## **Project Planning Phase**

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

Date	02 November 2022
Team ID	PNT2022TMID29641
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	User Story	User Story / Task	Story Points	Priority	Team
	Requirement (Epic)	Number				Members
Sprint-1	User Registration	USN-1	As a user, I can register for the application by entering my email, password, and confirming my password.	2	High	Abirami A Abinaya S
Sprint-1	User Confirmation	USN-2	As a user, I will receive confirmation email once I have registered for the application.		Medium	Anbarasi C
Sprint-1	Login	USN-3	As a user, I can log into the application by entering email & password.	1	High	Hariharan M
Sprint-2	Data collection and data pre-processing	USN-1	Download or collect the dataset to perform pre- processing. Data pre-processing formats the data and handle the missing values.	2	High	Abirami A Anbarasi C
Sprint-2	Model Building	USN-1	Calculate the Water Quality Index (WQI) using given formula for every parameter.	2	High	Abinaya S
Sprint-3	Training and Testing	USN-2	Training the model using ML algorithm sand 2 testing the performance of the model.		High	Abirami A
Sprint-4	Implementing the web page	USN-1	Implementing the web page for collecting the data from user. And it provides the details about quality of water.	2	High	Anbarasi C Hariharan 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	11 Nov 2022
Sprint-4	20	6 Days	14 Nov 2022	19 Nov 2022	20	19 Nov 2022

Velocity:

$$AV = \frac{\text{SPRINT DURATION}}{\text{VELOCITY}} = \frac{20}{6} = 3.3$$