

Project Planning Phase

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

Date	03 January 2026
Team ID	LTVIP2026TMIDS83736
Project Name	Rising Waters: A Machine Learning Approach to Flood Prediction
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	Homepage/Introduction	USN-1	As a user, I can view the project introduction page with system overview	2	High	4
Sprint-1	UI Setup	USN-2	Set up Flask application with routing and template structure	3	High	4
Sprint-1	Static Assets	USN-3	Create CSS styling for all pages with consistent design	2	High	4

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
Sprint-1	ML Model Integration	USN-4	Load pre-trained ML model (floods.save) on Flask startup	5	High	4
Sprint-1	Data Preprocessing	USN-5	Implement data transformation using transform.save file	3	High	4
Sprint-1	Manual Input Form	USN-6	Create input form for 8 flood parameters (monsoon, topography, drainage, etc.)	5	High	4
Sprint-2	Prediction Logic	USN-7	Implement prediction function to process user inputs and return results	5	High	4
Sprint-2	Result Display	USN-8	Display flood prediction results in user-friendly format	3	High	4
Sprint-2	Input Validation	USN-9	Validate user inputs and handle errors gracefully	3	Medium	4

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
Sprint-2	Navigation	USN-10	Implement navigation between intro, home, and prediction pages	2	High	4
Sprint-2	Performance Optimization	USN-11	Optimize model loading and prediction speed	3	Medium	4
Sprint-2	UI/UX Improvements	USN-12	Refine user interface and improve user experience	4	Medium	4
Sprint-3	Error Handling	USN-13	Implement comprehensive error handling and user feedback	3	Medium	4
Sprint-3	Testing	USN-14	Test prediction accuracy with various input combinations	5	High	4
Sprint-3	Model Regeneration	USN-15	Document and test regenerate_model.py script	3	Low	4

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
Sprint-3	Documentation	USN-16	Create user documentation and system documentation	3	Medium	4
Sprint-3	Deployment	USN-17	Deploy application and perform final testing	3	High	4
Sprint-3	Bug Fixes	USN-18	Fix any remaining bugs and polish application	3	Medium	4