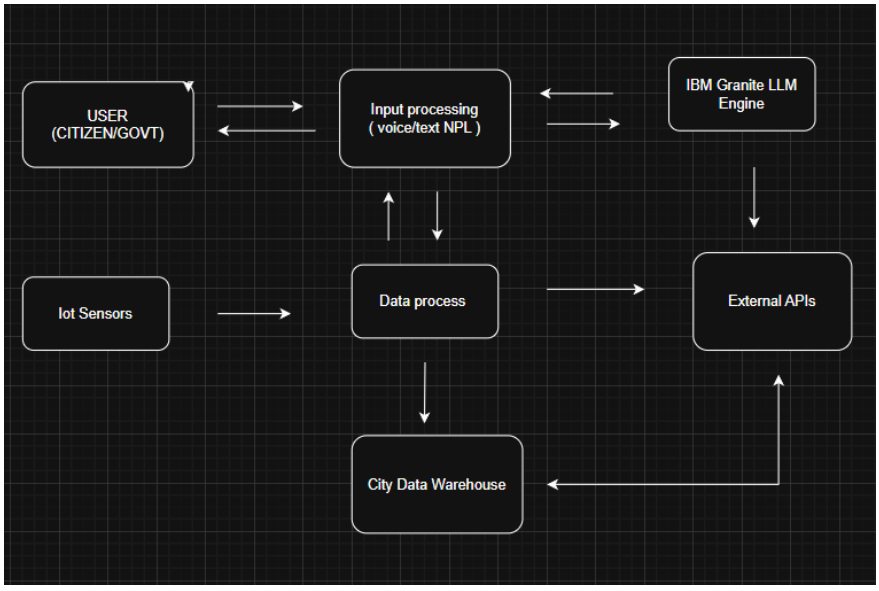
Project Design Phase-II
Data Flow Diagram & User Stories

Date	28 June 2025
Team ID	LTVIP2025TMID30982
Project Name	Sustainable Smart City Assistant Using IBM Granite Model
Maximum Marks	4 Marks

Data Flow Diagrams:

A Data Flow Diagram (DFD) is a traditional visual representation of the information flows within a system. In the context of the Sustainable Smart City Assistant, it represents how citizen inputs, city sensor data, and administrative tasks interact with AI-powered services like chat assistance, document summarization, eco-advice generation, anomaly detection, and KPI forecasting. The DFD illustrates how data is collected, processed, and returned to the user, while also showing how data is stored and managed across the platform.

Example: DFD Level 0 (Industry Standard)



Sustainable Smart City Assistant – User Stories

User Type	Functional Requirement (Epic)	User Story Number	User Story / Task	Acceptance Criteria	Priority	Release
Citizen (Web)	Chat Assistant	USN-1	As a user, I can ask city-related questions to the AI Assistant.	I get relevant and polite responses from the LLM.	High	Sprint -1
Citizen (Web)	Feedback Form	USN-2	As a user, I can submit feedback about city services.	My feedback is submitted and stored.	High	Sprint -1
City Administrator	KPI Forecast	USN-3	As an admin, I can forecast key sustainability KPIs using ML.	I see predictive graphs and KPI reports.	Medium	Sprint -2
City Administrator	Anomaly Detection	USN-4	As an admin, I receive alerts when anomalies are detected in city data.	I get timely alerts with data insights.	Medium	Sprint -2
Citizen (Web)	Eco-Tip Generator	USN-5	As a user, I receive personalized eco-friendly suggestions.	I see AI-generated sustainability tips.	Medium	Sprint -2
Admin/Staff	Document Summarizer	USN-6	As an admin, I can upload reports to get summaries.	I get an accurate summary of uploaded documents.	High	Sprint -1
Developer	Watsonx API Integration	USN-7	As a developer, I want to integrate IBM Granite using the Watsonx.ai SDK.	Backend API successfully communicates with the LLM and returns model output.	High	Sprint -1