

Project Design Phase

Proposed Solution Template

Date	15 February 2025
Team ID	LTVIP2025TMID29266
Project Name	Sustainable Smart City Assistant using IBM Granite LLM
Maximum Marks	2 Marks

Proposed Solution Template:

S.No.	Parameter	Description
1	Problem Statement (Problem to be solved)	City administrators and citizens struggle with effective policy communication, feedback management, KPI forecasting, and sustainability awareness due to lack of AI-based tools and platforms for smart urban governance.
2	Idea / Solution Description	Develop an AI-powered Smart City Assistant using IBM Granite LLM, deployed via Gradio. It supports key features such as policy summarization, feedback reporting, KPI forecasting, eco-tips generation, anomaly detection, and chatbot Q&A, making city interactions seamless for both admins and citizens.
3	Novelty / Uniqueness	Combines multiple smart city functions into a unified LLM-powered assistant. Uses IBM's Granite 3.3-2B model for real-time natural language summarization and response, offering citizen interaction and administration tools in one interface. Deployed on Hugging Face for accessibility.
4	Social Impact / Customer Satisfaction	Enhances public engagement and trust by making policies understandable and actionable. Encourages eco-conscious behavior with personalized tips. Helps city authorities make faster, data-informed decisions based on AI insights and structured feedback.
5	Business Model (Revenue Model)	Initially offered as a free open-source solution to municipalities. Future monetization can include subscription plans for enterprise/government clients, custom integration services, and analytics dashboard licensing.
6	Scalability of the Solution	Highly scalable due to cloud-based deployment (Hugging Face + Gradio). Can be extended to include more cities, support more languages, integrate sensor data, and enhance features using APIs or mobile app versions.