Project Planning Phase
Project Planning Template (Product Backlog, Sprint Planning, Stories, Storypoints)

Date	21 October 2022
Team ID	PNT2022TMID19759
Project Name	Efficient Water Quality Analysis and Prediction using Machine Learning
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	Data Collection	USN-1	Collect the appropriate dataset for predicting the water quality.	10	High	Monish R
Sprint-1	Data Preprocessing	USN-2	Used to transform the data into useful format.	7	Medium	Subasri S
Sprint-2	Model Building	USN-3	Calculate the Water Quality Index (WQI).	10	High	Ramya V
Sprint-2		USN-4	Splitting the Model into Training and Testing from the overall dataset.	7	Medium	Puviyarasu S
Sprint-3	Training and Testing	USN-5	Train the Model using Regression algorithm and Testing the Performance of the model.	10	High	Puviyarasu S
Sprint-3	Application Building	USN-6	Build the HTML and Python code	7	Medium	Monish R Subasri S
Sprint-4		USN-7	Run Flask App	10	High	Ramya V
Sprint-4	Implementation of the Application	USN-8	Deploy the Model on IBM Cloud.	7	Medium	Puviyarasu S

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	10	6 Days	24 Oct 2022	29 Oct 2022	8	29 Oct 2022
Sprint-2	10	6 Days	31 Oct 2022	05 Nov 2022	7	05 Nov 2022
Sprint-3	10	6 Days	07 Nov 2022	12 Nov 2022	8	12 Nov 2022
Sprint-4	10	6 Days	14 Nov 2022	19 Nov 2022	7	19 Nov 2022

Velocity:

Imagine we have a 6 -day sprint duration, and the velocity of the team is 10 (points per sprint). Let's calculate the team's average velocity (AV) per iteration unit (story points per day).

$$AV = \frac{\text{sprint duration}}{\text{velocity}} = 6/10=0.6$$

Burndown Chart: