

## Project Planning Phase

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

Date	18October 2022
Team ID	PNT2022TMID23851
Project Name	Efficient Water Quality Analysis & 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	Dataset collection	USN-1	Water dataset is collected and handling of missing data,preprocessing,calculation of Water Quality Index is performed.	8	High	Swetha R
Sprint-1	Applcation of Machine Learning algorithms	USN-2	Using Machine learning algorithms .	8	High	Mythili B
Sprint-1	Visualize	USN-3	Data visualization	2	High	Sneka k
Sprint-1	Features	USN-4	Feature Reduction	2	High	Reshmitha K
Sprint-2	Data training and testing	USN-5	Data is trained.	13	Low	Swetha R
Sprint-2	Testing of data	USN-6	Testing the model using appropriate algorithms.	7	High	Mythili B
Sprint-3	Model building,evaluation and result.	USN-7	Model building is performed , performance of ML model and error rate is calculated.Water quality is visualized using graphs.	20	High	Reshmitha k
Sprint-4	Login	USN-8	As a user,I can upload the dataset to predict the water quality.	8	Medium	Sneka k
Sprint-4	Dashboard	USN-9	As a user I can visualize the predicted quality using graphs which indicates the efficiency .	12	High	Mythili B

**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	5 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	19 Nov 2022

**Velocity:**

$AV=80/20=4$  story points per day.