

## 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 Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
Sprint-1	Data collection	USN-1	Download or collect the dataset to perform pre-processing.	2	High	Abirami A
Sprint-1	Data-preprocessing	USN-2	Data pre-processing formats the data and handle the missing values.	1	High	Anbarasi C
Sprint-2	Model Building	USN-3	Calculate the Water Quality Index (WQI) using given formula for every parameter.	2	High	Hariharan M
Sprint-2	Training and Testing	USN-4	Training the model using ML algorithms and testing the performance of the model.	2	High	Abirami A
Sprint-3	IBM Deployment	USN-5	Deploy the model on IBM cloud.	2	High	Abinaya S
Sprint-4	Implementing the web page	USN-6	Implementing the web page for collecting the data from user. And it provides the details about quality of water.	2	High	Anbarasi C

**Project Tracker, Velocity & Burndown Chart: (4 Marks)**

<b>Sprint</b>	<b>Total Story Points</b>	<b>Duration</b>	<b>Sprint Start Date</b>	<b>Sprint End Date (Planned)</b>	<b>Story Points Completed (as on Planned End Date)</b>	<b>Sprint Release Date (Actual)</b>
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:**

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

## Burn – Down Chart

