Project Planning Phase

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

Date	15 February 2026
Team ID	LTVIP2026TMIDS24126
Project Name	Rising Waters – A Machine Learning Approach to Flood Prediction
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	Registration	USN-1	As a user, I can register for the application by entering my email, password, and confirming my password.	2	High	Frontend Dev
Sprint-1		USN-2	As a user, I will receive confirmation email once I have registered for the application	1	High	Frontend Dev
Sprint-2		USN-3	As a user, I can register for the application through Facebook	2	Low	Frontend Dev
Sprint-1		USN-4	As a user, I can register for the application through Gmail	2	Medium	ML Engineer
Sprint-1	Login	USN-5	As a user, I can log in using email and password.	1	High	Frontend Dev
	Data Collection	USN-6	As a system, I can collect rainfall and river sensor data.	3	High	ML Engineer
	Data Preparation	USN-7	As a system, I can clean and preprocess environmental data.	3	High	ML Engineer
	Dashboard	USN-58	As a Disaster Management Authority, I can view district-wise flood risk on a dashboard.	3	High	ML Engineer

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	24 Oct 2022	01 Feb 2026	20	01 Feb 2026
Sprint-2	20	6 Days	31 Oct 2022	03 Feb 2026	23	03 Feb 2026vv
Sprint-3	20	6 Days	07 Nov 2022	05 Feb 2026	23	05 Feb 2026
Sprint-4	20	6 Days	14 Nov 2022	09 Feb 2026	23	09 Feb 2026

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:

A burn down chart is a graphical representation of work left to do versus time. It is often used in agile software development methodologies such as Scrum. However, burn down charts can be applied to any project containing measurable progress over time.

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

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

Reference:

https://www.atlassian.com/agile/project-management

https://www.atlassian.com/agile/tutorials/how-to-do-scrum-with-jira-software

https://www.atlassian.com/agile/tutorials/epics

https://www.atlassian.com/agile/tutorials/sprints

https://www.atlassian.com/agile/project-management/estimation

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