Project Planning Phase

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

Date	18 October 2022
Team ID	PNT2022TMID52665
Project Name	Project – 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-1	Data Collection	USN-1	Collecting dataset for pre-processing	10	High	Deepthy Shivani A
Sprint-1		USN-2	Data pre-processing. Used to transform the data into useful format.	10	Medium	Deepthy Shivani A
Sprint-2	Model Building	USN-3	Calculate the Water Quality Index (WQI) using regression algorithm of machine learning	10	High	Divya K
Sprint-2		USN-4	Splitting the data into training and testing from the entire dataset.	10	Medium	Divya K
Sprint-3	Training and Testing	USN-5	Training the model using regression algorithm and testing the performance of the model.	20	Medium	Soundarya M
Sprint-4	Implementation of Web Page	USN-6	Implementing the web page for collecting the data from the user	10	High	Subiksha Devi MS
Sprint-4		USN-6	Deploying the model using IBM cloud and IBM Watson studio	10	Medium	Subiksha Devi MS

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	29 Oct 2022

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-2	20	6 Days	31 Oct 2022	05 Nov 2022	20	05 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).

Sprint 1 Average Velocity:
Average Velocity = 20/2 = 10

Sprint 2 Average Velocity:
Average Velocity = 20/2 = 10

Sprint 3 Average Velocity:
Average Velocity = 20/1 = 20

Sprint 4 Average Velocity:
Average Velocity = 20/2 = 10

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.