

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	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
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:

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

Velocity = Total Story Points Completed / Number of Sprints

= (10 + 14) / 2

= 24 / 2 = 12 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.

