**Sustainable Smart City Assistant-** **Agile Scrum-oriented**

|  |  |
| --- | --- |
| Date | 30 June 2025 |
| Team ID | LTVIP2025TMID29114 |
| Project Name | Sustainable Smartcity Assistant Using IBM Granite LLM |
| Maximum Marks |  |

**Sprint, Epic, Story, and Story Point Definitions – Sustainable Smart City Assistant**

* **Sprint:** A fixed time-boxed development cycle (e.g., 2–5 days) during which the Smart City Assistant team delivers a functional increment (e.g., policy summarizer, feedback analyzer, KPI module).
* **Epic:** A large, user-centric feature that spans multiple stories and possibly sprints. Examples include:
  + “Policy Summarization Module”
  + “Citizen Feedback Analysis”
  + “KPI Forecasting Dashboard”
* **Story:** A specific task or sub-feature under an Epic. Examples include:
  + “Integrate IBM Granite LLM API”
  + “Build user role-based login system”
  + “Visualize KPI trends using Plotly”
* **Story Point:** An estimation unit (Fibonacci series: 1, 2, 3, 5, 8…) used to measure the complexity, effort, and time needed to complete a story.

| **Effort Level** | **Story Points** |
| --- | --- |
| Very Easy | 1 |
| Easy | 2 |
| Moderate | 3–5 |
| Difficult | 8+ |

**Sprint 1: User Roles & Policy Summarization (2 Days)**

**Epic:** Role Management & Onboarding

* Role Selection for Citizen/Admin – 1
* User Authentication Setup – 2

**Epic:** Policy Summarization Module

* Create UI for Policy Upload/Display – 2
* Integrate IBM Granite LLM for summarization – 3

**Sprint 1 Total Story Points = 8**

**Sprint 2: Feedback System & Eco Module (2 Days)**

**Epic:** Citizen Feedback Analyzer

* Design Feedback Form UI – 2
* Implement NLP Analysis on Feedback – 3
* Visualize Feedback Sentiment in Dashboard – 2

**Epic:** Eco Tips Generator

* Generate Contextual Eco Tips using AI – 3
* Schedule Daily Tips per Role/City Zone – 2

**Epic:** Anomaly Detection

* Connect to Sample City KPI Dataset – 3
* Implement Threshold-Based Anomaly Alerts – 3

**Sprint 2 Total Story Points = 18**

**Velocity Calculation:**

* **Total Story Points =** Sprint 1 (8) + Sprint 2 (18) = **26**
* **Number of Sprints =** 2
* **Velocity =** 26 ÷ 2 = **13 Story Points per Sprint**