Project Design Phase-II
Data Flow Diagram & User Stories

Date	27 june 2025
Team ID	LTVIP2025TMID29266
Project Name	Sustainable Smart City Assistant using IBM Granite LLM
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.

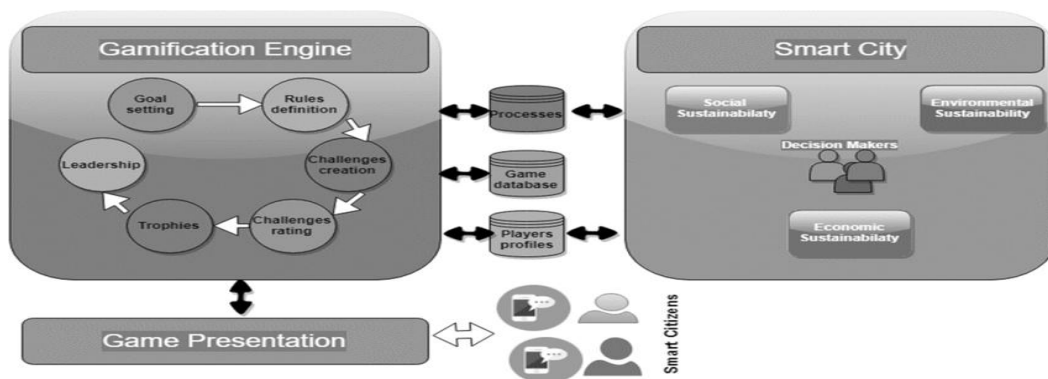### DFD Level 0 – Context Diagram

- External Entities: Citizens, City Admin, IBM Granite LLM

- Processes:

  1. Collect Smart City Data
  2. Analyze KPIs
  3. Generate Eco Tips
  4. Handle Feedback
  5. Provide Dashboard

DFD Level 1 – Decomposition Example

1.1 Data Preprocessing
      1.2 Model Building and Forecasting
      1.3 User Interaction via Gradio UI
      1.4 Flask API Integration with LLM

User Stories

User Type	Functional Requirement (Epic)	User Story Number	User Story / Task	Acceptance Criteria	Priority	Release
Citizen (Mobile or Web User)	Dashboard	USN-1	As a citizen, I can view live city KPIs through the dashboard	KPIs are displayed with latest data	High	Sprint-2
Citizen (Mobile or Web User)	Eco Tips	USN-2	As a citizen, I receive eco-friendly tips daily	Tips are generated & visible on dashboard	Medium	Sprint-2
Citizen (Mobile or Web User)	Feedback	USN-3	As a citizen, I can submit feedback about city services	Feedback is stored & visible to admin	High	Sprint-2
Administrator	Model Monitoring	USN-4	As an admin, I can monitor model accuracy & logs	Dashboard shows model logs & accuracy metrics	High	Sprint-2
Administrator	Feedback Review	USN-5	As an admin, I can review citizen feedback	List of all submitted feedback is visible	High	Sprint-2
Administrator	KPI Trend Analysis	USN-6	As an admin, I can view forecasted city trends	Visual trend graphs and statistics are shown	Medium	Sprint-2