

Project Planning Phase

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

Date	19 February 2026
Team ID	LTVIP2026TMIDS62229
Project Name	Exploratory Analysis of Rain Fall Data in India for Agriculture
Maximum Marks	5 Marks

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

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
Sprint-1	Data Collection	USN-1	As a developer, I can gather the Weather dataset for rainfall prediction.	2	High	Pradeep
Sprint-1		USN-2	As a developer, I can load dataset using Pandas.	1	High	Naveen
Sprint-1	Data Preparation	USN-3	As a developer, I can handle missing values in dataset.	3	High	Nikhila
Sprint-1		USN-4	As a developer, I can encode categorical variables.	3	High	Poojasri
Sprint-1		USN-5	As a developer, I can perform feature selection and split data.	2	Medium	Pradeep

Sprint-2	Model Building	USN-6	As a developer, I can train RandomForest model.	3	High	Naveen
Sprint-2		USN-7	As a developer, I can evaluate model using accuracy & confusion matrix.	2	High	Nikhila
Sprint-2	Web Application	USN-8	As a developer, I can create Flask backend application.	3	High	Pradeep
Sprint-2		USN-9	As a developer, I can design HTML frontend form.	2	Medium	Poojasri
Sprint-2		USN-10	As a developer, I can connect ML model to web app and show prediction result.	3	High	Naveen

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

Sprint	Total Story Points	Duration	Sprint Start Date	Sprint End Date (Planned)	Story Points Completed	Sprint Release Date (Actual)
Sprint-1	11	6 Days	01 Feb 2026	06 Feb 2026	11	06 Feb 2026
Sprint-2	13	6 Days	08 Feb 2026	13 Feb 2026	13	13 Feb 2026
Sprint-3	10	6 Days	15 Feb 2026	20 Feb 2026	—	—
Sprint-4	8	6 Days	22 Feb 2026	27 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)

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

$$\text{Total Story Points Completed} = 11 + 13 = \mathbf{24}$$

$$\text{Number of Completed Sprints} = 2$$

$$\text{Velocity} = \text{Total Story Points Completed} / \text{Number of Sprints}$$

$$\text{Velocity} = 24 / 2$$

Sprint Duration = 6 Days

Sprint Velocity = 12

Average Velocity (AV) per day = $12 / 6$

2 Story Points per Day

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>