Project Planning Phase

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

Date	18 October 2022
Team ID	PNT2022TMID10904
Project Name	Efficient Water Quality Analysis and Prediction Using Machine Learning
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-2	Registration	USN-1	As a user, I can register for the application by entering my email, password, and confirming my password.	2	High	Yogashree. D
Sprint-2	Confirmation	USN-2	As a user, I will receive confirmation email once I have registered for the application	1	High	Shri Janani. M
Sprint-2	Verification	USN-3	As a user, I can register for the application through OTP message or email	2	Low	Sathiyapriya. M
Sprint-3	Parameter Passing	USN-4	As a user, I can provide values for various parameters of water quality	1	High	Nithyasree. N
Sprint-3	Predicting	USN-5	Using ML algorithm, predictions are made using the parameter provided	2	Medium	Sathiyapriya. M
Sprint-4	Result	USN-6	Quality of the water is determined	1	High	Nithyasree. N
Sprint-1	Data Cleaning	USN-5	Removing the null values and outliers from the data	1	Low	Yogashree. D

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
Sprint-1	Data Pre-processing And Model Building	USN-5	Scaling the data and training the model with the data	3	High	Nithyasree. N
Sprint-4	Solution Providing	USN-1	Better water usage ideas are provided based on the quality of water	1	Medium	Shri Janani. M

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	4 Nov 2022
Sprint-2	20	6 Days	31 Oct 2022	05 Nov 2022	20	5 Nov 2022
Sprint-3	20	6 Days	07 Nov 2022	12 Nov 2022	20	12 Nov 2022
Sprint-4	20	6 Days	14 Nov 2022	19 Nov 2022	20	19 Nov 2022

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)

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

Average Velocity=Story points per day

Sprint Duration=Number of days per sprint (Duration)

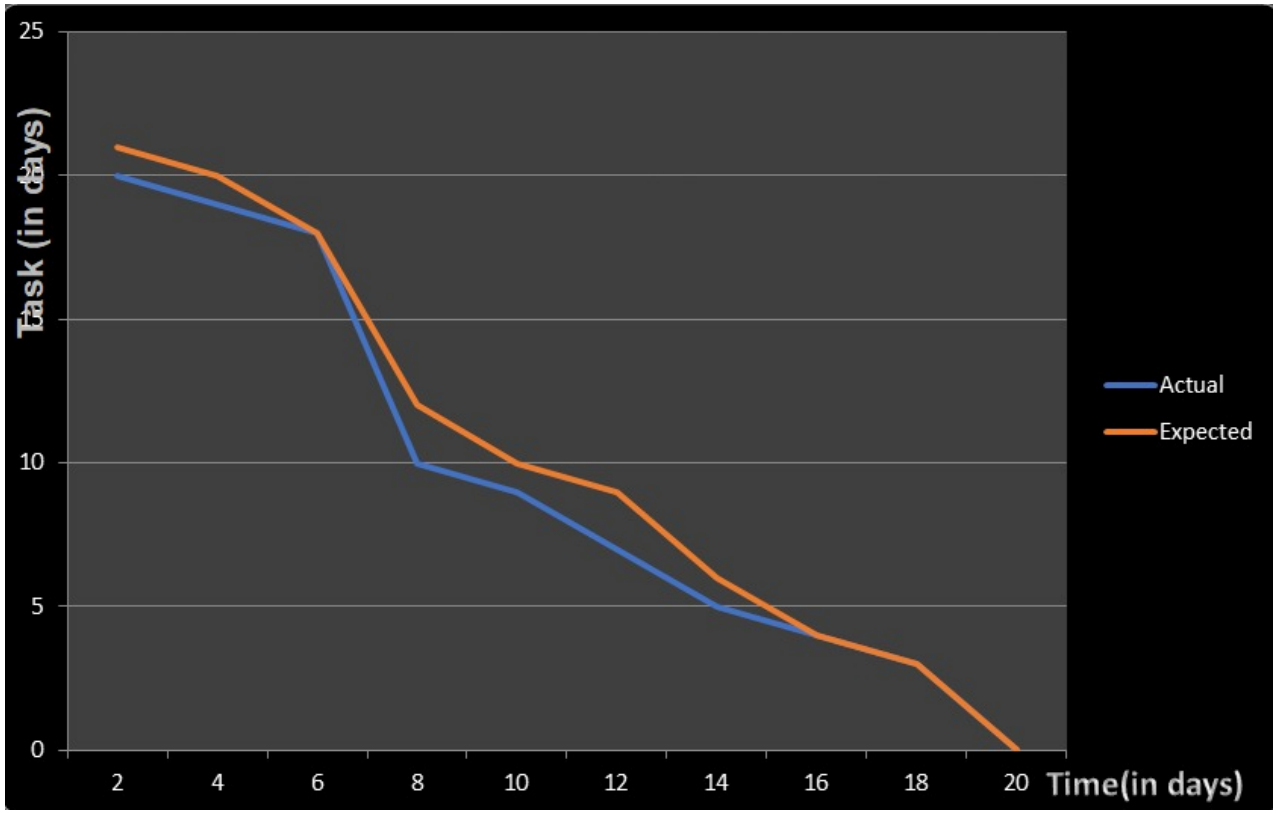
Velocity=points per sprint

AV=20/4=6(approx.)

The average velocity is 4 points per sprint.

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.



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