Project Design Phase
Solution Architecture

Date	26 June 2025
Team ID	LTVIP2025TMID47436
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