Project Planning Phase

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

Date	15 February 2026
Team ID	LTVIP2026TMIDS73971
Project Name	Rainfall Prediction System 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).