

# **LOW LEVEL DESIGN (LLD) DOCUMENT**

## **ANALYZING SWIGGY**

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## **1. Introduction**

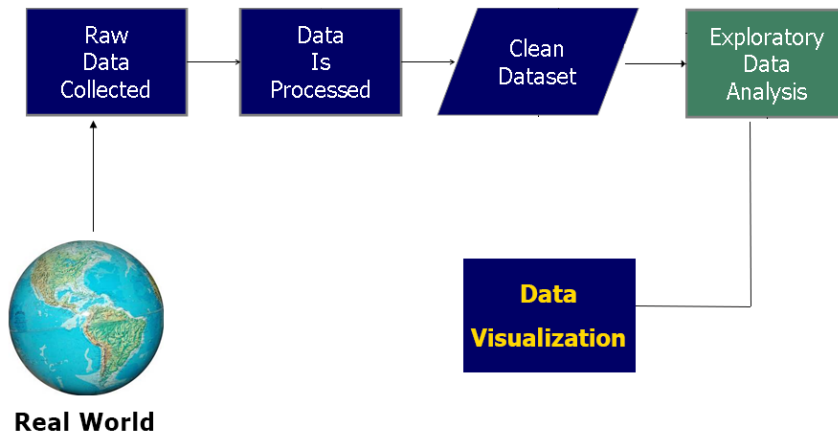
### **1.1 What is Low Level Design Document**

The goal of the LDD or Low-level design document (LLDD) is to give the internal logic 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**

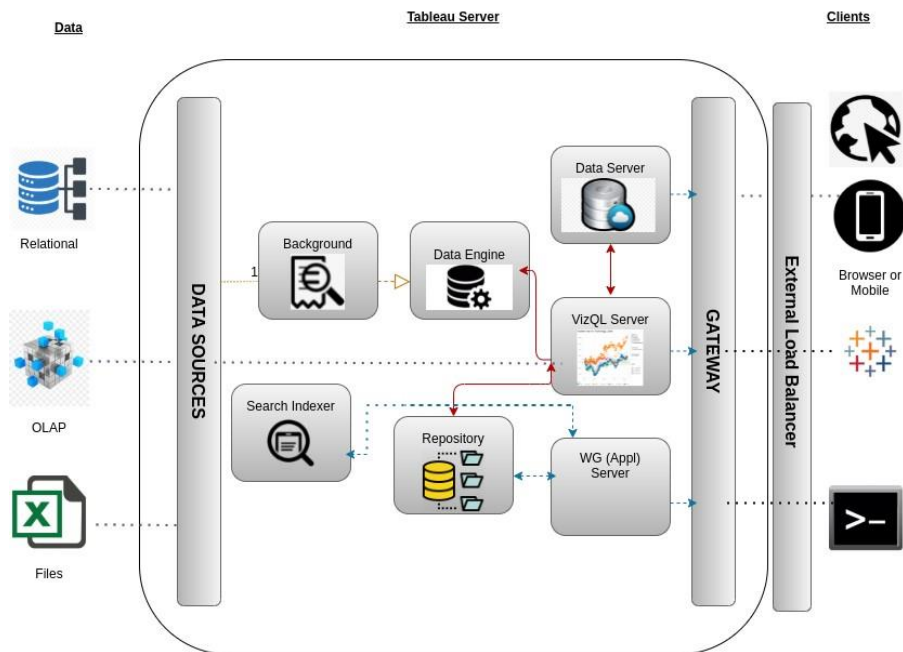
Low-level design (LLD) is a component-level design process that follows a step- by-step refinement process. The process can be used for designing data structures, required software architecture, source code and ultimately, performance algorithms. Overall, the data organization may be defined during requirement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

## 2. Architecture



### 2.1 Tableau Server Architecture

Tableau Communication Flow



### **1). Gateway/Load Balancer**

It acts as an Entry gate to the Tableau Server and also balances the load to the Server if multiple Processes are configured.

### **2) Application Server:**

Application Server processes (wgserver.exe) handle browsing and permissions for the Tableau Server web and mobile interfaces. When a user opens a view in a client device, that user starts a session on Tableau Server. This means that an Application Server thread starts and checks the permissions for that user and that view.

### **3) Repository:**

Tableau Server Repository is a PostgreSQL database that stores server data. This data includes information about Tableau Server users, groups and group assignments, permissions, projects, data sources, and extract metadata and refresh information.

### **4) VIZQL Server:**

Once a view is opened, the client sends a request to the VizQL process (vizqlserver.exe). The VizQL process then sends queries directly to the data source, returning a result set that is rendered as images and presented to the user. Each VizQL Server has its own cache that can be shared across multiple users

### **5) Data Engine:**

It Stores data extracts and answers queries.

### **6) Data Server:**

Data Server Manages connections to Tableau Server data sources  
It also maintains metadata from Tableau Desktop, such as calculations, definitions, and groups.

### 3. Architecture Description

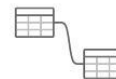
#### 3.1 Data Description:

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.

Swiggy Bangalore Outlet Details (2)

Swiggy Bangalore Outlet ...



Need more data?

Drag tables here to relate them. [Learn more](#)

Sort fields	Modified						
Swiggy Bangalore Out...	Swiggy Bangalore Out...	Calculation	Calculation	Swiggy Bang...	Calculation	Calculation	
Hotel	Cuisine	Area	Area Spot	Rating	Cost for 1 Item	axis	
Kanti Sweets	Sweets	Koramangala	Koramangala	4.30000	75.000	0	
Mumbai Tiffin	North Indian, Ho...	Sector 5	HSR	4.40000	200.000	0	
Sri Krishna sagar	South Indian, No...	6th Block	Koramangala	4.10000	63.000	0	
Al Daaz	American, Arabia...	HSR	HSR	4.40000	200.000	0	
Beijing Bites	Chinese, Thai	5th Block	Koramangala	4.10000	225.000	0	
Kitchens of Punjab	North Indian	Koramangala 4th...	Koramangala	4.20000	175.000	0	
99 VARIETY DOS...	Fast Food, North ...	BTM 2nd Stage	BTM	4.10000	100.000	0	
La Pino'z Pizza	Italian	BTM	BTM	3.90000	250.000	0	
Hotel Manu	South Indian, Ker...	HSR	HSR	4.10000	175.000	0	
Yumlane Pizza	Pizzas, Italian, M...	9th Main road	Koramangala	3.80000	75.000	0	
Ambur Star Briya...	Chinese, South In...	outer ring road	BTM	4.10000	250.000	0	

#### 3.2 Web Scrapping:

Web scrapping 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 BeautifulSoup, Scrapy.

### 3.3 Data Transformation:

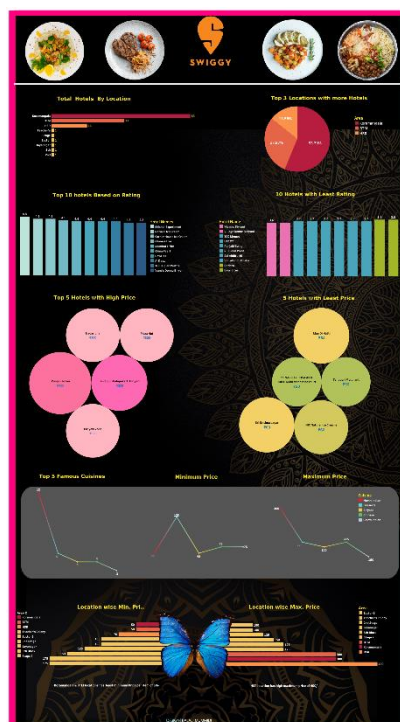
In the Data Transformation Process, we will convert our original datasets with other necessary attributes format. For the given Data Set names of the Columns have been changed and Null Values have been removed from the DataSet.

### 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 Chart
5. Butterfly Charts

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

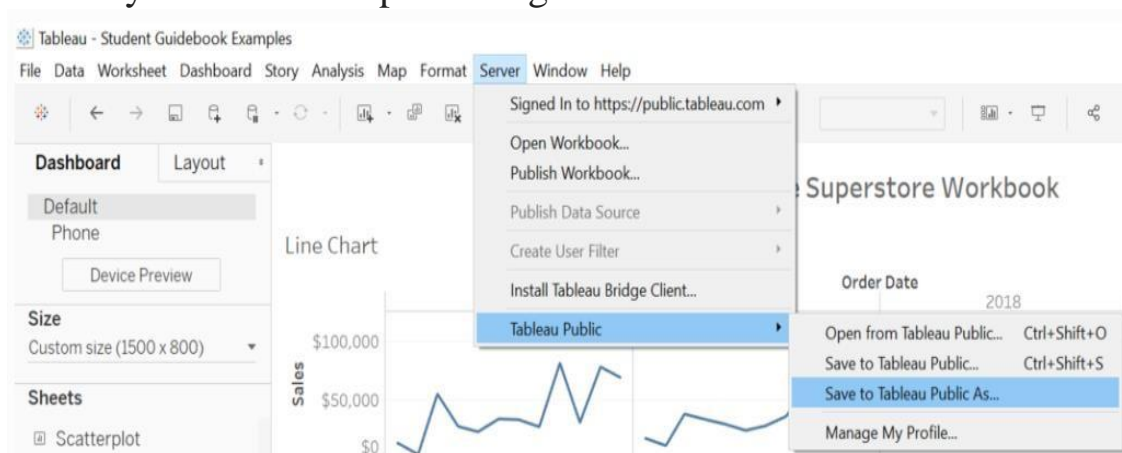




### 3.5 Deployment

Once you've completed your dashboard, follow these steps: **Server, Tableau Public, Save to Tableau Public As**

You may be prompted to log into your Tableau Public profile first if this is your first time publishing.



### 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 get mostly available cuisines
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