

**Project Planning Phase**  
**Project Planning (Product Backlog, Sprint Planning, Stories, and Story Points)**

Date	15 October 2022
Team ID	PNT2022TMID49864
Project Name	Project – 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 Preparation	USN-1	Collecting water dataset and pre-processing it	10	High	Jeya Suriya C
Sprint-1	Model Building	USN-2	Create a ML model to predict water quality	5	Medium	Jeya Suriya C Manimala R Rajasubashini S Rubika C
Sprint-1	Model Evaluation	USN-3	Calculate the performance, error rate and complexity of ML model	5	Medium	
Sprint-2	Model Deployment	USN-5	Using flask and deploy model finally in IBM cloud using IBM storage and Watson Studio	20	Medium	
Sprint-3	Registration	USN-5	As a user, I can register for the application by entering email, password, and confirm password	10	Medium	Jeya Suriya C Manimala R Rajasubashini S Rubika C
Sprint-3	Confirmation	USN-6	As a user, I will receive confirmation email once I have registered for the application	5	Low	
Sprint-3	Login	USN-7	As a user, I can log into the application by entering email & password	5	Medium	
Sprint-4	Dashboard	USN-8	As a user, I can use the application by entering water data	20	High	Jeya Suriya C

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

Sprint	Total Story Points	Duration	Sprint Start Date	Sprint End Date	Story Points Completed	Sprint Release Date
Sprint-1	20	5 Days	24 Oct 2022	28 Oct 2022	20	29 Oct 2022
Sprint-2	20	5 Days	31 Oct 2022	04 Nov 2022	20	05 Nov 2022
Sprint-3	20	5 Days	07 Nov 2022	11 Nov 2022	20	12 Nov 2022
Sprint-4	20	5 Days	14 Nov 2022	18 Nov 2022	20	19 Nov 2022

**Velocity:** Average Velocity =  $80 / 20 = 4$  Story Points per Day

#### Burndown Chart:

