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

Date	29 June 2025
Team ID	LTVIP2025TMID55900
Project Name	Visualizing Housing Market Trends: An Analysis Of Sale Prices and Features Using Tableau
Maximum Marks	4 Marks

Technical Architecture:

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

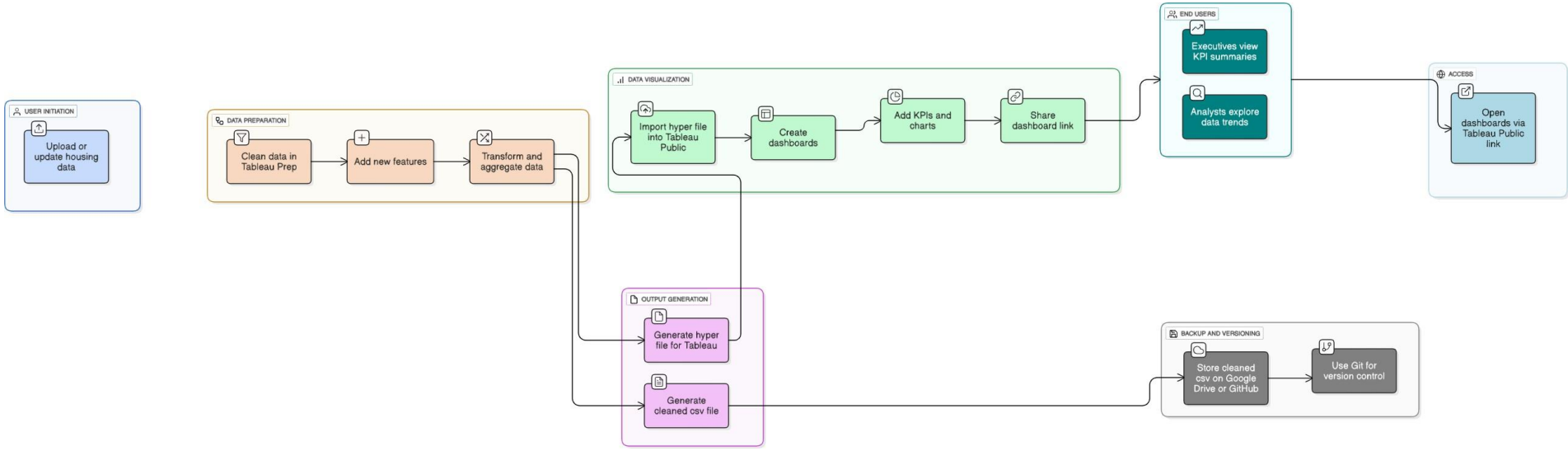

Table-1 : Components & Technologies:

S.No	Component	Description	Technology
1	User Interface	Final dashboard seen by end users	Tableau Public, HTML, Flask
2	Data Source	Housing dataset source	Google Drive / Local CSV
3	Data Collection	Gathering dataset for analysis	Manual / Scripted download
4	Data Preparation	Cleaning & transformation	Tableau Prep
5	Data Visualization	Building charts & visuals	Tableau Public Desktop
6	Dashboard & Story	Visual storytelling with filters	Tableau Story
7	Web Integration	Embedding dashboards into UI	Flask (Python Web Framework)
8	Hosting Infrastructure	Hosting the Flask app	Localhost / Web server

Table-2: Application Characteristics:

S.No	Characteristics	Description & Technology
1	Open-Source Frameworks	Tableau Public, Flask
2	Security Implementations	Dataset access via local storage or private Tableau links
3	Scalable Architecture	Layered and modular architecture flow
4	Availability	Accessible via Tableau Cloud and Flask Web App
5	Performance	Optimized Tableau dashboards using filters and cache

References:

https://c4model.com/

https://developer.ibm.com/patterns/online-order-processing-system-during-pandemic/

https://www.ibm.com/cloud/architecture

https://aws.amazon.com/architecture

https://medium.com/the-internal-startup/how-to-draw-useful-technical-architecture-diagrams-2d20c9fda90d