Data Flow Diagram
Visualization tool for Electric charge and Range Analysis

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Team ID	LTVIP2025TMID20808
Project Name	Visualization tool for electric charge and range analysis
Maximum Marks	4 Marks

Data Flow Description

The following describes the data flow in the Visualization Tool for Electric Charge and Range Analysis project.
This DFD outlines how the raw EV data moves through the system and gets transformed into interactive visualizations.

1. Raw EV Dataset (CSV format) – collected data containing charging station information, vehicle type, charging duration, and range stats.
2. MySQL Workbench – used for storing, cleaning, and structuring the dataset. SQL queries filter and organize the data.
3. Tableau – connects to MySQL to generate dashboards and stories using charts, filters, and storyboards.
4. Tableau Public – the final dashboard and story are published online for public access.
5. Website – Tableau dashboards and stories can be embedded on platforms like Netlify.

Text-Based DFD Representation

Raw Dataset (CSV)
↓
MySQL Workbench (SQL Queries, Cleaned Tables)
↓
Tableau Desktop (Dashboards + Story Design)
↓
Tableau Public (Web-Based Publishing)
↓
Website Integration (Netlify/Github)

System Flow Diagram

Raw EV Dataset (CSV)
↓
MySQL Workbench
(SQL Querying, Data Cleaning)
↓
Tableau Desktop
(Dashboard & Story Creation)
↓
Tableau Public
Online Visualization & Sharing