

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

Date	26 June 2025
Team ID	LTVIP2025TMID32067
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	Birlangi Murali Shekar
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	B. Durga Sesh Veer
Sprint-2	Backend Integration	USN-3	As a tester, I can verify if the prompt and response communication is working smoothly.	3	High	B. Durga Sesh Veer
Sprint-1	Testing & Communication	USN-4	As a user, I can register for the application through Gmail	3	Medium	Baji Kumar

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
Sprint-1	Complaint Classification	USN-5	As a user, I can submit civic issues which get routed to the right department automatically.	5	High	BJVNSM Gangadhar
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	Birlangi Murali Shekar
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	Baji Kumar
Sprint-1	Mode Switching	USN-8	As a user, I can switch between Eco and Complaint modes using radio buttons.	3	Medium	BJVNSM Gangadhar

**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)
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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:

$$AV = \frac{\text{sprint duration}}{\text{velocity}} = \frac{20}{10} = 2$$

Velocity = Total Story Points Completed / Number of Sprints

$$= (10 + 14) / 2$$

$$= 24 / 2 = 12 \text{ Story Points per Sprint}$$

Team's Velocity:  12 Story Points/Sprint

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- ♦ Average Velocity Per Day (Story Points / Sprint Duration)

Each sprint = 5 days

$$\text{Average Velocity (AV)} = 12 / 5 = 2.4 \text{ story points/day}$$

**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.

<https://www.visual-paradigm.com/scrum/scrum-burndown-chart/>

<https://www.atlassian.com/agile/tutorials/burndown-charts>

