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

TEAM ID	PNT2022TMID43670
PROJECT NAME	Project- Real Time River Quality Monitoring and Control System.

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 Numb err	User Story / Task	Story Points	Priority	Team Members
Sprint-1	Registration	USN-1	As a user, I canregister for the application by entering my email, password, and confirming My password.	2	HIGH	Vasundhara k Penumarthi Hema Sri
	Registration via Facebook	USN-3	As a user, I can register for the application through Facebook	2	LOW	Dhanireddy Naga Mohan Reddy
	Registration via Mail ID	USN-4	As a user, I can register for the application through Gmail	2	MEDIUM	
Sprint-2	Confirmation	USN-2	As a user, I will receive confirmation email once I have registered for the application	1	HIGH	Vasundhara K Penumarthi Hema Sri
	Login	USN-5	As a user, I can log into the application by entering email & password	1	HIGH	
	IBM Cloud service Access		Get access to IBM cloud services.	2	HIGH	
Sprint-3	Create the IBM Watson IoT and device Settings	USN-6	To create the IBM Watson IoT Platform and integrate the microcontroller with it, to send the sensed data on Cloud	2	HIGH	Abbireddy Kiranmayee
	Create a node red service	USN-7	To create a node red service to	2	MEDIUM	

Sprint						
			integrate the IBM Watson along with the Web UI			Penumarthi Hema Sri
	Create a Web UI	USN-8	To create a Web UI, to access the data from the cloud and display all parameters.	2	MEDIUM	Vasundhara K
	To develop a Python code	USN-9	Create a python code to sense the physical quantity and store data	2	MEDIUM	Dhanireddy Naga Mohan Reddy
Sprint-4	Publish Data to cloud.	USN-10	Publish Data that is sensed by the microcontroller to the Cloud	3	HIGH	Vasundhara K
	Fast-SMS Service	USN-11	Use Fast SMS to send alert messages once the parameters like pH, Turbidity and temperature goes beyond the threshold	3	HIGH	Abbireddy Kiranmayee
	Testing	USN-12	Testing of project and final deliverables	3	MEDIUM	Penumarthi Hema Sri

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	4 Days	26 Oct 2022	29 Oct 2022	20	30 Oct 2022
Sprint-2	20	5 Days	30 Oct 2022	03 Nov 2022	20	06 Nov 2022
Sprint-3	20	8 Days	04 Nov 2022	11 Nov 2022	20	13 Nov 2022
Sprint-4	20	9 Days	12 Nov 2022	18 Nov 2022	20	20 Nov 2022

Velocity:

Imagine we have 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)

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

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.

Burndown Chart