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

Date	7 NOVEMBER 2022
Team ID	PNT2022TMID10264
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	Iqbal N
Sprint-1	Data Preprocessing	USN-2	Used to transform the data into useful format.	7	Medium	Jino mon E M
Sprint-2	Model Building	USN-3	Calculate the Water Quality Index (WQI).	10	High	Mathavan G
Sprint-2		USN-4	Splitting the Model into Training and Testing from the overall dataset.	7	Medium	Abinesh
Sprint-3	Training and Testing	USN-5	Train the Model using Regression algorithm and Testing the Performance of the model.	10	High	Mathavan G
Sprint-3	Application Building	USN-6	Build the HTML and Python code	7	Medium	Iqbal N, Jinomon E M
Sprint-4		USN-7	Run Flask App	10	High	Abinesh
Sprint-4	Implementation of the Application	USN-8	Deploy the Model on IBM Cloud.	7	Medium	Mathavan G

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: