**Project Planning Phase**

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

|  |  |
| --- | --- |
| Date | 26-06-2025 |
| Team ID | LTVIP2025TMID37089 |
| Project Name | Sustainable Smart City Assistant using IBM Granite LLM |
| Maximum Marks | 5 Marks |

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

Use the below template to create product backlog and sprint schedule

| **Sprint** | **Functional Requirement (Epic)** | **User Story Number** | **User Story / Task** | **Story Points** | **Priority** | **Team Members** |
| --- | --- | --- | --- | --- | --- | --- |
| Sprint-1 | |  | | --- | |  |  |  | | --- | | UI Setup | | USN-1 | As a user, I can access a login screen to authenticate before using the assistant. | 2 | High | Sai Sahithi |
| Sprint-1 | |  | | --- | |  |  |  | | --- | | UI Setup | | USN-2 | |  | | --- | |  |  |  | | --- | | As a developer, I want to load the IBM Granite model and connect it to the frontend. | | 2 | High | Mohana Chandrika |
| Sprint-2 | |  | | --- | |  |  |  | | --- | | Backend Integration | | USN-3 | |  | | --- | |  |  |  | | --- | | As a tester, I can verify if the prompt and response communication is working smoothly. | | 3 | High | Devi Naga Sai Ram Prasad |
| Sprint-1 | |  | | --- | |  |  |  | | --- | | Testing & Communication | | USN-4 | As a user, I can register for the application through Gmail | 3 | Medium | Sanjay |
| Sprint-1 | |  | | --- | |  |  |  |  | | --- | --- | | Complaint Classification | | |  |  |  | | --- | |  | | USN-5 | |  | | --- | |  |  |  | | --- | | As a user, I can submit civic issues which get routed to the right department automatically. | | 5 | High | Sanjay |
| Sprint-1 | Eco-Query Response | USN-6 | As a user, I can ask sustainability-related questions and receive helpful suggestions from the assistant. | 3 | High | Devi Naga Sai Ram Prasad |
| Sprint-1 | Error Handling | USN-7 | |  | | --- | |  |  |  | | --- | | As a user, I receive a proper message if I enter an empty input or an unrecognized prompt. | | 3 | Medium | Mohana Chandrika |
| Sprint-1 | |  | | --- | |  |  |  | | --- | | Mode Switching | | USN-8 | |  | | --- | | As a user, I can switch between Eco and Complaint modes using radio buttons. |  |  | | --- | |  |  |  | | --- | |  | | 3 | Medium | Sai Sahithi |

**Project Tracker, Velocity & Burndown Chart: (4 Marks)**

| **Sprint** | **Total Story Points** | **Duration** | **Sprint Start Date** | **Sprint End Date (Planned)** | **Story Points Completed (as on Planned End Date)** | **Sprint Release Date (Actual)** |
| --- | --- | --- | --- | --- | --- | --- |
| Sprint-1 | 20 | 6 Days | 21-May-2025 | 27-May-2025 | 20 | 29-May-2025 |
| Sprint-2 | 20 | 6 Days | 29-May-2025 | 4-June-2025 | 15 | 6-June-2025 |
| Sprint-3 | 20 | 6 Days | 6-June-2025 | 12-June-2025 | 10 | 12-June-2025 |
| Sprint-4 | 20 | 6 Days | 8-June-2025 | 14-June-2025 | 12 | 14-June-2025 |
|  | 10 | 4-days | 12-June-2025 | 16-June-2025 | 14 | 16-June-2025 |
|  | 8 | 4-days | 17-June-2025 | 21-June-2025 | 18 | 21-June-2025 |
|  | 10 | 4-days | 22-June-2025 | 26-June-2025 | 20 | 26-June-2025 |
|  | 15 | 4-days | 24-June-2025 | 25-June-2025 | 15 | 26-June-2025 |

**Velocity:**



**Velocity = Total Story Points Completed / Number of Sprints  
= (10 + 14) / 2  
= 24 / 2 = 12 Story Points per Sprint**

**Team’s Velocity: ✅ 12 Story Points/Sprint**

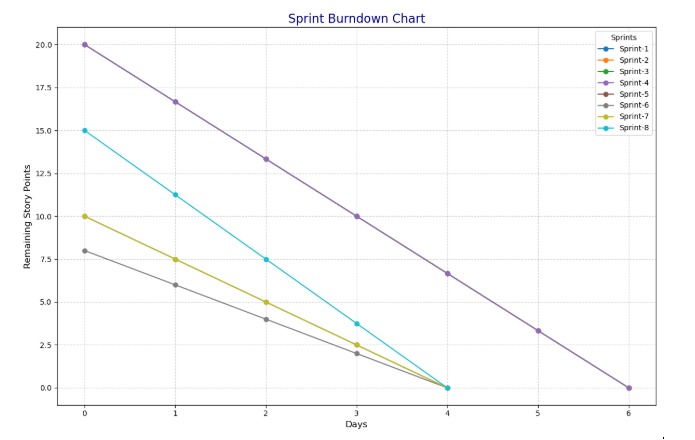
**🔹 Average Velocity Per Day (Story Points / Sprint Duration)**

**Each sprint = 5 days  
Average Velocity (AV) = 12 / 5 = 2.4 story points/day**

**Burndown Chart:**

 A **Burndown Chart** is used to track how much work (in story points) remains across the sprint timeline.

 For each sprint, points should decrease daily from the total to 0 if on schedule.

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