

## Project Planning Phase

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

Date	18 October 2022
Team ID	PNT2022TMID37146
Project Name	Project – EFFICIENT WATER QUALITY ANALYSIS AND PREDICTION
Maximum Marks	8 Marks

#### Product Backlog, Sprint Schedule, and Estimation (4 Marks)

Use the below template to create product backlog and sprint schedule

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story points	Priority	Team Members
Sprint-1	Registration & Login	USN-1	As a user, I can register for the application by entering my email, password, and confirming my password.	3	High	S.Priyadarshini
		USN-2	As a user , I will receive confirmation E-mail once I have registered for the application	2	High	S.Pushparoja
		USN-3	As a user, I can log into the application by entering email & password	1	High	S.Priyadharshini
Sprint-2	Dashboard	USN-4	As a user, I will able to see my profile information once I have login into the application	2	High	S.Sowmya
		USN-5	As a user, I will be able to logout from my account in dashboard from application	1	High	S.Pushparoja
Sprint-3	Data Collection & Processing	USN-6	As a user, I will give information about collected water samples.	3	High	D.Priyadarshini
		USN-7	User should give PH, temperature,conductivity,solid,hardness of the water	4	High	S.Priyadharshini
		USN-8	In data processing, data will get processed based on collected water sample	5	Medium	S.Priyadarshini

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story points	Priority	Team Members
		USN-9	From the user given ph and temperature,conductivity,solid,hardness of the sample water and it will process by using machine learning technology to predict the water quality.	6	High	S.Pushparoja
Sprint-4	Result Display	USN-10	As a user, I can get the result of the given water sample are quality or not with accuracy in a result page in the app	3	High	S.Sowmya

#### 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	6	6 Days	24 Oct 2022	29 Oct 2022	6	19 Nov 2022
Sprint-2	3	6 Days	31 Oct 2022	05 Nov 2022	3	19 Nov 2022
Sprint-3	18	6 Days	07 Nov 2022	12 Nov 2022	18	19 Nov 2022
Sprint-4	3	6 Days	14 Nov 2022	19 Nov 2022	3	19 Nov 2022

#### Velocity:

Imagine we have a 10-day sprint duration, and the velocity of the team is 20 (points per sprint). Let's calculate the team's average velocity (AV) per iteration unit (story points per day)

$$AV = \frac{\text{sprint duration}}{\text{velocity}} = \frac{20}{10} = 2$$

## Burndown Chart:

A burn down chart is a graphical representation of work left to do versus time. It is often used in agile software development methodologies such as Scrum. However, burn down charts can be applied to any project containing measurable progress over time.

Sprint	Start Hours	Hours Spend Day 1	Hours Spend Day 2	Hours Spend Day 3	Hours Spend Day 4	Hours Spend Day 5	Hours Spend Day 6	Total hours
Sprint 1	10	4	3	2	0	1	0	10
Sprint 2	8	3	1	1	2	0	1	8
Sprint 3	10	3	2	2	1	1	1	10
Sprint 4	12	5	3	2	0	1	1	12
Actual remaining Hours	40	25	16	9	6	3	0	
Estimated remaining Hours	40	26	14	8	6	3	0	

