

Ideation Phase

Brainstorm & Idea Prioritization Template

Date	31 January 2025
Team ID	LTVIP2025TMID29266
Project Name	Sustainable Smart City Assistant using IBM Granite LLM
Maximum Marks	4 Marks

Team Members & Roles

Name	Role
Singuluri Chandra Sagar	Team Leader, LLM Integration & Deployment
Sesetti Mohana Krishna	Gradio UI Developer & Model Testing
Tibirisetti Satish	KPI Forecasting & Anomaly Detection
Sangani Kasu Raju	Citizen Feedback & Eco Tips Module

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

Problem Statement:

To develop a Sustainable Smart City Assistant that utilizes Generative AI through IBM Granite LLMs to support citizens and administrators with policy understanding, feedback reporting, eco-friendly tips, KPI forecasting, and anomaly detection.

Motivation:

Urban areas face a rising need for accessible information, sustainable living practices, and proactive governance. Our assistant provides AI-driven solutions to bridge the gap between smart city data and user action.

Step 2: Brainstorming, Idea Listing, and Grouping

Initial Ideas:

- Summarize lengthy policy documents using LLM
- Create a chatbot assistant for queries

- Accept and categorize citizen feedback
- Forecast KPIs like energy, pollution, traffic
- Provide AI-generated eco tips
- Detect anomalies from city sensor data
- Deploy using Gradio on Hugging Face

Grouped into Modules:

1. Policy Module – Summarization using Granite
2. Chat Module – LLM-powered assistant
3. Feedback Module – Gradio form + tagging
4. Forecast Module – Basic predictive simulation
5. Eco Tips Generator – Prompt-based LLM tips
6. Anomaly Detection – Alert system
7. Deployment/UI – Gradio-based interface

Step 3: Idea Prioritization (Final Version)

Feature / Module	Importance	Feasibility	Notes
Policy Summarization	High	High	Implemented using IBM Granite LLM
Chat Assistant	High	High	LLM-powered Q&A chatbot using IBM Granite
Citizen Feedback Reporting	Medium	High	Gradio form with backend processing
KPI Forecasting	High	Medium	Used simulated data for forecasting
Eco Tips Generator	Medium	High	Prompt-based tips using LLM
Anomaly Detection	High	Medium	Alerts based on simulated deviations
Gradio Interface (Frontend)	High	High	Deployed on Hugging Face using Gradio