

Project Design Phase

Problem – Solution Fit Template

Date: 26 June 2025

Team ID: LTVIP2025TMID20299

Project Name: Sustainable Smart City Assistant Using IBM Granite LLM

Maximum Marks: 2 Marks

Problem – Solution Fit Template:

The Problem–Solution Fit process aligns real civic governance and sustainability challenges with an AI-powered digital solution. The Sustainable Smart City Assistant addresses municipal, citizen, and urban management needs by integrating Generative AI into tasks like policy summarization, data forecasting, anomaly detection, eco education, and feedback collection..

Purpose:

Sustainable Smart City Assistant is built to remove inefficiencies and gaps in urban service delivery by enabling municipalities and citizens to interact intelligently with city policies, KPIs, and governance services using AI-powered natural language models like IBM Watsonx Granite LLM.

How Our Solution Solves the Problem:

- Simplifies policy communication by converting complex city regulations into readable summaries using LLMs.
- Increases planning agility by forecasting key performance indicators from city-level data (e.g., water usage, sanitation trends).
- Enables real-time anomaly detection for early warning in energy or infrastructure data.
- Empowers citizens to easily report civic issues through intuitive UI and feedback logging.
- Promotes sustainability awareness by generating practical eco-friendly tips.

- Offers a chat-based assistant to engage users on urban queries interactively.
- Boosts trust and transparency using accurate, explainable AI results powered by Granite 3B/13B.
- Builds familiarity and adoption via a unified, no-login Streamlit web app experience

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References:

<https://www.ideahackers.network/problem-solution-fit-canvas/>

<https://medium.com/@epicantus/problem-solution-fit-canvas-aa3dd59cb4fe>