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

Date	22 November 2023
Team ID	PNT2022TMID-592056
Project Name	Project - Machine Learning Approach For Predicting The Rainfall
Maximum Marks	8 Marks

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

Use the below template to create product backlog and sprint schedule

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
Sprint-1	Accessible Forecasting	USN-1	As a farmer, I want daily rainfall predictions to plan my agricultural activities efficiently. The predictions should include rainfall intensity, duration, and probability, presented in a clear and user-friendly format.	5	High	Supraja & Aswini
Sprint-1	Data Integration	USN-2	As an agricultural organization, I want API access for seamless integration with the Dynamic Rainfall Prediction System to enhance decision-making. The API should provide endpoints for real-time data retrieval, historical data access, and support for customizable analytics.	8	High	Supraja & Aswini
Sprint-2	Early Warning System	USN-3	As a government agency, I want real-time alerts for extreme weather events to enable swift response and coordination. The alerts	13	Highst	Supraja & Aswini

			should be configurable based on predefined risk levels, and the system should prioritize critical weather conditions.			
Sprint-1	Data Licensing	USN-4	As a researcher, I want access to high-resolution meteorological data for climate studies and research. The data access should include a licensing mechanism, ensuring compliance with privacy and datasharing standards.	3	Low	Supraja & Aswini
Sprint-4	Community Engagement	USN-5	As a community member, I want to actively participate in weather data collection and access educational resources. The platform should provide a user-friendly interface for data submission, educational content, and community-driven workshops.	3	Low	Supraja & Aswini
Sprint-2	Security and Compliance	USN-6	As a system administrator, I want robust security measures to ensure the confidentiality and integrity of user data. The security implementation should include encryption, secure coding practices, and regular audits for compliance.	8	High	Supraja & Aswini
Sprint-3	API Documentation	USN-7	As a developer, I want comprehensive API documentation to facilitate seamless integration with the Dynamic Rainfall Prediction System. The documentation should include clear explanations of endpoints, data formats, and authentication methods.	5	Medium	Supraja & Aswini
Sprint-2	Research Collaboration	USN-8	As a research institution, I want collaboration tools to engage in ongoing research efforts and contribute to climate	8	Medium	Supraja & Aswini

studies	s.The collaboration interfaces should		
include	e data-sharing agreements,		
collabo	orative research spaces, and periodic		
worksł	nops.		

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

Sprint	Total Story Points	Duration	Sprint Start Date	Sprint End Date (Planned)	Story Points Completed (as on Planned End Date)	Sprint Release Date (Actual)
Sprint-1	20	6 Days	24 Oct 2022	29 Oct 2022	20	30-10-2023
Sprint-2	20	6 Days	31 Oct 2022	05 Nov 2022	18	06-11-2023
Sprint-3	20	6 Days	07 Nov 2022	12 Nov 2022	12	13-11-2023
Sprint-4	20	6 Days	14 Nov 2022	19 Nov 2022	10	20-11-2023

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)

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

Burnd	down Chart:	
A burn	n down chart is a graphical representation of work left to do versu rum. However, burn down charts can be applied to any project co	s time. It is often used in agile software development methodologies such ntaining measurable progress over time.
the spa	u progress through the sprints, the line should ideally move towar pacing and symbols as needed for your specific tracking requirem lete the work by the end of the project.	ds zero, indicating that you are burning down the remaining work. Adjust ents. The slope of the line helps to assess whether the team is on track t













