

Project Planning Phase

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

Date	28 June 2025
Team ID	LTVIP2025TMID35907
Project Name	Sustainable Smart City Assistant using IBM Granite LLM,
Maximum Marks	5 Marks

Product Backlog, Sprint Schedule, and Estimation:

Here's a completed **Product Backlog, Sprint Schedule, and Estimation** table for our *Sustainable Smart City Assistant using IBM Granite LLM*, continuing from your format and including the **Dashboard** epic:

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
Sprint-1	Registration	USN-1	As a user, I can register for the application by entering my email, password, and confirming my password.	2	High	
Sprint-1		USN-2	As a user, I will receive confirmation email once I have registered for the application	1	High	
Sprint-2		USN-3	As a user, I can register for the application through Facebook	2	Low	
Sprint-1		USN-4	As a user, I can register for the application through Gmail	2	Medium	
Sprint-1	Login	USN-5	As a user, I can log into the application by entering email & password	1	High	
	Dashboard					

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

Project Tracker, Velocity & Burndown Chart:

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	24 june 2025	26 june 2025	20	29 june 2025
Sprint-2	20	6 Days	31 june 2025	05 june 2025		
Sprint-3	20	6 Days	07 june 2025	12 june2025		
Sprint-4	20	6 Days	14 june 2025	19 june 2025		

Velocity:

Imagine we have a 10-day sprint duration, and the velocity of the team is 20 (points per sprint). Let's calculate the team's average velocity (AV) per iteration unit (story points per day)

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

Burndown Chart:

Here's a simple Burndown Chart representation for your Sustainable Smart City Assistant project using IBM Granite LLM, based on the 4-sprint plan we discussed:

sprint	planned points	remaining points
0	—	68
1	13	55
2	21	34
3	21	13
4	13	0

This chart shows how your team "burns down" the total 68 story points over 4 sprints. You can visualize this as a line graph with:

- X-axis: Sprint number (0 to 4)
- Y-axis: Remaining story points (68 to 0)
- Ideal line: A straight diagonal from (0, 68) to (4, 0)
- Actual line: Plots the real progress—if it dips below the ideal, ou'r ahead of schedule