Project Design Phase-II
Data Flow Diagram & User Stories

Date	31 January 2025
Team ID	**LTVIP2025TMID47712**
Project Name	**Visualization Tool for Electric Vehicle Charge and Range Analysis**
Maximum Marks	4 Marks

Data Flow Diagrams:

A **Data Flow Diagram (DFD)** visually explains how data flows through the Electric Vehicle (EV) Visualization System. It helps users and developers understand the movement, transformation, and output of data at a glance.
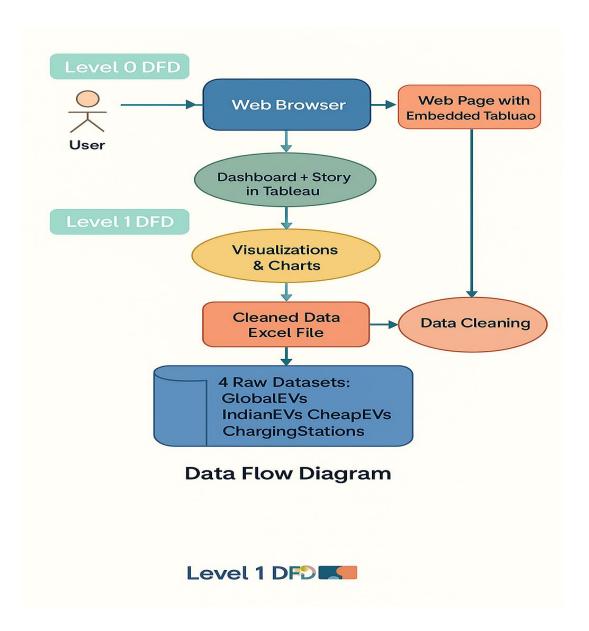
The system collects **raw data** from multiple sources, including global EV specs, Indian EV market data, and charging station locations. This data is cleaned, structured, and organized in Excel or Google Sheets.

The cleaned data is then used in **Tableau Desktop** to create interactive visualizations, dashboards, and a story. These outputs are published to **Tableau Public** for accessibility.

From Tableau Public, visual components are embedded into a **web application** using HTML/CSS or Bootstrap, allowing users to access dashboards online without needing Tableau software.

The DFD shows all these components — data sources, processing units, visualization tools, and the user interface — and highlights how they are connected.

This simple visual map ensures clarity of **system functionality**, **data flow**, and **project architecture**, making communication between technical and non-technical stakeholders easier.

Data Flow Diagram

User Stories - EV Visualization Project

User Type	Functional Requirement (Epic)	User Story Number	User Story / Task	Acceptance Criteria	Priority	Release
Customer (Web user)	Data Exploration	USN-1	As a user, I can view global and Indian EV data in one dashboard	I can compare price, range, and features easily	High	Sprint-1
	Charging Station Map	USN-2	As a user, I can view EV charging station locations on an interactive map	I can see location markers and zoom on city-wise regions	High	Sprint-1
	Filtering and Sorting	USN-3	As a user, I can filter EVs by price, range, and segment	Filters apply correctly and update all visuals	Medium	Sprint-2
	Story Dashboard	USN-4	As a user, I can view a visual story comparing Indian vs global EV trends	I can read narrative visual flow embedded into the web app	High	Sprint-2
	Web App Access	USN-5	As a user, I can access the dashboard via a public web page	I can open the webpage and see the Tableau visuals embedded without login	High	Sprint-1
Admin	Data Publishing	USN-6	As an admin, I can publish updated Tableau dashboards and link to the web app	Tableau links are live and reflect changes	High	Sprint-2
Developer	Web Integration	USN-7	As a developer, I can embed Tableau dashboards into a Bootstrap-based HTML page	Embedded dashboard works on different devices and loads fully	Medium	Sprint-2