High-level design

(Swiggy food Data Analysis)

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PROJECT BY

AVINASH MALVIYA

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Contents

Abstract

Data analysis can help them to understand their business in a quiet different manner and helps to improve the quality of the service by identifying the weak areas of the business. This study demonstrates the how different analysis help to make better business decisions and help analyze customer trends and satisfaction, which can lead to new and better products and services. Different analysis performed such as Exploratory Data Analysis and Descriptive Analysis on variety of use cases to get the key insights from this data based on which business decisions will be taken.

The first online food ordering service, World Wide Waiter, was founded in 1995. Online food ordering is the process of ordering food from a website or other application. The online food ordering market includes foods prepared by restaurants, prepared by independent people, and groceries being ordered online and then picked up or delivered. The product can be either ready-to-eat food or food that has not been specially prepared for direction consumption.

1. Introduction

1.1 Purpose of the Document

The purpose of this plan is to

- Describe different design approaches.
- Describe different analysis approaches based on variety of Use Cases.
- Describe third party components/tools required for the system.
- Present complete Process Flow followed for this project.

1.2 Objective of HLD

1. To provide an overview of the entire system.
2. To provide introduction of Problem Perspective & Statement, Data Requirements, Tools used and many more.
3. To provide a module-wise breakup of the entire system.

1.3 Scope of HLD

This HLD covers all areas of the system.

2. General Description

2.1 Product Perspective & Problem Statement

The objective of the project is to perform an exploratory data analysis, data pre-processing, & data cleaning and at the end, apply different Data Visualization techniques to get meaningful insight from the given data. This project aims to apply some amazing Python Libraries such as Plotly and tablue which will give a boost to our visual understanding of the data.

2.2 Data Requirements

Data requirements completely depend on our problem.

- In this project, to perform analysis, we are using datasets that are provided by neuron.
- The features which are taken into consideration are:
- Some of the important features are:

Name	Description
Shop_Name	Name of the Shop/Restaurants
Cuisine	Name of the different Cuisines provided by Restaurants.
Location	Restaurant Area.
Rating	Rating is given by the Customers
Cost_for_Two (₹)	Approx. Cost of Two people

2.3 Tools Used

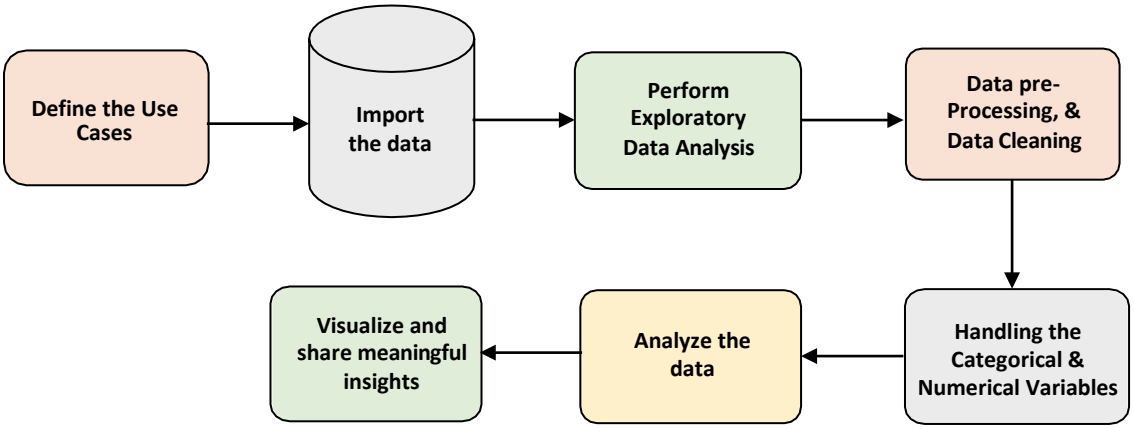
- Jupyter Notebook is used for codeing.
- Pandas and NumPy are used for Data loading & Pre-processing .
- Exploratory data analysis is automated by data prep.
- For visualization of the plots, Matplotlib, Seaborn, and Plotly are used.
- Tablue is used to representing the filterd data.

2.4 Constraints

The analysis must be user friendly, code must be neat & clean, EDA must be automated as much as possible because it will save huge amount of time. Moreover, users should not be required to have any of the coding knowledge as the insights they are looking for are mentioned in-detail with respective visuals.

3. Design Details

3.1 Process Flow



3.2 Error Handling / Exception Handling:

We have designed this project in such a way that, complete script is tested and runs multiple times to make sure that there is no error occurred during process flow.

Additionally, we have also dismissed the un-necessary warnings to avoid confusion by using filterwarnings class from warnings module.

4. Conclusion

The rating of restaurants

- The average rating of shop is **4.06**.
- The maximum rating of shop is **4.80**

The common rating and price of two peoples as respectively area locations

1. Koramangala - The common rating is 4.0 to 4.3 and Cost for Two People in between 200rs to 350rs.
2. BTM - The common 4.0 to 4.2 Rating and Cost for Two People in between 200rs to 350rs.
3. HSR - The common 4.0 to 4.3 and Cost for Two People in between 300rs to 400rs.
4. Jainager - The common 4.3 and Cost for Two People is 300rs.

List of top five food items sell in our all Bangalore

1. CHINESE - 12.9%
2. NORTH INDIAN - 11.8%
3. SOUTH INDIAN - 8.46%
4. BIRYANI - 6.62%
5. FAST FOOD - 5.88%

List of top five food items sell in HSR area in Bangalore

1. NORTH INDIAN - 14.3%
2. CHINESE - 9.52%
3. SOUTH INDIAN - 9.52%
4. BIRYANI - 9.52%
5. AMERICAN - 7.14%

List of top five food items sell in BTM Bangalore

1. CHINESE - 17.1%
2. NORTH INDIAN - 15.2%
3. SOUTH INDIAN - 9.52%
4. BIRYANI - 7.62%
5. ANDHRA - 6.67%

List of top five food items sell in KORAMANGALA Bangalore

1. CHINESE - 10.3%
2. NORTH INDIAN - 9.66%
3. SOUTH INDIAN - 7.59%
4. BIRYANI - 6.9%
5. FAST FOOD - 6.21%

5. References

1. Swiggy - Wikipedia