Project Planning - [Milestone, Activity List & Sprint Delivery Plan]

Date	04 February 2026
Team ID	LTVIP2026TMIDS74755
Project Name	Rising Waters: A Machine Learning Approach to Flood Prediction
Maximum Marks	8 Marks

Product Backlog, Sprint Schedule, and Estimation:

Sprint	Functional Requirement [Epic]	User Story Number	User Story / Task / Activity	Story Points	Priority	Team Members
Sprint-1	Data Preparation	USN-1	Collect rainfall and environmental dataset required for flood prediction	5	High	Kranthi, Devi
Sprint-1		USN-2	Clean and preprocess dataset by handling missing values and normalization	3	High	Lalitendra, Manideep
Sprint-1		USN-3	Perform exploratory data analysis to understand rainfall patterns	2	Medium	Devi, Lalitendra
Sprint-1	System Setup	USN-4	Set up Python, Flask environment and required ML libraries	2	High	Manideep, Kranthi
Sprint-1		USN-5	Train initial machine learning model using historical data	1	Medium	Lalitendra, Kranthi
Sprint-1	Prediction Interface	USN-6	Develop input form where user enters parameters for flood prediction	5	High	All Members

Sprint	Functional Requirement [Epic]	User Story Number	User Story / Task / Activity	Story Points	Priority	Team Members
Sprint-2	Model Development	USN-7	Improve ML model accuracy using feature selection and tuning	3	Medium	Kranthi, Devi
Sprint-2		USN-8	Integrate trained model with Flask backend	5	High	Lalitendra,Manideep
Sprint-2		USN-9	Process user input and generate prediction	8	High	All Members
Sprint-3	Visualization & Output	USN-10	Display prediction result (Flood Risk / No Flood Risk) clearly to user	5	High	Kranthi, Devi
Sprint-3	Support	USN-11	Implement error handling and validation for wrong inputs	2	Medium	Manideep, Lalitendra
Sprint-3		USN-12	Debug system issues and improve prediction workflow	1	Low	Lalitendra, Devi
Sprint-3		USN-13	Optimize UI for better usability and clarity	1	Low	Kranthi, Manideep
Sprint-3		USN-14	Test prediction results with multiple datasets	5	High	All Members
Sprint-4	Deployment	USN-13	Finalize ML model and deploy web application	8	High	Kranthi, Lalitendra
Sprint-4		USN-14	Ensure website responsiveness across devices	2	Medium	All Members
Sprint-4		USN-15	Perform final testing, bug fixing, and documentation	5	High	Manideep, Devi

Velocity:

Average Sprint Velocity *[estimated to be ideal]* $= \frac{\text{Story points to be completed out of all user stories}}{\text{Total number of Sprints}} = \frac{63}{4} = 15.75$

Therefore, the amount of work to be done on each sprint is an average of 15.75 story points.

Burndown Chart:

Project progress made till now over time is not measurable under the burnout chart. The chart would be updated later based on the completion of each sprint.