Project Design Phase-II
Data Flow Diagram & User Stories

Date	23 Feb 2026
Team ID	LTVIP2026TMIDS37725
Project Name	Visualizing Housing Market Trends: An Analysis of Sale Prices and Features using Tableau
Maximum Marks	4 Marks

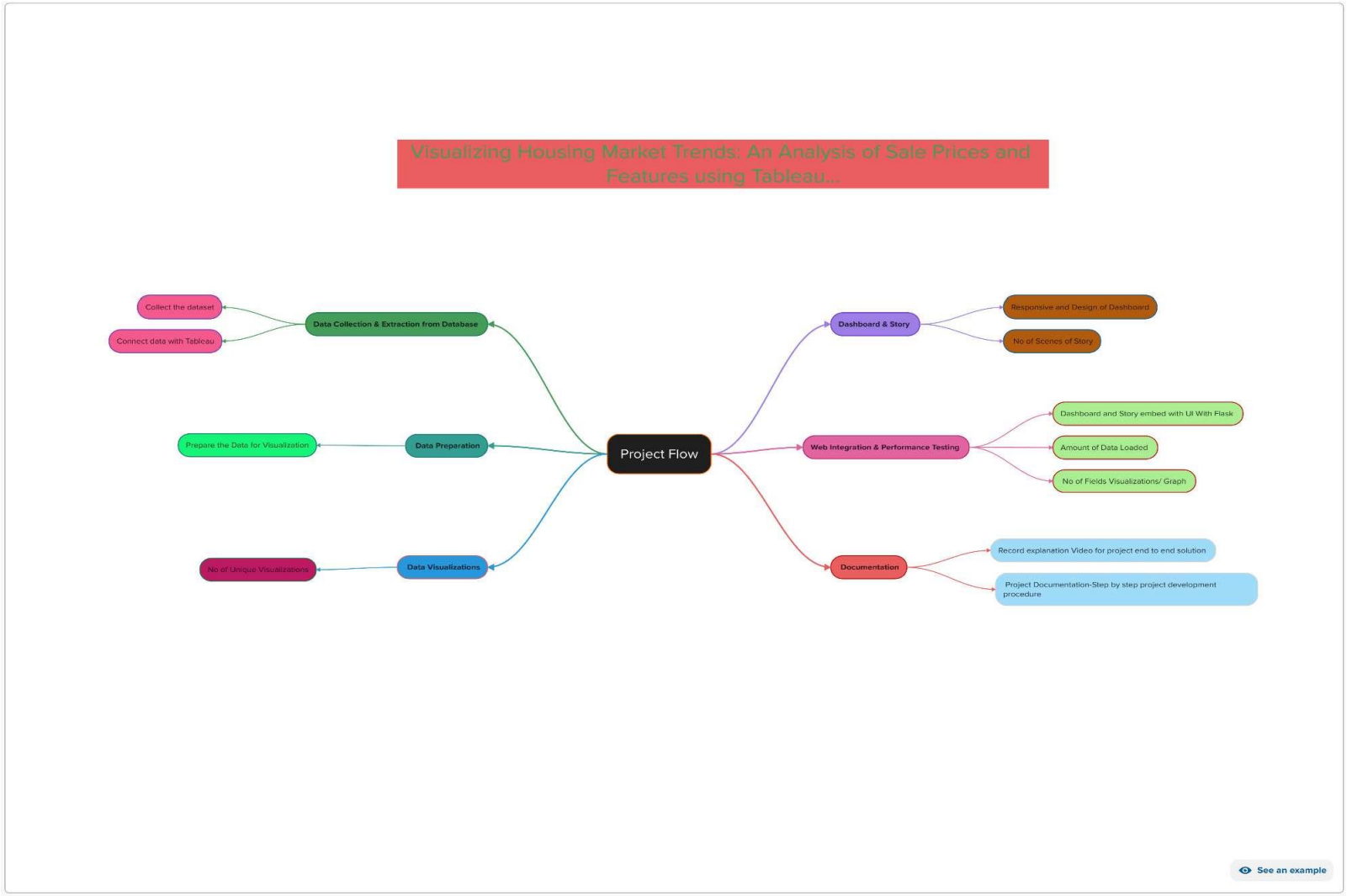
Data Flow of the Project

The data flow describes how data moves through the system from input to final visualization and user interaction. It explains the process of collecting, processing, analysing, and presenting data in a structured manner. In this project, data flows through multiple stages including data preparation, backend processing, and dashboard visualization. The system ensures that raw data is converted into meaningful insights for decision-making. Each component of the application works together to provide accurate and interactive analytical results.

Data Flow Steps :

1. The process begins with collecting and importing the raw dataset into the system.
2. The data is cleaned and pre-processed to remove missing or incorrect values.
3. The cleaned dataset is loaded into the Python Flask backend using the app.py file.
4. Flask processes the data and performs required computations and data handling operations.
5. The processed data is connected to Tableau for creating visualizations and dashboards.
6. When a user accesses the application, the browser sends a request to the Flask server.
7. The server retrieves the required information and sends it to the web pages.
8. The application displays interactive dashboards and insights to the user for analysis and decision-making.

Data Flow Diagrams :



User Stories

User Type	Functional Requirement (Epic)	User Story Number	User Story / Task	Acceptance Criteria	Priority	Release
Customer (Mobile user)	Registration	USN-1	**As a user, I can register for the application by entering my email, password, and confirming my password.**	User account is created and dashboard is accessible	High	Sprint-1
		USN-2	**As a user, I receive a confirmation message after registration.**	Confirmation message/email is displayed successfully	High	Sprint-1
		USN-3	**As a user, I can register using Gmail login.**	User logs in using Gmail and accesses dashboard	Medium	Sprint-1
	Login	USN-4	**As a user, I can log into the application using email and password.**	User successfully enters dashboard after login	High	Sprint-1
	Dashboard	USN-5	**As a user, I can view data visualizations and analytics dashboards.**	Charts and dashboards load correctly	High	Sprint-1
		USN-6	**As a user, I can interact with filters and graphs.**	Filters update charts dynamically	High	Sprint-2
		USN-7	**As a user, I can view detailed information using tooltips.**	Tooltip information appears on hover	Medium	Sprint-2
	Reports	USN-8	**As a user, I can view summarized business insights.**	Summary insights are displayed clearly	High	Sprint-2
Customer (Web user)	Data Access	USN-9	**As a web user, I can access dashboards through browser pages.**	Web pages load successfully using Flask routes	High	Sprint-1

User Type	Functional Requirement (Epic)	User Story Number	User Story / Task	Acceptance Criteria	Priority	Release
		USN-10	**As a web user, I can navigate between different pages of the app.**	Navigation buttons work correctly	High	Sprint-1
	Visualization	USN-11	**As a web user, I can view multiple charts in one dashboard.**	Dashboard displays all visualizations properly	High	Sprint-2
Customer Care Executive	User Support	USN-12	**As a support executive, I can view user queries or feedback.**	Feedback information is accessible	Medium	Sprint-2
	Monitoring	USN-13	**As a support executive, I can monitor dashboard usage.**	Usage data is visible	Low	Sprint-3
Administrator	Data Management	USN-14	**As an admin, I can upload or update datasets.**	New data updates dashboards automatically	High	Sprint-1
		USN-15	**As an admin, I can manage user access permissions.**	Admin can enable/disable user access	High	Sprint-2
	System Control	USN-16	**As an admin, I can maintain and monitor application performance.**	System runs without errors	Medium	Sprint-3
	Publishing	USN-17	**As an admin, I can publish dashboards for public viewing.**	Dashboard link is accessible online	High	Sprint-1