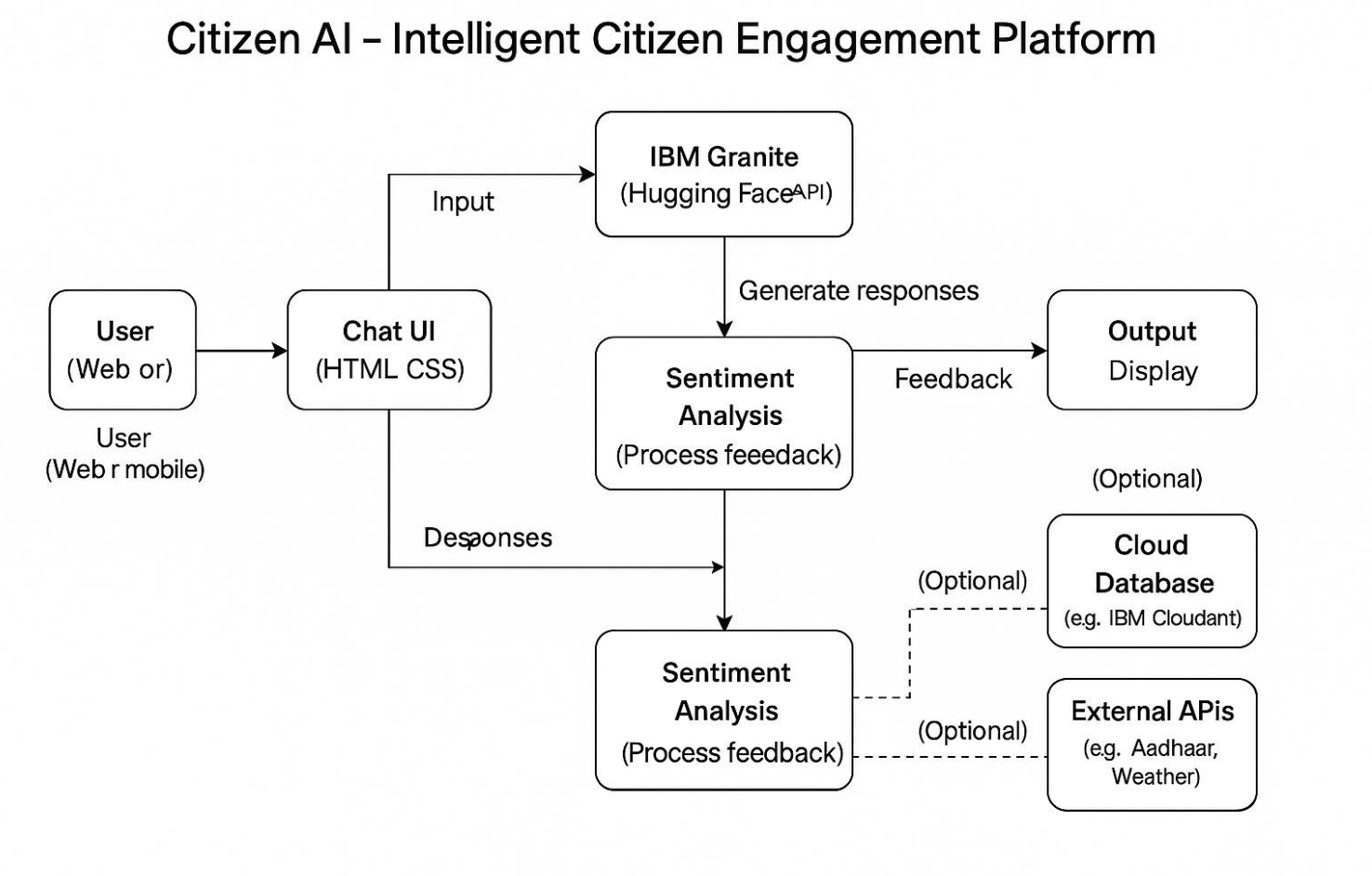
Project Design Phase-II
Data Flow Diagram & User Stories

Date	27 June 2025
Team ID	LTVIP2025TMID21064
Project Name	Citizen AI – Intelligent Citizen Engagement Platform
Maximum Marks	4 Marks

DATA FLOW DIAGRAMS

The Data Flow Diagram (DFD) for Citizen AI illustrates how user inputs such as civic queries and complaints flow through the system. Users interact via a web interface, where their inputs are processed by FastAPI and routed to the IBM Granite LLM via Hugging Face for AI responses. Complaints are categorized, logged, and displayed on a live dashboard. Sentiment analysis is performed on user feedback, and results are visualized in real time. This DFD highlights seamless interaction between frontend, backend services, AI processing, and visualization layers.



Data Flow Diagram (DFD) for Citizen AI

User Stories

User Type	Functional Requirement (Epic)	User Story Number	User Story / Task	Acceptance Criteria	Priority	Release
Web User (Citizen)	Chat Assistant	USW-1	As a user, I can ask civic-related questions using the chat assistant	AI-generated responses are accurate and context-aware	High	Sprint-1
Web User (Citizen)	Complaint Submission	USW-2	As a user, I can submit complaints by selecting issue type and entering a description	Complaint is stored and confirmed with a message	High	Sprint-1
Web User (Citizen)	Sentiment Feedback	USW-3	As a user, I can provide feedback that is analyzed for sentiment	Sentiment is shown as positive/negative in dashboard	Medium	Sprint-2
Web User (Citizen)	View Dashboard	USW-4	As a user, I can view live sentiment analysis results on the dashboard	Sentiment graph auto-refreshes every 15 seconds	Medium	Sprint-2
Admin/Backend Maintainer	API Integration	USA-1	As an admin, I can connect the app to Hugging Face API for LLM queries	Query responses are returned from IBM Granite model via API	High	Sprint-1
Admin	View Complaint Logs	USA-2	As an admin, I can view all logged complaints and sentiment entries	Admin can access logs with timestamps and sentiment flags	High	Sprint-2
Developer (Engineer)	Prompt Tuning	USDEV-1	As a developer, I can test prompt performance in Google Colab	Prompt behavior is tested and optimized for reliability	Medium	Sprint-1
Developer (Engineer)	Dashboard Setup	USDEV-2	As a developer, I can configure the Chart.js dashboard to show real-time sentiment	Dashboard updates automatically with new values	High	Sprint-1
Citizen (General Public)	Feedback Confirmation	USW-5	As a user, I receive a confirmation after feedback or complaint submission	Confirmation message appears after submission	Medium	Sprint-1