Project Design Phase-II
Data Flow Diagram & User Stories

Date	19 February 2026
Team ID	LTVIP2026TMIDS25019
Project Name	Visualizing Housing Market Trends: An Analysis of Sale Prices and Features using Tableau
Maximum Marks	4 Marks

Data Flow Diagrams:

A Data Flow Diagram (DFD) is a traditional visual representation of the information flows within a system. A neat and clear DFD can depict the right amount of the system requirement graphically. It shows how data enters and leaves the system, what changes the information, and where data is stored.
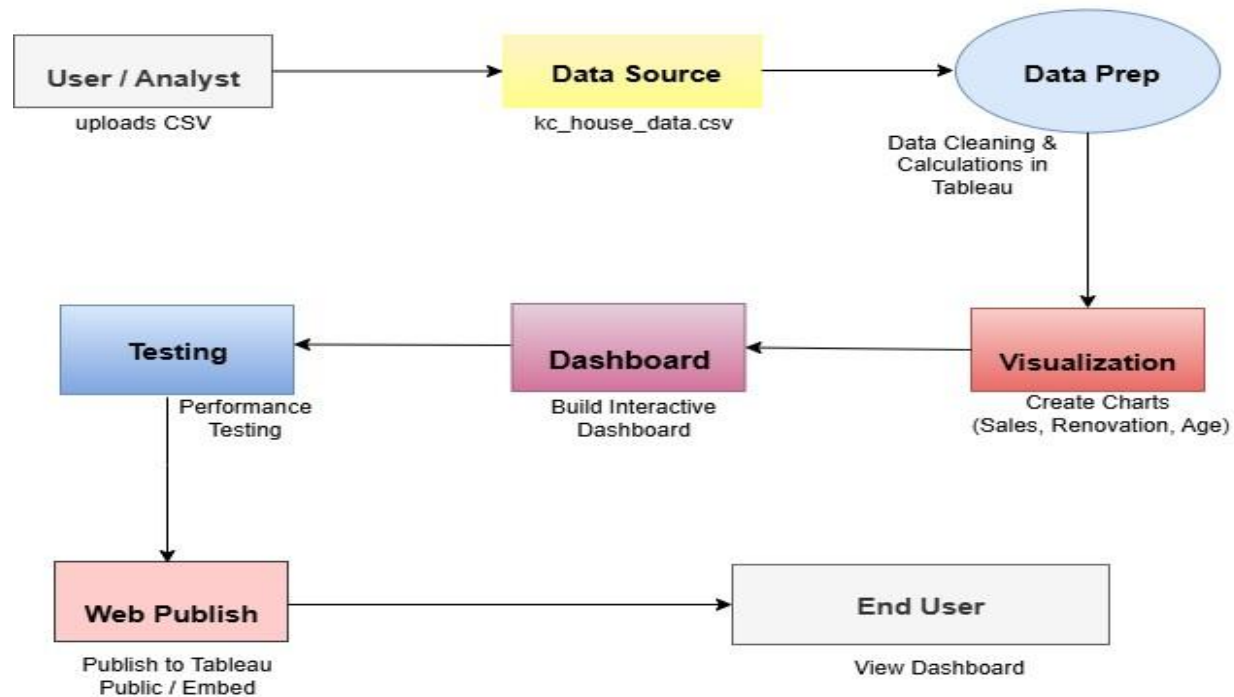
DFD Level 0 – Context Diagram Flow

- User/Analyst uploads housing data (CSV/Excel) into the visualization system.
- System processes the data and creates meaningful visualizations.
- End users (executives, analysts) view insights via an interactive Tableau dashboard.

Level 1 DFD (Expanded):

Housing Market Visualization using Tableau

DFD Level 1 – Expanded Flow

- File upload and validation (check file type, structure).
- Handle missing/null values if present.
- Clean the data (e.g., format dates).
- Create calculated fields:
  e.g., House Age, Years Since Renovation, Price/Sqft.
- Create charts using Tableau: Total Sales, House Age, Bedrooms/Floors comparison, etc.
- Combine visuals into a filtered interactive dashboard (with dropdowns/sliders).
- Load performance, filter functionality, field calculation checks.
- Publish to Tableau Public
  Embed into a website / share with stakeholders

User Stories

Use the below template to list all the user stories for the product.

User Type	Functional Requirement (Epic)	User Story Number	User Story / Task	Acceptance criteria	Priority	Release
Data Analyst	Data Upload	USN-1	As a data analyst, I can upload the housing dataset to begin the visualization process.	Dataset is successfully uploaded and read by Tableau.	High	Sprint-1
Data Analyst	Data Preparation	USN-2	As a data analyst, I can clean and transform the dataset in Tableau.	Null values removed, calculated fields added (e.g., House Age).	High	Sprint-1
Data Analyst	Visualization Creation	USN-3	As a data analyst, I can create charts based on renovation, house age, and features.	Visuals like bar/pie charts are created and reflect accurate data.	High	Sprint-1
Viewer	View Dashboard	USN-4	As a viewer, I can interact with the dashboard using filters.	Filters (e.g., Year, Region, Bedrooms) function correctly.	High	Sprint-2
Executive	Dashboard Export	USN-5	As an executive, I can export dashboard visuals for reports.	PDF/image exports are generated from Tableau dashboard.	Medium	Sprint-2

| Admin | Dashboard Sharing | USN-6 | As an admin, I can publish or embed the dashboard on a website. | Dashboard appears embedded and accessible to stakeholders. | Medium | Sprint-2 |