

Project Design Phase-II Technology Stack (Architecture & Stack)

Date	25 th October 2023
Team ID	Team-591291
Project Name	Project – Graphical Advantages: A tableau Exploration of Top Manga
Maximum Marks	4 Marks

Technical Architecture:

The Deliverable shall include the architectural diagram as below and the information as per the table1 & table 2

Technology Stack Diagram: -

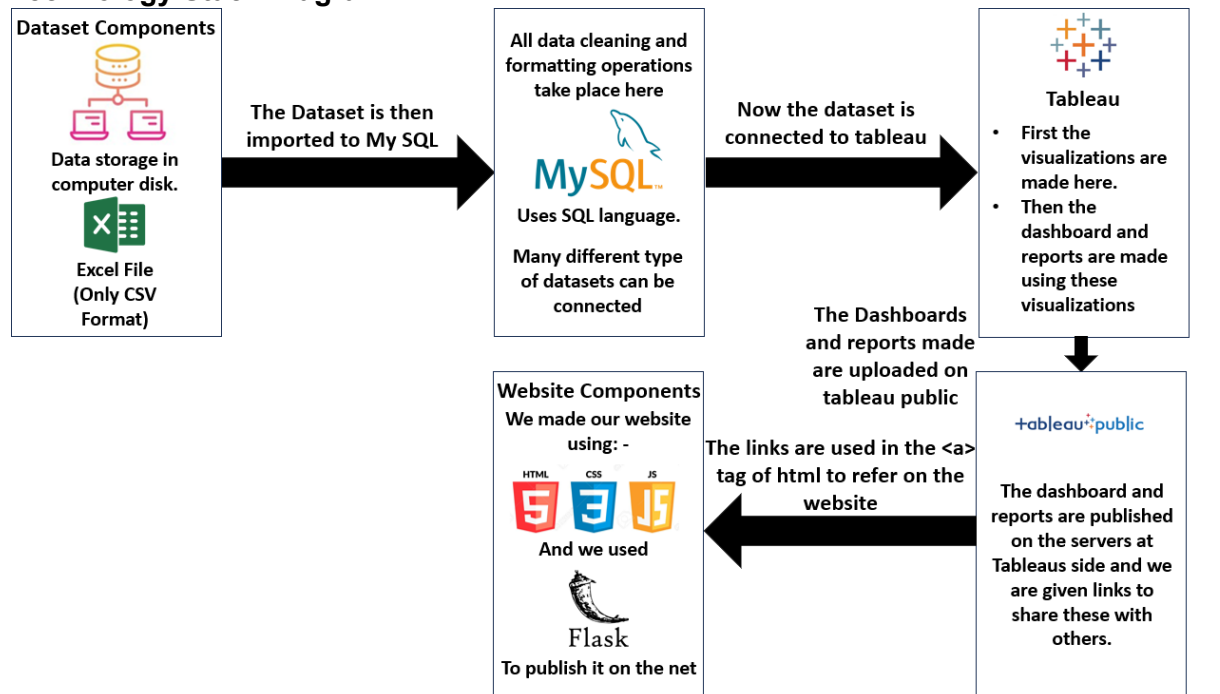


Table-1 : Components & Technologies:

S.No	Component	Description	Technology
1.	User Interface	How user interacts with application e.g. Web UI, Mobile App, Chatbot etc.	Dashboard, Data Visualization and Report
2.	Data Pipeline	Process of collecting, cleaning, transforming, and loading data for analysis.	SQL, SQL work bench
3.	Data Warehouse	Central repository for storing and managing data for analysis.	Tableau, Excel
4.	Data Lake	Scalable storage repository for storing raw and processed data,	SQL, SQL work bench
5.	Data Modelling	Process of creating conceptual, logical, and physical models of data to support analysis.	SQL, SQL work bench
6.	Data Visualization	Process of creating data visualizations, such as charts and graphs, to communicate insights from data.	Tableau, Excel, Dashboard
7.	Statistical Analysis	Process of using statistics to analyze data and draw conclusions.	SQL, SQL work bench
8.	Reports and Dashboard	Process of creating reports and dashboards to communicate insights from data to stakeholders.	Tableau, Excel, Dashboard
9.	Data Governance	Set of policies and procedures for managing and protecting data.	Excel, Report
10.	Data Quality Management	Process of ensuring that data is accurate, complete, consistent, and timely.	Excel, Report
11.	Metadata Management	Process of managing and governing data about data, such as data types, column definitions, and relationships between tables.	Excel, Report

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Purpose	Defines the specific problem or task the model addresses. In our case we want to know about the sales of different types of manga	Tableau
2.	Data Source	Identifies the origin of the data used for analysis. In our case we have taken a dataset from Kaggle.	Kaggle, Excel
3.	Data Integration	In this we will see that our data is integrated to the backend server or not	MySQL
4.	Data Volume	Like in this we will see that there are how many rows and columns present in the dataset.	Tableau
5.	Data Variety	The diversity of data types (structured, unstructured). In our case we will see that how many unique values are present in our data.	Tableau
6.	Data Quality	The level of data accuracy, completeness, and consistency. In our case we will look whether we have enough number of attributes to classify our manga or not.	Tableau
7.	Interpretability	How easily the model's results can be understood. Like in our case that our visualizations are clearly telling the observations out from them or not.	Tableau
8.	User-Friendliness	The ease of use and accessibility for end-users. Like in our case we will see that whether are dashboards are really interactive and have a good user experience or not.	Flask, HTML, CSS, JS