

## Project Design Phase Solution Architecture

Date	27 june 2025
Team ID	LTVIP2025TMID29266
Project Name	Sustainable Smart City Assistant using IBM Granite LLM
Maximum Marks	4 Marks

### Solution Architecture:

Solution architecture is a structured process that connects complex urban challenges to viable technology solutions. For a Smart City project, the goal is to develop a comprehensive system that improves urban services and infrastructure through integrated and intelligent technologies.

### Objectives of the Solution Architecture:

- Identify the best technology stack to optimize urban resource usage (e.g., water, electricity, traffic).
- Illustrate how subsystems like smart lighting, waste management, surveillance, and public transport interact.
- Define system behavior, data flow, and communication across modules (IoT devices, cloud servers, analytics).
- Detail the solution requirements, development milestones, and integration strategies for different components.
- Ensure scalability, data security, and citizen privacy across the platform.

### Example - Solution Architecture Diagram:

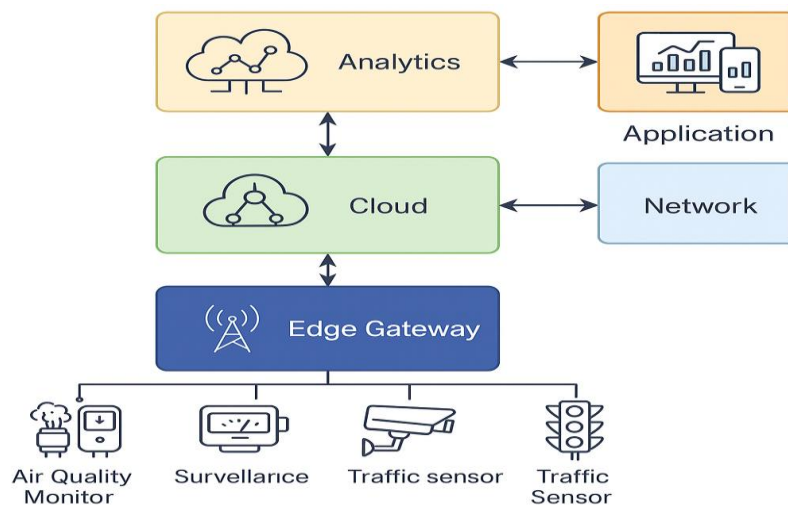


Figure 1: Architecture and Data Flow of the Smart City Application