Project Planning Phase

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

Date	20 November 2023
Team ID	591569
Project Name	Machine Learning Approach for Predicting the Rainfall
Maximum Marks	8 Marks

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

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
Sprint-1	The system should be able to import and process historical weather data	USN-1	As a data scientist, I want to be able to load historical weather data into the system.	20	High	3
Sprint-2	The system should provide accurate and reliable rainfall predictions	USN-2	As a user, I want to be able to view historical rainfall data for a specified location.	20	High	3
Sprint-3	The system should meet the needs of its users and provide a positive user experience	USN-3	As a user, I want to be able to provide feedback on the system's functionality and usability.	15	Low	3

Sprint-1	The system should be able to train and evaluate various machine learning models	USN-4	As a data scientist, I want to be able to compare the performance of different machine learning algorithms for rainfall prediction.	20	Medium	3
Sprint-2	The system should be scalable and able to handle large amounts of data	USN-5	As a system administrator, I want to be able to monitor the system's performance and resource utilization.	10	High	3

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

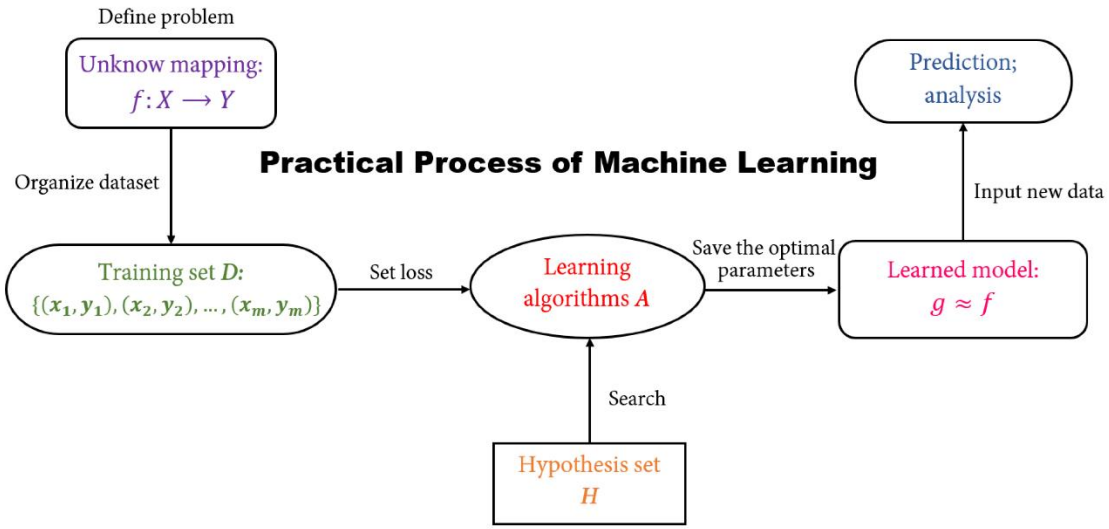
Sprint	Total Story Points	Duration	Sprint Start Date	Sprint End Date (Planned)	Story Points Completed (as on Planned End Date)	Sprint Release Date (Actual)
Sprint-1	20	6 Days	24 Oct 2023	29 Oct 2023	20	29 Oct 2023
Sprint-2	20	6 Days	31 Oct 2023	05 Nov 2023	20	06 Nov 2023
Sprint-3	15	6 Days	07 Nov 2023	12 Nov 2023	15	13 Nov 2023
Sprint-4	20	6 Days	14 Nov 2023	19 Nov 2023	20	20 Nov 2023
Sprint -5	10	5 Days	20 Nov 2023	25 Nov 2023	10	26 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.mdpi.com/2073-4433/11/7/676