Project Design Phase-II

Technology Stack (Architecture & Stack)

Date	18 June 2025
Team ID	LTVIP2025TMID48901
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

S.No	Component	Description	Technology
1	User Interface	Web-based dashboard view	Tableau Public
2.	Application Logic-1	Data filtering and user interaction	Tableau filters and parameters
3.	Application Logic-2	Data visualization logic	Tableau dashboards & calculated fields
4.	Application Logic-3	Not used (optional)	—
5.	Database	Housing dataset (CSV)	Excel / CSV
6.	Cloud Database	Hosted data files	Google Drive / Tableau Public
7.	File Storage	Source file storage	Local system / Google Drive
8.	External API-1	(Optional) Live pricing data API	RapidAPI (if used)
9.	External API-2	(Optional) Geolocation or Maps API	Google Maps API (if used)
10.	Machine Learning Model	Not used	—

11.	Infrastructure (Server / Cloud)	Tableau hosted online	Tableau Public

Table-2: Application Characteristics:-

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	Uses Tableau Public (free) and data from Kaggle or open housing sources	Tableau Public, Excel
2.	Security Implementations	Tableau's built-in privacy and publishing settings	Tableau Privacy Settings
3.	Scalable Architecture	Can scale to visualize larger datasets or additional regions	Tableau filters, cloud storage
4.	Availability	Hosted 24/7 on Tableau Public	Tableau Public
5.	Performance	Optimized dashboard design, fast filters, small file size	Tableau filters, pre-aggregated data