Project Planning Phase

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

Date	18 October 2022
Team ID	PNT2022TMID10672
Project Name	Project - Efficient Water Quality Analysis & 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 Preparation	USN-1	Collecting water dataset and pre-processing it	5	High	Kishor M, Karthikeyan K
Sprint-1	Handling Missing values	USN-2	Handle all the missing values in the dataset	5	High	
Sprint-1	Calculate the Water Quality Index	USN-3	Calculate the water quality index using the collected dataset	5	High	Mohammed Mujahid M, Rajesh V
Sprint-1	Data Visualization	USN-4	Visualize the data using the histogram and heatmaps.	5	Medium	
Sprint-2	Model Building	USN-5	Create an ML model to predict waterquality	20	High	Kishor M, Karthikeyan K, Mohammed Mujahid M
Sprint-3	Model Evaluation	USN-6	Calculate the performance, error rate, and complexity of the ML model and evaluate thedataset based on the parameter that the dataset consists of.	5	High	
Sprint-3	Model Deployment	USN-7	As a user, I need to deploy the model and need to find the results.	10	Medium	Rajesh V, Kishor M, Karthikeyan K
Sprint-3	Web page (Form)	USN-8	As a user, I can use the application by entering the water dataset to analyze or predict the results.	5	High	Mohammed Mujahid M, Karthikeyan

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
						K, Kishor M
Sprint-4	Flask App	USM-9	Flask app should be created to act as an interface between the frontend and model	20	High	Mohammed Mujahid M, Rajesh V, Kishor 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	29 Oct 2022
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	14 Nov 2022

Velocity:

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Sprint 1: 1 user stories x 20 story points = 20

Sprint 2: 1 user stories x 20 story points = 20

Sprint 3: 1 user stories x 20 story points = 20

Sprint 4: 1 user stories x 20 story points = 20

Total = 80

The average sprint velocity is 80 ÷ 4 = 20.