

Project Planning Phase

Project Planning Template (Product Backlog, Sprint Planning, Stories, Story points)

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| Date | 15 February 2025 |
| Team ID | LTVIP2025TMID29266 |
| Project Name | Sustainable Smart City Assistant using IBM Granite LLM |
| Maximum Marks | 5 Marks |

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

| Sprint | Functional Requirement (Epic) | User Story Number | User Story / Task | Story Points | Priority | Team Members |
|----------|-------------------------------|-------------------|--|--------------|----------|-------------------------|
| Sprint-1 | Data Collection | USN-1 | As a developer, I want to collect smart city KPIs for model training | 2 | High | Tibirisetti Satish |
| Sprint-1 | Data Collection | USN-2 | As a developer, I want to load and verify the data format | 1 | Medium | Tibirisetti Satish |
| Sprint-1 | Data Preprocessing | USN-3 | As a developer, I want to handle missing values in smart city data | 3 | High | Sangani Kasu Raju |
| Sprint-1 | Data Preprocessing | USN-4 | As a developer, I want to encode categorical values properly | 2 | Medium | Sangani Kasu Raju |
| Sprint-2 | Model Building (LLM/KPI) | USN-5 | As a developer, I want to build a KPI forecasting | 5 | High | Singuluri Chandra Sagar |

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|----------|-----------------|-------|--|---|--------|-------------------------|
| | | | model using LLM | | | |
| Sprint-2 | Model Testing | USN-6 | As a developer, I want to test model accuracy and performance | 3 | High | Sesetti Mohana Krishna |
| Sprint-2 | Deployment & UI | USN-7 | As a developer, I want to create a Gradio-based HTML UI | 3 | Medium | Sesetti Mohana Krishna |
| Sprint-2 | Deployment | USN-8 | As a developer, I want to deploy the app using Flask and IBM Granite LLM | 5 | High | Singuluri Chandra Sagar |

Project Tracker, Velocity & Burndown Chart (4 Marks)

| Sprint | Total Story Points | Duration | Sprint Start Date | Sprint End Date (Planned) | Story Points Completed |
|----------|--------------------|----------|-------------------|---------------------------|------------------------|
| Sprint-1 | 8 | 5 Days | 01 Feb 2025 | 05 Feb 2025 | 8 |
| Sprint-2 | 16 | 5 Days | 06 Feb 2025 | 10 Feb 2025 | 16 |

Velocity Calculation:

- Total Story Points: 24
- Total Sprints: 2
- Velocity = $24 / 2 = 12$ Story Points per Sprint.