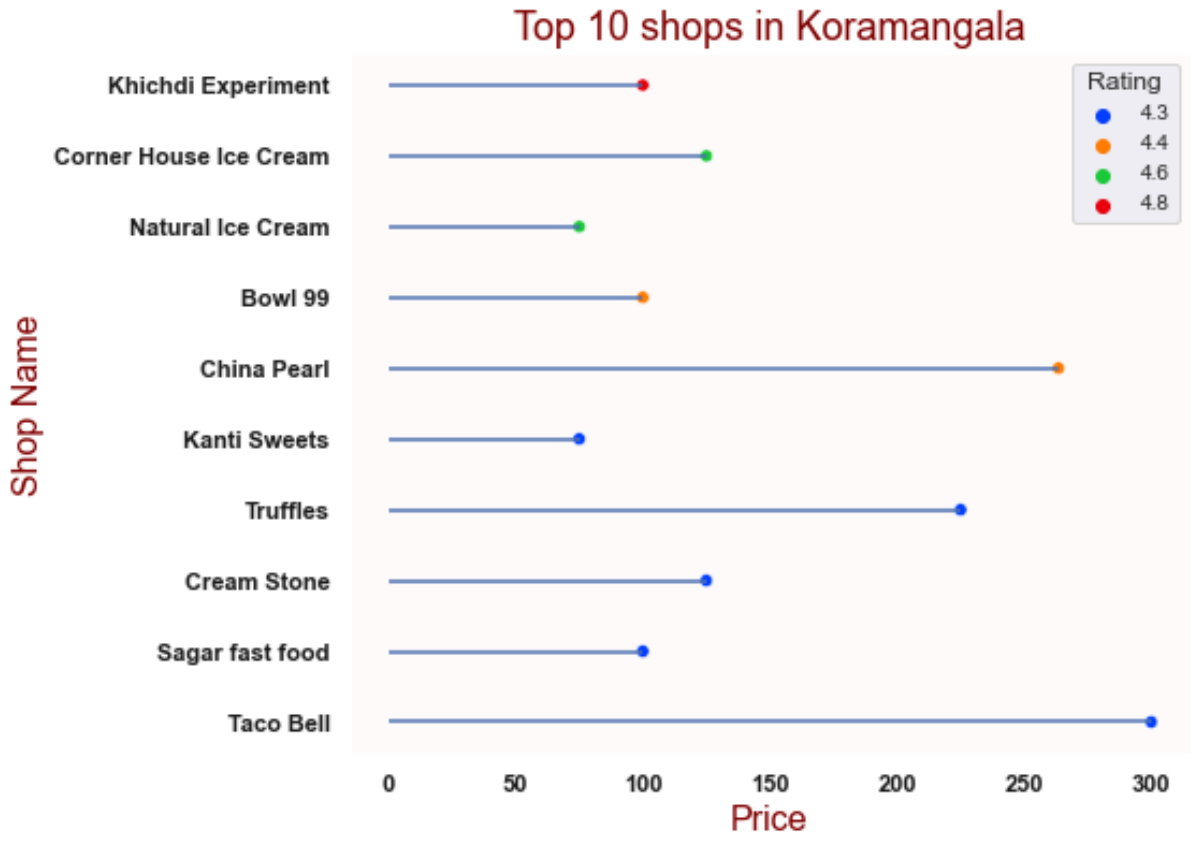

Top 10 Shop Names with highest rating
Khichdi Experiment
Corner House Ice Cream
Natural Ice Cream
Chinese Bae
Al Daaz
Bowl 99
China Pearl
Mumbai Tiffin
Nagarjuna
Leon Grill
4.8
4.6
4.6
4.5
4.4
4.4
4.4
4.4
4.3
4.3
Shop Name
0
1
2
3
4
5
Rating
Prices
Price in Rupees
300
250
200
150
100
50
0
100.0
125.0
75.0
225.0
200.0
100.0
263.5
200.0
300.0
150.0
Khichdi Experiment
Corner House Ice Cream
Natural Ice Cream
Chinese Bae
Al Daaz
Bowl 99
China Pearl
Mumbai Tiffin
Nagarjuna
Leon Grill
Shop Name

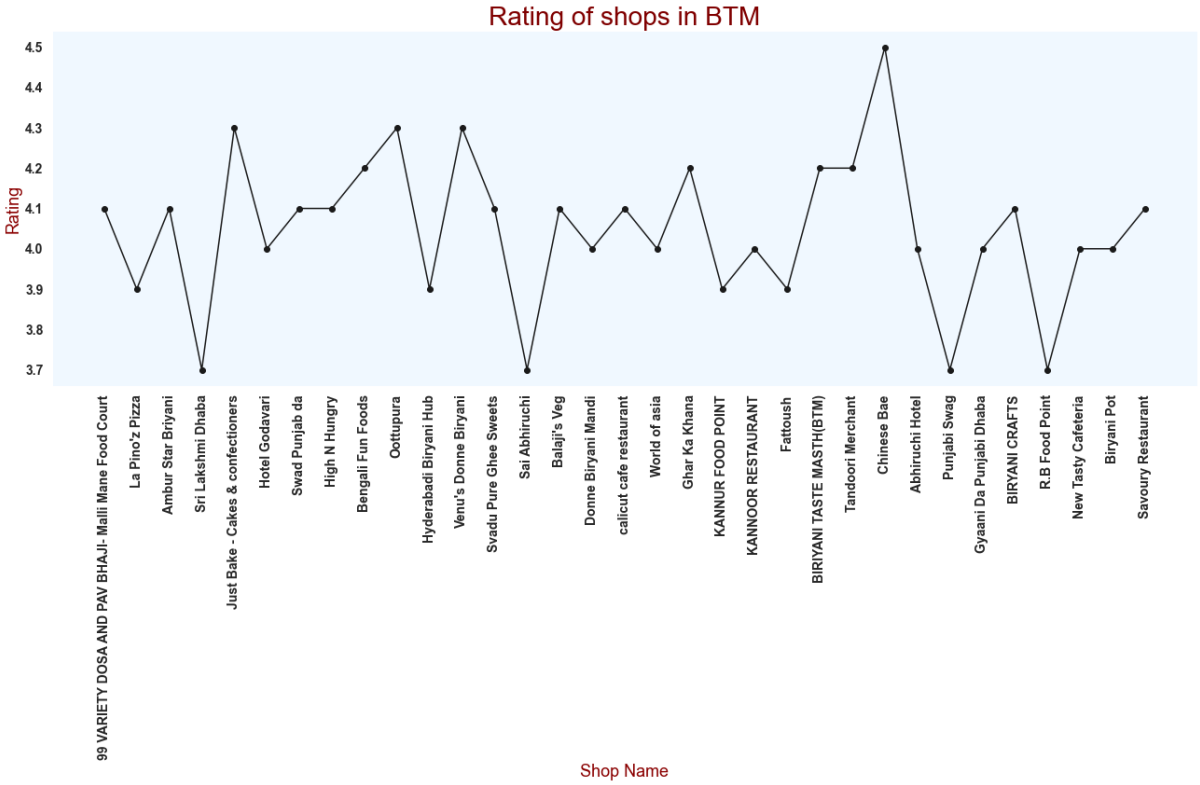

Top 10 Shops based on location
Rating
4.3
4.4
4.5
4.6
4.8
Count
2.00
1.75
1.50
1.25
1.00
0.75
0.50
0.25
0.00
Koramangala
BTM
HSR
Area

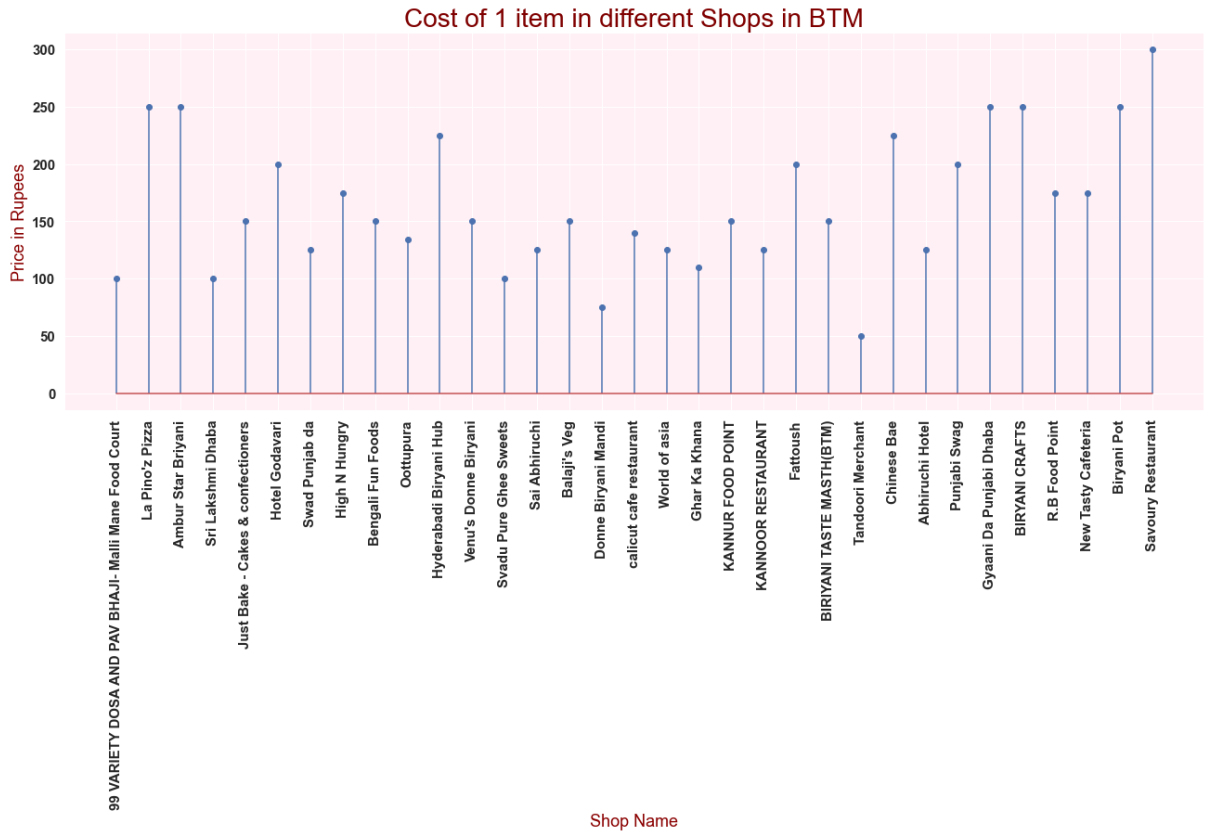

Top 10 mostly available Cuisines
North Indian
Desserts
Chinese
Biryani
North Indian, Chinese, Biryani
American, Fast Food
South Indian
Andhra, Biryani
North Indian, South Indian
Chinese, Thai
12.0
5.0
4.0
4.0
3.0
3.0
3.0
3.0
3.0
2.0
Cuisine
No. of Shops

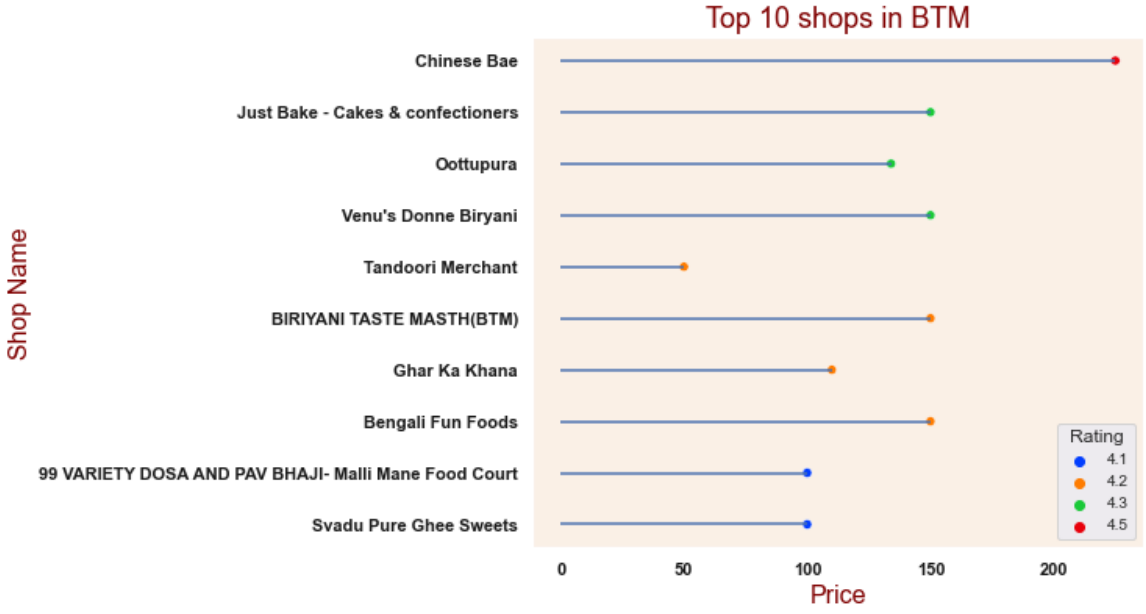

Rating of shops in Koramangala
Rating
4.8
4.6
4.4
4.2
4.0
3.8
3.6
Kanti Sweets
Sri Krishna sagar
Beijing Bites
Kitchens of Punjab
Yumlane Pizza
Cake Box
Meghana Foods
Momoz
A2B - Adyar Ananda Bhavan
Shawarma Inc
WarmOven Cake & Desserts
Falahaar & Kota Kachori
Maa Di Hatti
Rolls On Wheels
Rice Bowl
Burger King
Nandhana Palace
Easy Bites
Madurai Idly Shop
Taco Bell
Bathinda Junction
Cream Stone
Pizza Hut
China Pearl
Onesta
FreshMenu
Donne Biryani House
Pipabu
Sharmas punjabi restaurant
KFC
Sagar fast food
Biryanis and more
Biryani Khazana
800 Momos
Thalassery Restaurant
Nagarjuna
Barista
Leon Grill
Khichdi Experiment
Kitchens of China
Natural Ice Cream
Truffles
Khawa Karpo
99 VARIETY DOSA AND JUICE-Malli mane food court
Purani Dilli By Anand Sweets
XO Belgian Waffle
Madeena Hotel
Corner House Ice Cream
NIC Natural Ice Creams
Just Shawarma
La Pino'z Pizza
Delhi Food Point
Mad Over Donuts
Village Donne Biriyani
Paradise Biryani
The Bowl Company
Hotel Savitha Family Restaurant
Bowl 99
Kritunga
Wok Paper Scissors
Royal Treat
Thali 99
Mani's Dum Biryani
Shop Name


Cost of 1 item in different Shops in Koramangala
Price in Rupees
300
250
200
150
100
50
0
Kanti Sweets
Sri Krishna sagar
Beijing Bites
Kitchens of Punjab
Yumlane Pizza
Cake Box
Meghana Foods
Momoz
A2B - Adyar Ananda Bhavan
Shawarma Inc
WarmOven Cake & Desserts
Falahaar & Kota Kachori
Maa Di Hatti
Rolls On Wheels
Rice Bowl
Burger King
Nandhana Palace
Easy Bites
Madurai Idly Shop
Taco Bell
Bathinda Junction
Cream Stone
Pizza Hut
China Pearl
Onesta
FreshMenu
Donne Biryani House
Pipabu
Sharmas punjabi restaurant
KFC
Sagar fast food
Biryanis and more
Biryani Khazana
800 Momos
Thalassery Restaurant
Nagarjuna
Barista
Leon Grill
Khichdi Experiment
Kitchens of China
Natural Ice Cream
Truffles
Khawa Karpo
99 VARIETY DOSA AND JUICE-Malli mane food court
Purani Dilli By Anand Sweets
XO Belgian Waffle
Madeena Hotel
Corner House Ice Cream
NIC Natural Ice Creams
Just Shawarma
La Pino'z Pizza
Delhi Food Point
Mad Over Donuts
Village Donne Biriyani
Paradise Biryani
The Bowl Company
Hotel Savitha Family Restaurant
Bowl 99
Kritunga
Wok Paper Scissors
Royal Treat
Thali 99
Mani's Dum Biryani
Shop Name


Top 10 shops in Koramangala
Rating
4.3
4.4
4.6
4.8
Shop Name
Khichdi Experiment
Corner House Ice Cream
Natural Ice Cream
Bowl 99
China Pearl
Kanti Sweets
Truffles
Cream Stone
Sagar fast food
Taco Bell
0
50
100
150
200
250
300
Price

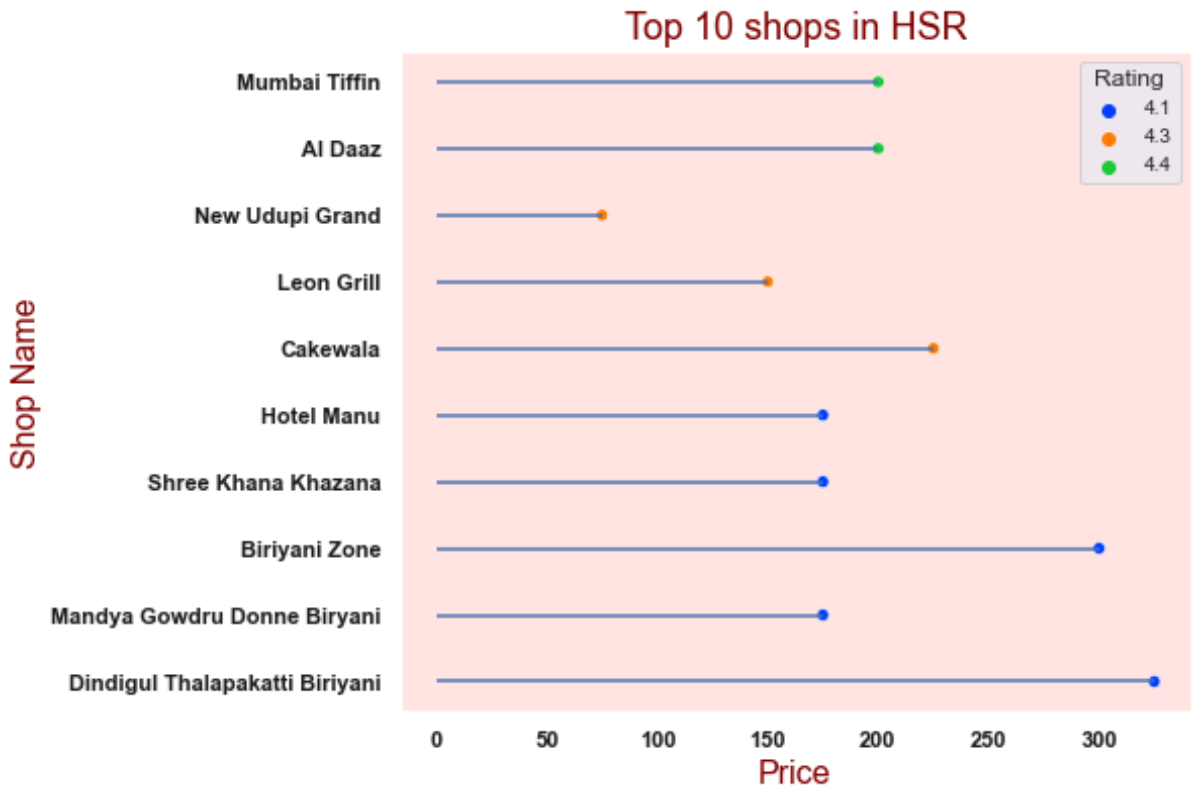

Rating of shops in BTM
Rating
4.5
4.4
4.3
4.2
4.1
4.0
3.9
3.8
3.7
99 VARIETY DOSA AND PAV BHAJI- Malli Mane Food Court
La Pino'z Pizza
Ambur Star Biriyani
Sri Lakshmi Dhaba
Just Bake - Cakes & confectioners
Hotel Godavari
Swad Punjab da
High N Hungry
Bengali Fun Foods
Oottupura
Hyderabadi Biryani Hub
Venu's Donne Biryani
Svadu Pure Ghee Sweets
Sai Abhiruchi
Balaji's Veg
Donne Biryani Mandi
calicut cafe restaurant
World of asia
Ghar Ka Khana
KANNUR FOOD POINT
KANNOOR RESTAURANT
Fattoush
BIRIYANI TASTE MASTH(BTM)
Tandoori Merchant
Chinese Bae
Abhiruchi Hotel
Punjabi Swag
Gyaani Da Punjabi Dhaba
BIRYANI CRAFTS
R.B Food Point
New Tasty Cafeteria
Biryani Pot
Savoury Restaurant
Shop Name

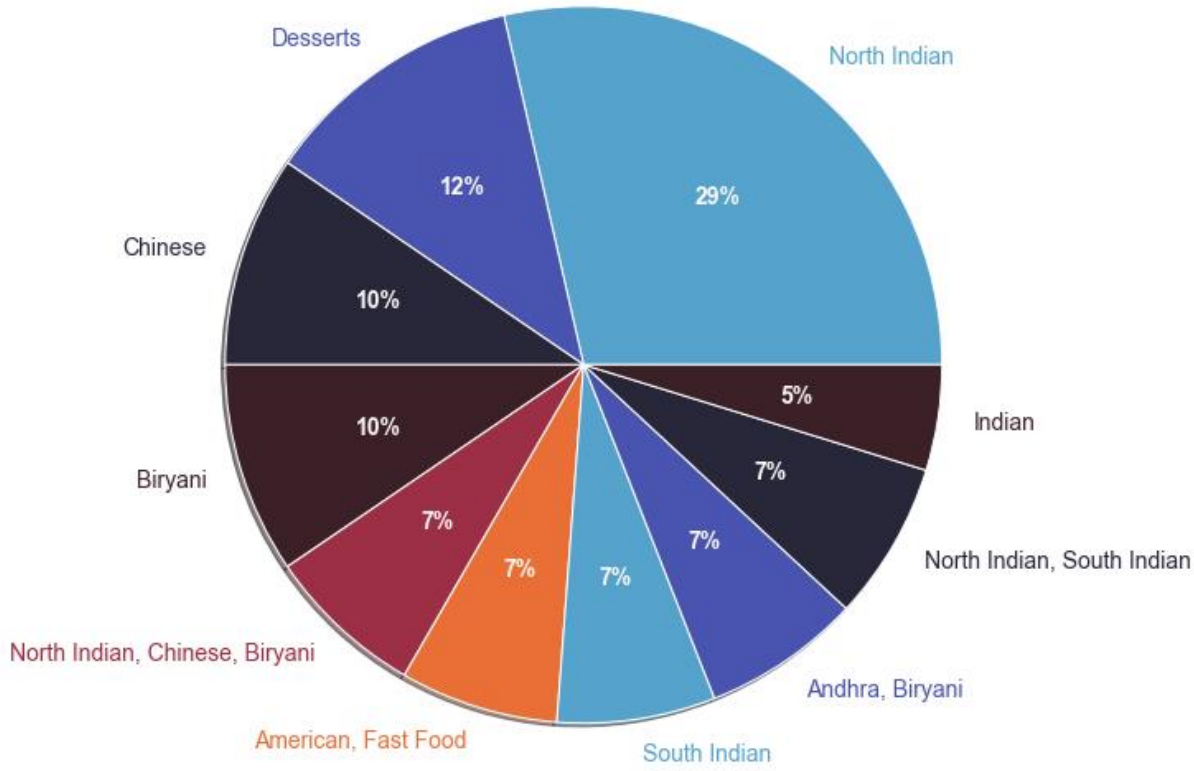

Cost of 1 item in different Shops in BTM
Price in Rupees
300
250
200
150
100
50
0
99 VARIETY DOSA AND PAV BHAJI- Malli Mane Food Court
La Pino'z Pizza
Ambur Star Biriyani
Sri Lakshmi Dhaba
Just Bake - Cakes & confectioners
Hotel Godavari
Swad Punjab da
High N Hungry
Bengali Fun Foods
Oottupura
Hyderabadi Biryani Hub
Venu's Donne Biryani
Svadu Pure Ghee Sweets
Sai Abhiruchi
Balaji's Veg
Donne Biryani Mandi
calicut cafe restaurant
World of asia
Ghar Ka Khana
KANNUR FOOD POINT
KANNOOR RESTAURANT
Fattoush
BIRIYANI TASTE MASTH(BTM)
Tandoori Merchant
Chinese Bae
Abhiruchi Hotel
Punjabi Swag
Gyaani Da Punjabi Dhaba
BIRYANI CRAFTS
R.B Food Point
New Tasty Cafeteria
Biryani Pot
Savoury Restaurant
Shop Name

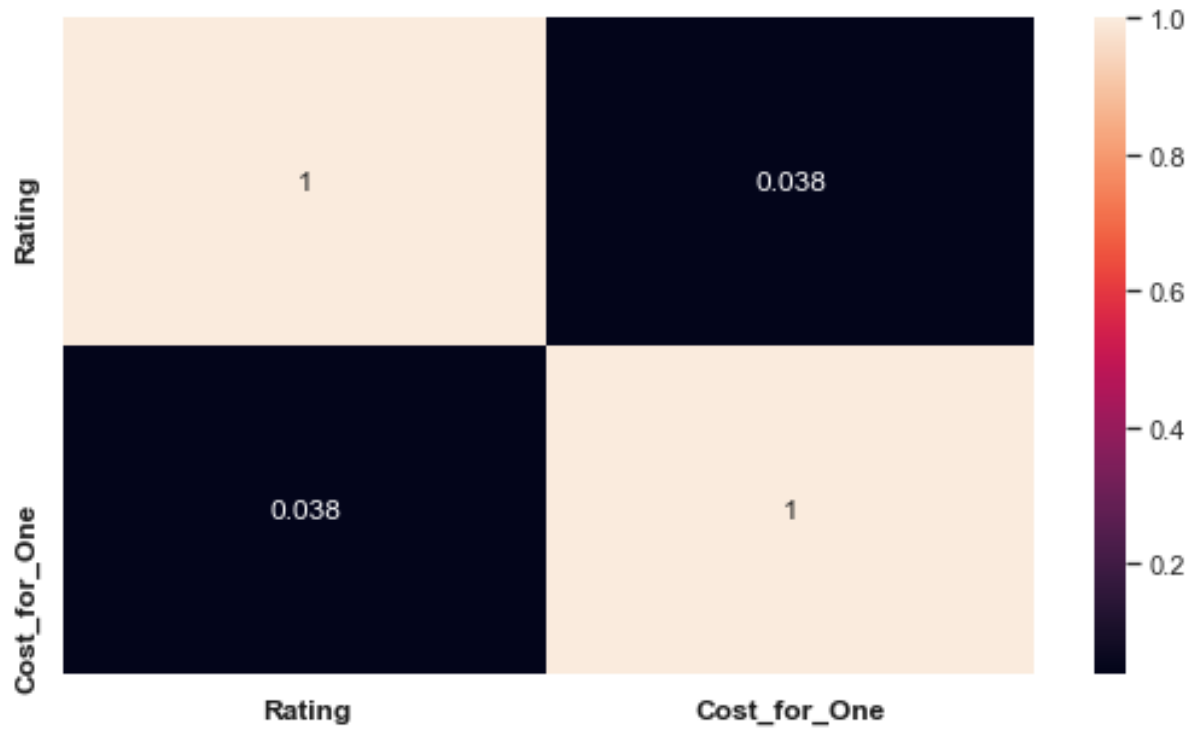

Top 10 shops in BTM
Shop Name
Chinese Bae
Just Bake - Cakes & confectioners
Oottupura
Venu's Donne Biryani
Tandoori Merchant
BIRIYANI TASTE MASTH(BTM)
Ghar Ka Khana
Bengali Fun Foods
99 VARIETY DOSA AND PAV BHAJI- Malli Mane Food Court
Svadu Pure Ghee Sweets
Rating
4.1
4.2
4.3
4.5
0
50
100
150
200
Price


Rating of shops in HSR
Rating
4.4
4.3
4.2
4.1
4.0
3.9
3.8
Mumbai Tiffin
Al Daaz
Hotel Manu
Shree Khana Khazana
New Udupi Grand
Biriyani Zone
Gongura's
Leon Grill
Cakewala
Donne Biriyani House
Nanda's
Cake Garden
Punjabi Rasoi
Mandya Gowdru Donne Biryani
Dindigul Thalapakatti Biriyani
Junior Kuppanna
Shop Name


Cost of 1 item in different Shops in HSR
Price in Rupees
400
350
300
250
200
150
100
50
0
Mumbai Tiffin
Al Daaz
Hotel Manu
Shree Khana Khazana
New Udupi Grand
Biriyani Zone
Gongura's
Leon Grill
Cakewala
Donne Biriyani House
Nanda's
Cake Garden
Punjabi Rasoi
Mandya Gowdru Donne Biryani
Dindigul Thalapakatti Biriyani
Junior Kuppanna
Shop Name

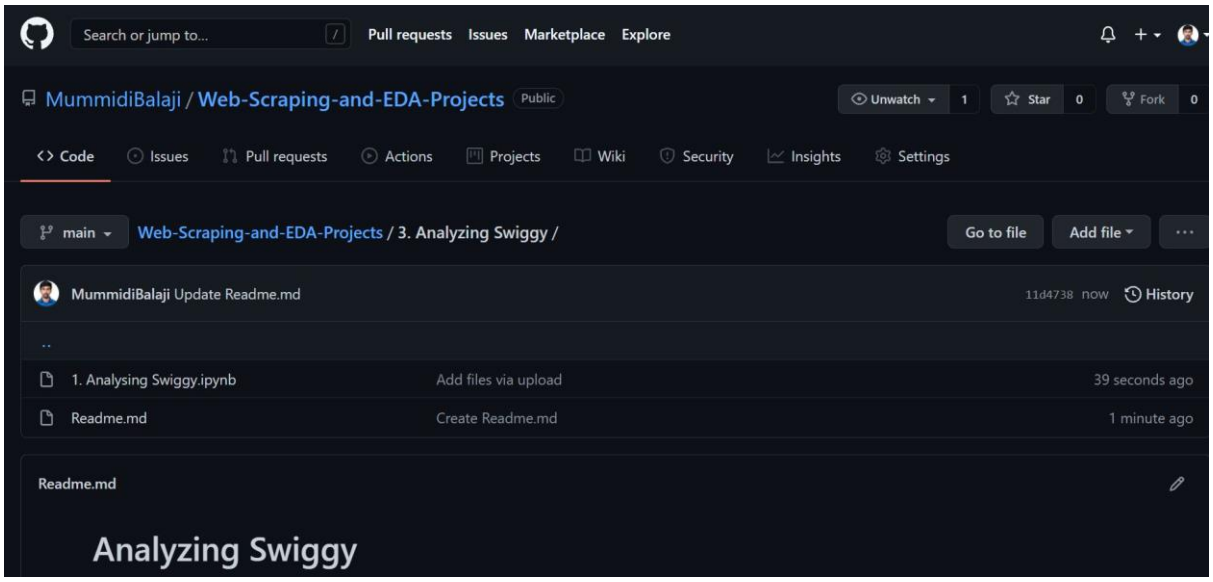

Top 10 shops in HSR
Shop Name
Mumbai Tiffin
Al Daaz
New Udupi Grand
Leon Grill
Cakewala
Hotel Manu
Shree Khana Khazana
Biriyani Zone
Mandya Gowdru Donne Biryani
Dindigul Thalapakatti Biriyani
Rating
4.1
4.3
4.4
0
50
100
150
200
250
300
Price


Desserts
North Indian
12%
29%
Chinese
10%
10%
5%
Indian
Biryani
7%
7%
North Indian, South Indian
7%
7%
7%
North Indian, Chinese, Biryani
Andhra, Biryani
American, Fast Food
South Indian



3.5 Deployment

We can deploy the report in the form of Jupyter Notebook in GitHub and we can share that report with others. Here we had successfully deployed the report in GitHub.



4. Unit Test Cases

S. No	Test Case Description	Expected Results
1	Total number of hotels based on location.	Count of hotels are shown by count plot based on location.
2	Top 10 hotels with highest rating	Sorting the data based on rating in descending order gives the rating from highest.
3	Top 10 hotels with highest price	Sorting the data based on Cost for one item in descending order gives the rating from highest.
4	Heatmap for Rating vs Price	We get a heatmap based on price & rating
5	Mostly available Cuisines	By filtering data & presenting in bar chart we het mostly available cuisines