Project Planning Phase

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

Date	16 November 2023
Team ID	Team-591644
Project Name	Machine Learning Approach For Predicting The Rainfall
Maximum Marks	4 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
Sprint-1	Forecast Accessibility	USN-1	As a farmer, I want to access rainfall forecasts for my region to plan crop irrigation schedules accordingly.	Forecasts should cover at least a week in advance.	High
Sprint-1	Risk Assessment	USN-2	As an emergency response coordinator, I need reliable rainfall predictions to plan for potential flood risks.	The system should offer accurate rainfall predictions for vulnerable areas prone to flooding.	High
Sprint-2	Resource Optimization	USN-3	As an agricultural supply chain manager, I want to optimize resource allocation based on rainfall forecasts.	The model's predictions should allow for efficient resource allocation,	Low

				reducing unnecessary costs and resource wastage.	
Sprint-1	Data Access	USN-4	As a meteorologist, I require historical rainfall data to analyze long-term climate trends and anomalies.	The data should be easily downloadable or accessible via an API for research purposes.	Medium
Sprint-1	Model Enhancement	USN-5	As a system administrator, I want the predictive model to continually learn and adapt to improve accuracy.	The updated model should demonstrate improved accuracy compared to the previous version.	High

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 2023	29 Oct 2023	20	29 Oct 2023
Sprint-2	20	6 Days	31 Oct 2023	05 Nov 2023		
Sprint-1	20	6 Days	07 Nov 2023	12 Nov 2023		
Sprint-1	20	6 Days	14 Nov 2023	19 Nov 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)

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

Burndown Chart:

A burn down chart is a graphical representation of work left to do versus time. It is often used in agile software development methodologies such as Scrum. However, burn down charts can be applied to any project containing measurable progress over time.

https://www.visual-paradigm.com/scrum/scrum-burndown-chart/

https://www.atlassian.com/agile/tutorials/burndown-charts

Reference:

https://www.atlassian.com/agile/project-management

https://www.atlassian.com/agile/tutorials/how-to-do-scrum-with-jira-software

https://www.atlassian.com/agile/tutorials/epics

https://www.atlassian.com/agile/tutorials/sprints

https://www.atlassian.com/agile/project-management/estimation

https://www.atlassian.com/agile/tutorials/burndown-charts