Project Planning Phase

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

Date	08 February 2026
Team ID	LTVIP2026TMIDS55682
Project Name	Exploratory-Analysis-Of-RainFall-Data-In-India-For-Agriculture
Maximum Marks	5 Marks

Product Backlog & Sprint Schedule

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
Sprint-1	UI Development	USN-1	As a farmer, I can enter weather parameters in a web form.	3	High	Frontend Team
Sprint-1	Data Validation	USN-2	As a system, I validate user inputs before processing.	2	High	Backend Team
Sprint-1	Model Integration	USN-3	As a user, I receive rainfall prediction results from the ML model.	5	High	ML Team
Sprint-2	Preprocessing Pipeline	USN-4	As a system, I apply scaling, encoding, and imputation automatically.	5	High	ML Team
Sprint-2	Advisory Generation	USN-5	As a farmer, I receive agricultural	3	High	Backend Team

			advisory based on prediction.			
Sprint-3	Performance Optimization	USN-6	As a user, I get prediction results within seconds.	2	Medium	Backend Team
Sprint-3	Deployment Setup	USN-7	As a team, we deploy the Flask application locally/cloud.	3	Medium	DevOps Team
Sprint-4	Model Improvement	USN-8	As a system, I improve prediction accuracy using feature tuning.	5	Medium	ML Team
Sprint-4	Documentation & Testing	USN-9	As a team, we test the application and finalize documentation.	3	High	All Members

Sprint Planning Summary

Sprint-1: Develop frontend UI and integrate initial ML prediction.

Sprint-2: Implement preprocessing pipeline and advisory generation.

Sprint-3: Optimize performance and deploy the application.

Sprint-4: Improve model accuracy and complete testing/documentation.

Estimation Approach

Story points were estimated using relative complexity and effort required. Tasks involving ML model training and preprocessing were assigned higher points (5), while UI and validation tasks were assigned moderate points (2–3).

Project Tracker, Velocity & Burndown Chart

Sprint	Total Story Points	Duration	Sprint Start Date	Sprint End Date	Story Points Completed	Sprint Release Date
Sprint1	10	10 Days	28 Jan 2026	04 Feb 2026	10	04 Feb 2026
Sprint2	12	10 Days	06 Feb 2026	08 Feb 2026	12	08 Feb 2026
Sprint3	15	10 Days	08 Feb 2026	17 Feb 2026	15	17 Feb 2026
Sprint4	15	10 Days	19 Feb 2026	28 Feb 2026	15	28 Feb 2026

Velocity Calculation

Your Team's Performance across these sprints determine the speed of delivery:

Total Story Points: 52 Points (Calculated From Your Project BackLog)

Number Of Sprints : 4

Average Velocity : 13 Story Points Per Sprint (52/4)

Daily Velocity : 1.3 Story Points Per Day (assuming 10-Day Sprints)

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