

## Project Design Phase

### Solution Architecture

Date	26 June 2025
Team ID	LTVIP2025TMID47396
Project Name	Visualizing Housing Market Trends: An Analysis of Sale Prices and Features using Tableau
Maximum Marks	4 Marks

#### Solution Architecture Description:

The project leverages real estate housing data to provide insightful, visual dashboards through Tableau. This helps users such as buyers, sellers, agents, and analysts to interpret complex data with ease.

##### 1. Data Source:

- Raw data (Transformed\_Housing\_Data2.csv) containing sale price, area, bedrooms, furnishing status, and location.

##### 2. Data Processing:

- Cleaned and transformed using Python (Pandas/NumPy) to handle missing values and format data.

##### 3. Data Visualization:

- Tableau is used to create interactive charts like average price by location, area vs price, box plots for furnishing, and pie charts for transaction types.

##### 4. Output/Presentation:

- Dashboards published using Tableau Public or Server, with filters and interactions for end-users.

**Figure 1: Architecture and Data Flow of the Housing Data Visualization Project**

## Solution Architecture Diagram

