Project Planning Phase

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

Date	20 February 2026
Team ID	LTVIP2026TMIDS83775
Project Name	Exploratory Analysis of Rain Fall Data in India for Agriculture
Maximum Marks	5 Marks

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

Use the below template to create product backlog and sprint schedule

Sprint	Requirement	User Story ID	Description	Story Points	Priority	Owner
Sprint-1	Dataset Collection	USN-1	Collect WeatherAUS dataset and clean missing values	3	High	Team
Sprint-1	Model Training	USN-2	Train Random Forest model using processed dataset	5	High	Team
Sprint-2	Feature Scaling & Model Evaluation	USN-3	Feature Scaling & Model Evaluation	4	High	Team
Sprint-2	Image Preprocessing	USN-4	Implement OpenCV preprocessing	3	High	Team
Sprint-3	Prediction Module	USN-5	Implement breed prediction logic	5	High	Team
Sprint-3	Frontend Development	USN-6	Create image upload interface	4	Medium	Team
Sprint-4	Integration	USN-7	Integrate frontend and backend	4	High	Team
Sprint-4	Testing & Deployment	USN-8	Test and deploy system	3	High	Team

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

Sprint	Goal	Duration	Start Date	End Date	Story Points Planned	Story Points Completed
Sprint-1	Dataset & Training	2 weeks	01 Feb 2026	14 Feb 2026	8	8
Sprint-2	Backend & Scaling	2 weeks	15 Feb 2026	28 Feb 2026	7	7
Sprint-3	Prediction & Frontend	2 weeks	01 Mar 2026	14 Mar 2026	9	9
Sprint-4	Integration & Testing	2 weeks	15 Mar 2026	28 Mar 2026	7	7

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)

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

Velocity = 32 / 2

Velocity = 16 Story Points per Sprint

Burndown Chart:

A Burndown Chart is used to track the progress of the Rainfall Prediction project over time. It shows the remaining work versus sprint duration. As tasks such as model training, backend development, and frontend integration are completed, the remaining story points decrease. This helps the team monitor progress and ensure timely completion of the Rainfall Prediction System.