

# Low Level Design Wine Data Analysis

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## Contents

### **1 Introduction**

1.1 What is Low-Level Design Document.....	03
1.2 Scope.....	03

### **2 Architecture.....04**

### **3 Architecture Description.....05**

3.1 Data Description.....	06
3.2 Web Scrapping.....	07
3.3 Data Transformation.....	07
3.4 Deployment.....	08

## 1 Introduction

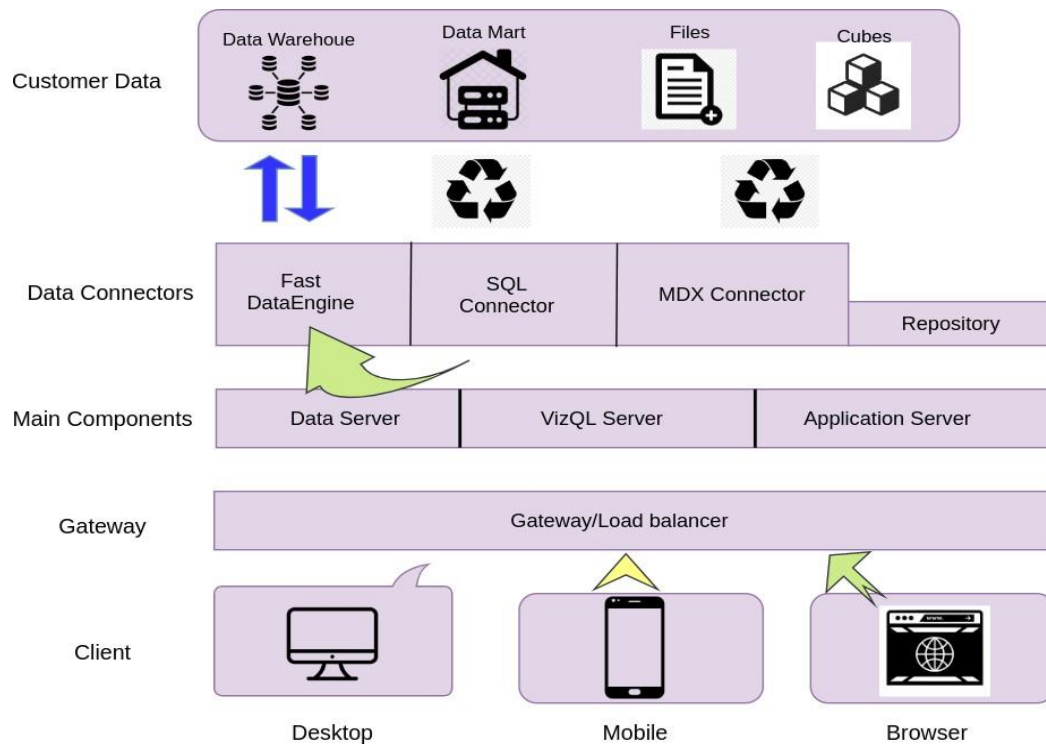
### 1.1 What is Low-Level design document?

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

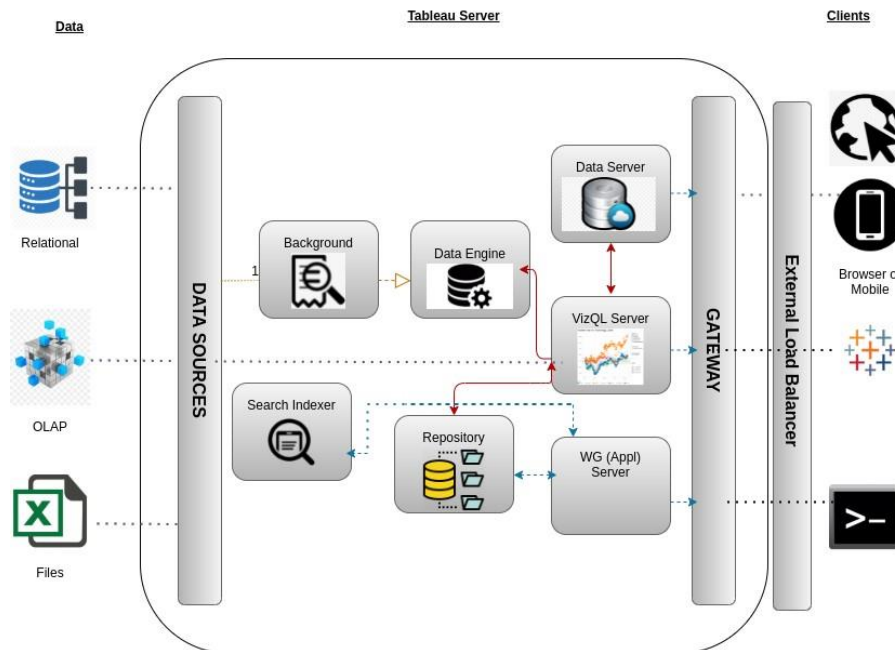


### Tableau Server Architecture

Tableau has a highly scalable, n-tier client-server architecture that serves mobile clients, web clients and desktop-installed software. Tableau Server architecture supports fast and flexible deployments.

The following diagram shows Tableau Server's 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.Backgrounder:-**

The backgrounder Executes server tasks which includes refreshes scheduled extracts, tasks initiated from tabcmd and manages other background tasks.

### **7.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**

1. The Dataset contains Country wise distribution of all the country of world for the following parameters
2. Country : All the country of the world to lot wine consumption.
3. Description : The material we make for a wine.
4. Wine: To the best wine in the world .
5. Region : The best distributor Area region by region.
6. Variable : The different type of wine available.
7. Price: Price at which the property was sold (in Dollars).

## 8. City\_Category: Categorization of the city based on the size.

### 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, Selenium, etc.

### 3.3 Data Preparation

In the preparation process, we will convert our original dataset with other necessary attributes format. And will merge it with the scrapped dataset.

As you all can notice that format of the data we have is not good to analyze and visualize so, we need to reconstruct the structure of the dataset.

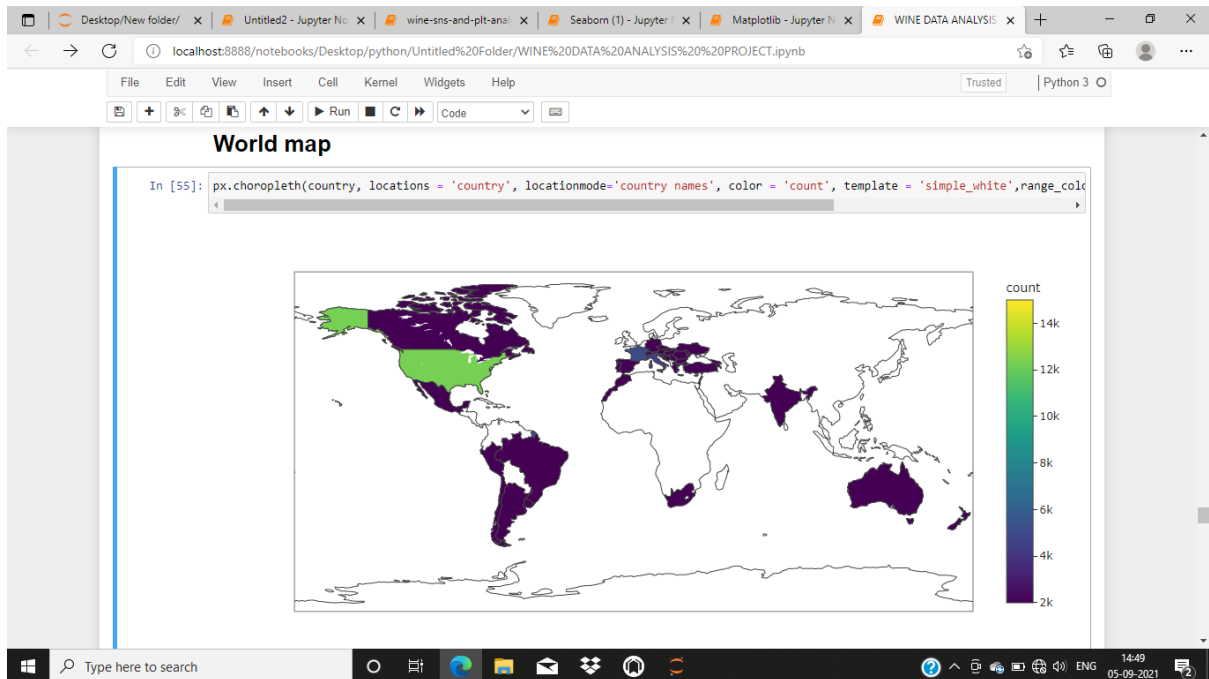
We will using only MS excel for data restructuring and clearing purpose and converting the data file to CSV file.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U
1		country	descriptio	designatic	points	price	province	region_1	region_2	taster	naï	taster_tw	title	variety	winery						
2	0	Italy	Aromas in Vulk	Ä Bia	87		Sicily & Sa Etna			Kerin Oâ€	@kerinok	Nicosia 20 White Ble	Nicosia								
3	1	Portugal	This is ripe	Avidagos	87	15	Douro			Roger Vos	@vossrog	Quinta do Portugue	Quinta dos Avidagos								
4	2	US	Tart and snappy, the		87	14	Oregon	Willamett	Willamett	Paul Gregi	@paulgwi	Rainstorm	Pinot Gris Rainstorm								
5	3	US	Pineapple Reserve L		87	13	Michigan	Lake Michigan Shore	Alexander Peartree	'St. Julian ; Riesling	'St. Julian										
6	4	US	Much like Vintner's l		87	65	Oregon	Willamett	Willamett	Paul Gregi	@paulgwi	Sweet Chi Pinot Noi	Sweet Cheeks								
7	5	Spain	Blackberry Ars In Vitr		87	15	Northern Navarra			Michael Si	@winesch	Tandem 2	Tempranil Tandem								
8	6	Italy	Here's a b Belsito		87	16	Sicily & Sa Vittoria			Kerin Oâ€	@kerinok	Terre di G Frappato	Terre di Giurfo								
9	7	France	This dry and restrain		87	24	Alsace	Alsace		Roger Vos	@vossrog	Trimbach GewÄ	Trimbach								
10	8	Germany	Savory dri Shine		87	12	Rheinhessen			Anna Lee C. Iijima	Heinz Eife GewÄ	Heinz Eifel									
11	9	France	This has g Les Naturi		87	27	Alsace	Alsace		Roger Vos	@vossrog	Jean-Bapt Pinot Gris	Jean-Baptiste Adam								
12	10	US	Soft, supp Mountain		87	19	California	Napa Valli Napa		Virginie B	@vboone	Kirkland S Cabernet	Kirkland Signature								
13	11	France	This is a dry wine, ve		87	30	Alsace	Alsace		Roger Vos	@vossrog	Leon Beye GewÄ	Leon Beyer								
14	12	US	Slightly reduced, thi		87	34	California	Alexander Sonoma		Virginie B	@vboone	Louis M. N. Cabernet	Louis M. Martini								
15	13	Italy	This is dor Rosso		87		Sicily & Sa Etna			Kerin Oâ€	@kerinok	Masseria 1 Nerello M	Masseria Setteporte								
16	14	US	Building on 150 year		87	12	California	Central Cc Central Cc		Matt Ketti	@mattket	Mirassou : Chardonn	Mirassou								
17	15	Germany	Zesty orar Devon		87	24	Mosel			Anna Lee C. Iijima	Richard B Riesling	Richard B Riesling									
18	16	Argentina	Baked plu Felix		87	30	Other	Cafayate		Michael Si	@winesch	Felix Lava Malbec	Felix Lavaque								
19	17	Argentina	Raw black Winemaki		87	13	Mendoza	Mendoza		Michael Si	@winesch	Gaucho A Malbec	Gaucho Andino								
20	18	Spain	Desiccate Vendimia		87	28	Northern	Ribera del Duero		Michael Si	@winesch	Pradorey ; Tempranil	Pradorey								
21	19	US	Red fruit aromas per		87	32	Virginia	Virginia		Alexander Peartree	QuiÄ	@vre Meritage	QuiÄ	@vremont							

### 3.4 Deployment.

Once you are completed your dashboard, follow these steps: to analysis the info, describe, loc, iloc to run (python).

You may be prompted to log into you seaborn, matplotlib, plotly. Here in the below screenshot we can see.



### Top 10 wine country

