

## Project Design Phase-II

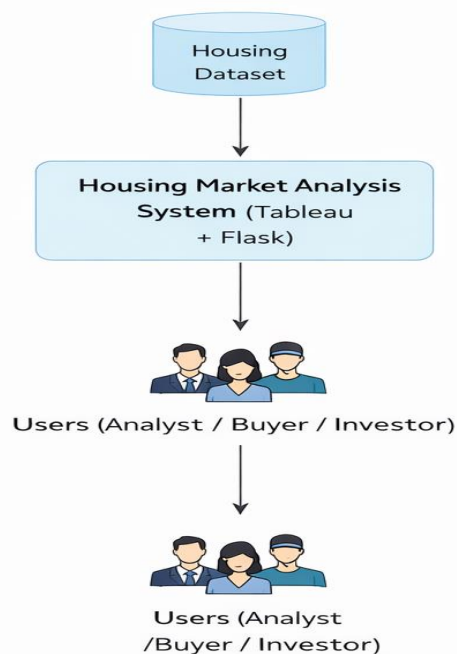
### Data Flow Diagram & User Stories

Date	02 February 2026
Team ID	LTVIP2026TMIDS38402
Project Name	Visualizing Housing Market Trends: An Analysis of Sale Prices and Features using Tableau
Maximum Marks	4 Marks

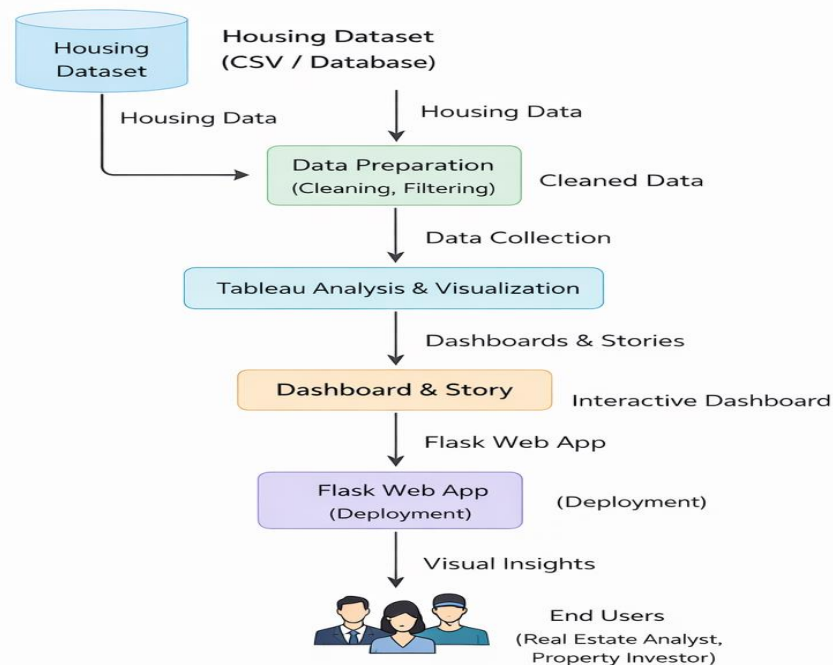
#### Data Flow Diagrams:

The Data Flow Diagram illustrates the overall working process of the Housing Market Analysis System. The system begins with collecting the housing dataset from a CSV file or database, which is then processed through data cleaning and preparation. The cleaned data is analyzed using Tableau to generate meaningful visualizations, dashboards, and stories. These visual insights are further integrated into a Flask web application for deployment. Finally, end users such as real estate analysts, property buyers, and investors access the interactive dashboards to understand housing price trends and make informed decisions.

Level 0 Context Diagram



Level 1 Detailed DFD



## User Stories

User Type	Functional Requirement (Epic)	User Story Number	User Story / Task	Acceptance criteria	Priority	Release
Real Estate Analyst	Data Visualization	USN-1	As a real estate analyst, I want to view average house prices based on bedrooms, bathrooms, and floors so that I can understand pricing patterns.	Dashboard displays filtered price comparison charts.	High	Sprint-1
	Age & Renovation Analysis	USN-2	As an analyst, I want to analyze house age distribution and renovation impact so that I can identify value trends.	System shows age distribution and renovation price comparison charts.	High	Sprint-1
	Interactive Dashboard	USN-3	As a user, I want interactive filters (bedrooms, bathrooms, renovation) so that I can customize my analysis.	Filters update dashboard dynamically.	High	Sprint-2
Property Investor	Trend Analysis	USN-4	As an investor, I want to view total sales by years since renovation so that I can identify profitable investment opportunities.	Sales trend graph is visible and interactive.	High	Sprint-2
	Web Access	USN-5	As a user, I want to access the dashboard through a web application so that I can view insights anytime.	Flask web app successfully displays dashboard.	Medium	Sprint-3
Administrator	Data Management	USN-6	As an administrator, I want to upload or update housing datasets so that the system reflects current data.	System accepts updated dataset and refreshes dashboards.	Medium	Sprint-3
Home Buyer	Feature Comparison	USN-7	As a home buyer, I want to compare properties based on features and price so that I can make informed decisions.	Filters allow comparison of property features.	Medium	Sprint-3