**Ideation Phase**

**Brainstorm & Idea Prioritization Template**

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| Date | 26 june 2025 |
| Team ID | LTVIP2025TMID32104 |
| Project Name | sustainable smart city assistant using ibm granite llm |
| Maximum Marks | 4 Marks |

**Brainstorm & Idea Prioritization Template:**

Brainstorming provides a free and open environment that encourages everyone within a team to participate in the creative thinking process that leads to problem solving. Prioritizing volume over value, out-of-the-box ideas are welcome and built upon, and all participants are encouraged to collaborate, helping each other develop a rich amount of creative solutions.

Use this template in your own brainstorming sessions so your team can unleash their imagination and start shaping concepts even if you're not sitting in the same room.

Reference: <https://www.mural.co/templates/brainstorm-and-idea-prioritization>

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

**Team Leader :** Kandula Bhargavi

**Team member :** K Hemanth

**Team member :** K Santhosh Mani

**Team member :** Jaya Prakash

**Selected Problem Statement:**  
How might we build a Sustainable Smart City Assistant that empowers urban citizens and administrators by using AI (Granite LLM), semantic search, and automation to improve urban policy analysis, feedback handling, sustainability planning, and anomaly detection?

**Step-2: Brainstorm, Idea Listing and Grouping**

**Brainstormed Ideas:**

* Enable citizens to report issues (e.g., water leaks) through a digital feedback form.
* Summarize complex policy documents using Watsonx Granite LLM.
* Forecast KPIs such as water usage and energy consumption using ML.
* Use anomaly detection on uploaded city KPIs to identify irregularities.
* Generate eco-tips on sustainability topics via natural language prompts.
* Provide a chat assistant for sustainability-related citizen queries.
* Embed and semantically search policy documents using Pinecone.
* Offer real-time visualization of KPIs in a dashboard.
* Automatically generate city sustainability reports using AI.
* Use a modular FastAPI backend for scalability and service separation.

**Step-3: Idea Prioritization**

**Top Priority Ideas for Implementation:**

1. **Citizen Feedback System** — structured issue reporting with categorization.
2. **Policy Document Summarization** — concise summaries using LLM.
3. **KPI Forecasting Module** — predict future trends using ML (e.g., water, energy).
4. **Eco Tips Generator** — actionable sustainability tips via Granite LLM.
5. **Anomaly Detection** — highlight suspicious spikes in urban data (e.g., electricity).

**Secondary Priority Ideas:**

* Chat Assistant for sustainability Q&A.
* Semantic Search with Pinecone for document retrieval.
* AI-generated Sustainability Reports.
* Stylish and responsive frontend with KPI cards and modular navigation.

Ideas were selected based on feasibility within the hackathon timeframe, impact on smart city governance, user engagement potential, and ability to leverage IBM Watsonx and other advanced AI/ML tools.