

Project Design Phase-II Data Flow Diagram & User Stories

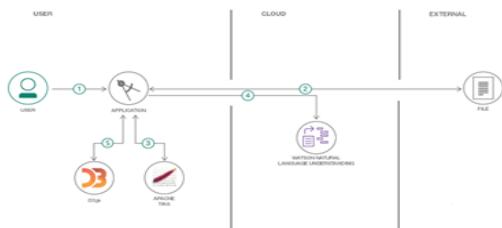
Date	31 January 2025
Team ID	LTVIP2026TMIDS47424
Project Name	Visualization Tool for Electric Vehicle Charge and Range Analysis
Maximum Marks	4 Marks

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.

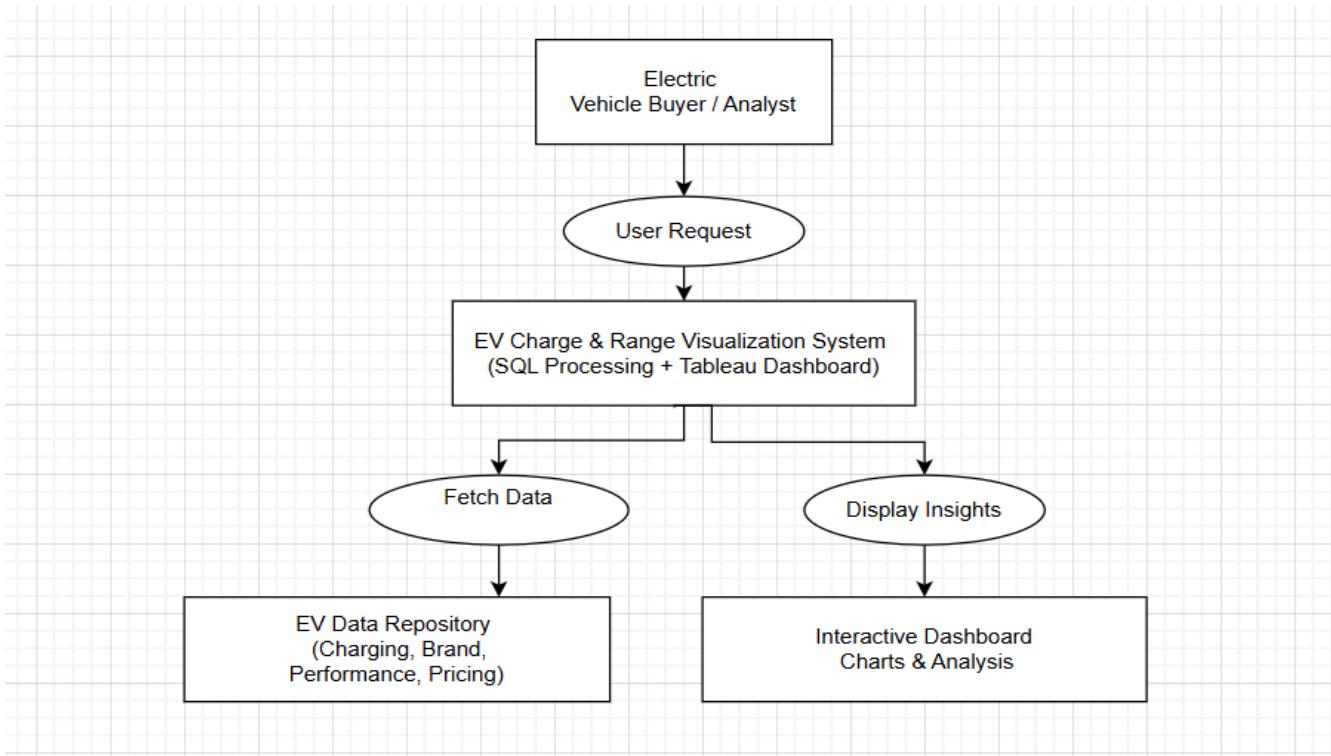
Example: (Simplified)

Flow



1. User configures credentials for the Watson Natural Language Understanding service and starts the app.
2. User selects data file to process and load.
3. Apache Tika extracts text from the data file.
4. Extracted text is passed to Watson NLU for enrichment.
5. Enriched data is visualized in the UI using the D3.js library.

Example:



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
Customer (EV Buyer - Web User)	Dashboard Access	USN-1	As an EV buyer, I want to view charging stations by region and type so that I can understand charging availability.	Charging map and regional chart load correctly with accurate data.	High	Sprint-1
Customer (EV Buyer - Web User)	Brand Comparison	USN-2	As an EV buyer, I want to compare EV brands by number of models so that I can evaluate market options.	Brand comparison chart displays correct model counts.	High	Sprint-1
Customer (EV Buyer - Web User)	Performance Analysis	USN-3	As an EV buyer, I want to compare top speed and efficiency of EV brands so that I can analyze performance differences.	Speed and efficiency charts load correctly and show accurate metrics.	High	Sprint-1
Customer (EV Buyer - Web User)	Price Analysis	USN-4	As an EV buyer, I want to view price range of EV cars in India so that I can identify affordable options.	Price comparison chart displays correct pricing segmentation.	High	Sprint-1
Customer (EV Buyer - Web User)	Powertrain Filtering	USN-5	As an EV buyer, I want to filter brands based on powertrain type so that I can perform focused analysis.	Powertrain filter updates dashboard dynamically.	Medium	Sprint-2
Customer (EV Buyer - Web User)	Interactive Filters	USN-6	As a user, I want interactive filters for brand and region so that I can customize dashboard view.	Filters apply correctly and update all relevant charts.	Medium	Sprint-2
Analyst / Researcher	Data Exploration	USN-7	As an analyst, I want access to structured EV datasets so that I can perform deeper analysis.	Cleaned dataset available and properly structured in SQL.	Medium	Sprint-2
Administrator	Data Management	USN-8	As an administrator, I want to update EV datasets in SQL so that dashboard reflects latest data.	Updated data reflects correctly in Tableau dashboards.	Medium	Sprint-3
Administrator	System Maintenance	USN-9	As an administrator, I want to ensure system performance and dashboard responsiveness.	Dashboard loads within acceptable performance limits.	Low	Sprint-3