

Ideation Phase

Brainstorm & Idea Prioritization

Date	27 June 2025
Team ID	LTVIP2025TMID31710
Project Name	Sustainable Smart City Assistant Using IBM Granite LLM
Maximum Marks	4 Marks

Step 1: Team Gathering, Collaboration, and Select the Problem Statement

Our team identified the growing need for an integrated platform that empowers urban residents and planners with real-time insights into key metrics such as weather, pollution, traffic, and urban policies. The problem statement we selected:

“There is no unified, AI-driven platform that delivers live environmental and infrastructure data with actionable insights for smart urban planning and sustainable living.”

We met virtually, explored daily life challenges in cities, and narrowed our focus to sustainable, real-time city assistance.

Step 2: Brainstorm, Idea Listing, and Grouping

Ideas Generated:

Group	Ideas
Data Modules	Weather forecasting, AQI monitoring, traffic congestion
AI Capabilities	Chatbot for urban policy questions, document summarization for government notices
ML Analytics	KPI forecasting, anomaly detection in usage patterns
User Engagement	Eco tips, feedback form, dashboard UI personalization
Deployment	Streamlit Cloud hosting, secrets manager, modular API integration

Ideas were grouped into categories based on their impact area (data collection, analysis, UI/UX, deployment).

Step 3: Idea Prioritization

We used an impact–effort matrix to rank ideas. The final priority ideas selected for the first release:

- Real-time dashboard (Weather, AQI, Traffic, Energy)
- AI modules: Chatbot and summarizer via IBM Granite
- KPI forecasting using Prophet, Anomaly detection using scikit-learn
- Feedback + eco tips
- Streamlit Cloud deployment for public access

Lower-priority ideas (e.g., user login, multi-language support, predictive alerts) were kept for future scope.