Project Design Phase-II
Data Flow Diagram & User Stories

Date	16 June 2025
Team ID	LTVIP2025TMID59142
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.

1. **Data collected** from POSOCO in CSV format.
2. **Cleaned and transformed**, with calculated fields like House age group.
3. **Visualizations built** in Tableau using multiple worksheets.
4. **Users review** the dashboard and may request changes.
5. **Final version archived** after approval.

```
                    Start

                      │
                      ▼
               Data Collected

                      │
                      ▼
                  ┌─────────┐
                  │  from   │────────▶  Cleaned &  ────────▶  Calculated Fields
                  │ POSOCO  │            Preprocessed            Added
                  └─────────┘                                     │
                                                                  ▼
      Dashboard                                             Visualization
      Published  ◀──────┐                              ┌──▶   Created
         │              │                              │         │
         ▼              │                              │         ▼
   Reviewed by Users    │                          ┌───────┐
         │              │                          │ Build │
         ▼              │                          │ charts│
   ┌──────────┐         │                          │  in   │
   │ Can lead │         │                          │Tableau│
   │    to    │         │                          └───────┘
   │revisiting│         │                              │
   │earlier   │         │                              ▼
   │steps     │         │                         Multiple
   │if needed.│         └─────────────────────    worksheets for
   └──────────┘                                   different insights.
         │
         ▼
     Archived  ──────┐
                     │
                     ▼
                   END
```
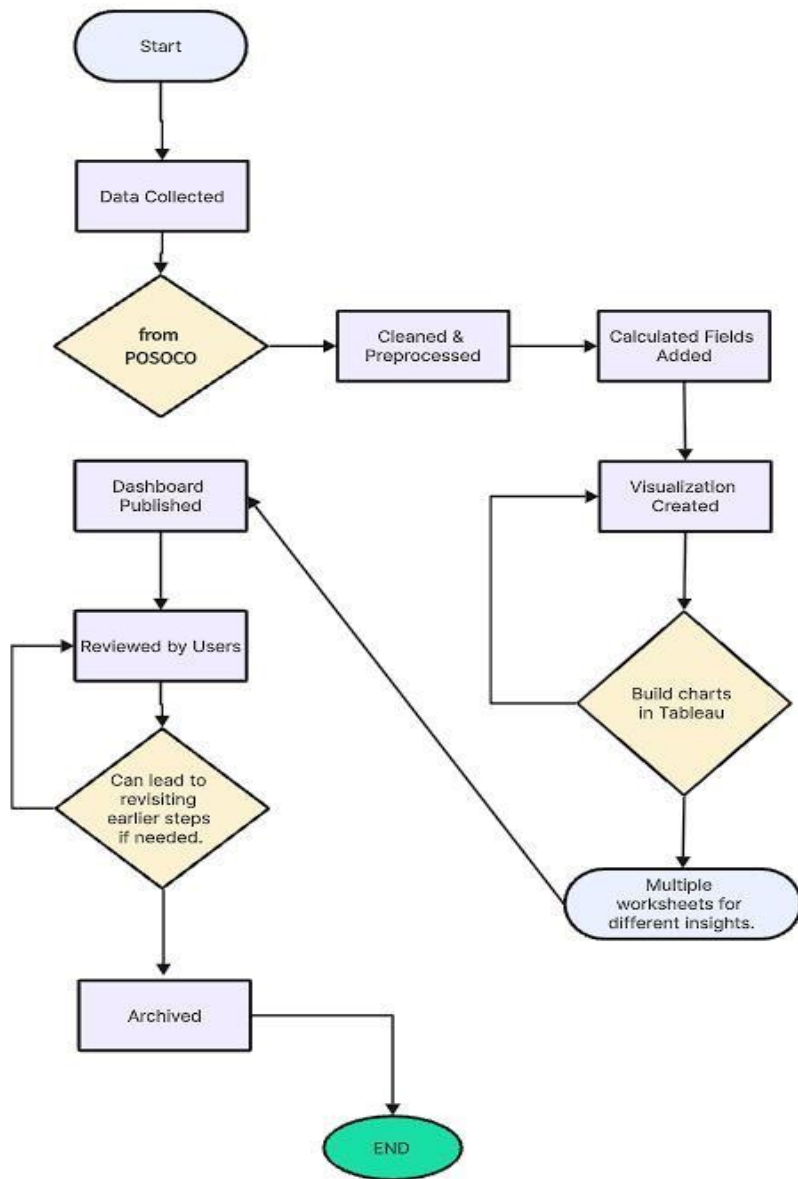
User Stories

User Type	Functional Requirement (Epic)	User Story Number	User Story / Task	Acceptance Criteria	Priority	Release
Analyst / Policymaker	View Housing MarketTrends	USN-1	As a user, I want to view housing market trends by region and year so I can identify peak consumption periods.	I can filter and view charts for specific regions and years.	High	Sprint-1
Analyst	Compare Houses	USN-2	As a user, I want to compare top and bottom house trends.	I can view bar charts with top N and bottom N trends.	Medium	Sprint-1
Policy Maker	Forecast Planning	USN-3	As a user, I want to analyze variations in trends to help plan future market trends.	I can view monthly and quarterly trends.	High	Sprint-2
House market Consultant	View Impact	USN-4	As a user, I want to compare before ad after the house market trends.	A before-after trends chart is available for selection.	High	Sprint-2
Developer	Connect Data	USN-5	As a user, I want the dashboard to be connected to a live database.	Data refreshes automatically from MySQL to Tableau.	Medium	Sprint-2
Developer	Export Insights	USN-6	As a user, I want to export dashboard views for presentations.	I can download dashboards as images or PDFs.	Low	Sprint-3