# Project Planning Phase

Date: 26 June 2025

Team ID: LTVIP2025TMID20299

Project Name: Sustainable Smart City Assistant Using IBM Granite LLM

Product Backlog, Sprint Schedule, and Estimation (4 Marks)

Use the below template to create product backlog and sprint schedule

## Product Backlog & Sprint Schedule

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Sprint** | **Functional Requirement (Epic)** | **User Story Number** | **User Story / Task** | **Story Points** | **Priority** | **Team Members** |
| Sprint-1 | App Initialization | USN-1 | Set up Streamlit app, virtual environment & .env config | 2 | High | All |
| Sprint-1 | Watsonx Model Setup | USN-2 | Connect to IBM Watsonx and validate API integration | 2 | High | Hari, Team |
| Sprint-2 | Policy Summarizer | USN-3 | Upload PDF/text → Generate summary via LLM | 3 | High | Hari |
| Sprint-2 | Feedback Reporting | USN-4 | Add category + description input → store/report issue | 3 | High | Team |
| Sprint-3 | KPI Forecasting | USN-5 | Upload CSV → Use LLM to predict next trends | 3 | High | Hari |
| Sprint-3 | Anomaly Detection | USN-6 | Analyze uploaded CSV → Return anomaly explanation | 3 | Medium | Team |
| Sprint-4 | Eco Tips Generator | USN-7 | Input keyword → Generate 5 green-living tips via LLM | 2 | Medium | Hari |
| Sprint-4 | Chat Assistant | USN-8 | Implement chat\_input → Return Watsonx-generated replies | 4 | High | Hari |
| Sprint-5 | Dashboard + Icons | USN-9 | Improve layout, icons, and descriptions across modules | 2 | Medium | All |
| Sprint-5 | Final Testing & Deployment | USN-10 | Validate all modules → Deploy to Streamlit Cloud | 3 | High | Hari |

## Project Tracker, Velocity & Burndown Chart (4 Marks)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Sprint** | **Total Story Points** | **Sprint Start Date** | **Sprint End Date** | **Story Points Completed** | **Sprint Release Date** |
| Sprint-1 | 4 | 01 July 2025 | 06 July 2025 | 4 | 06 July 2025 |
| Sprint-2 | 6 | 07 July 2025 | 12 July 2025 | 6 | 12 July 2025 |
| Sprint-3 | 6 | 13 July 2025 | 18 July 2025 | 5 | 18 July 2025 |
| Sprint-4 | 6 | 19 July 2025 | 24 July 2025 | 5 | 24 July 2025 |
| Sprint-5 | 5 | 25 July 2025 | 30 July 2025 | 4 | 30 July 2025 |

### Velocity:

Average Velocity = (4 + 6 + 5 + 5 + 4) / 5 = 4.8 story points per sprint