

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

Date	26-06-2025
Team ID	LTVIP2025TMID51031
Project Name	Visualizing Housing Market Trends: An Analysis of Sale Prices and Features using Tableau
Maximum Marks	4 Marks

**Technical Architecture:**

The technology stack outlines all the tools and platforms used throughout the project to analyse and visualize housing market trends. It includes everything from data sourcing to final visualization and sharing. Each component in the stack was chosen to ensure the project is efficient, user-friendly, and easy to deploy.

**Table 1:**

S.No	Component	Description	Technology
1	User Interface	How user interacts with dashboard & story	Tableau Public (Web UI)
2	Application Logic-1	Data loading, chart creation	Tableau Visualization Engine
3	Application Logic-2	Filtering, interaction setup	Tableau Filters & Parameters
4	Database	Housing dataset used for analysis	CSV File (local Excel format)
5	File Storage	Where project files are stored	GitHub Repository, Local Storage
6	External API-1	Dataset source	Kaggle Housing Data (CSV download)
7	Infrastructure	Where project runs	Local system (Windows) + Tableau Public Cloud

**Table-2: Application Characteristics:**

S.No	Characteristic	Description	Technology
1	Open-Source Frameworks	Tools used for editing/docs	Tableau Public, GitHub
2	Security Implementations	File privacy and limited access via public link	Tableau Public Sharing Control
3	Scalable Architecture	Can extend with more datasets or new visualizations	Tableau Architecture
4	Availability	Dashboard accessible 24/7 through Tableau Public	Cloud-hosted Tableau Link
5	Performance	Charts load within seconds, optimized for smooth interaction	Lightweight CSV + Tableau