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

TEAM ID	PNT2022TMID05994
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	POONGUNDRAN MOHAMED ASHARAF
	Registration via Facebook	USN-3	As a user, I can register for the application through Facebook	2	LOW	NAVEEN KUMAR
	Registration via Mail ID	USN-4	As a user, I can register for the application through Gmail	2	MEDIUM	NIKIL
Sprint-2	Confirmation	USN-2	As a user, I will receive confirmation email once I have registered for the application	1	HIGH	POONGUNDRAN
	Login	USN-5	As a user, I can log into the application by entering email & password	1	HIGH	MOHAMED ASHARAF
	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	NAVEEN KUMAR NIKIL MOHAMED ASHARAF
	Create a node red service	USN-7	To create a node red service to	2	MEDIUM	POONGUNDRAN

			integrate the IBM Watson along with the Web UI			NIKIL
	Create a Web UI	USN-8	To create a Web UI, to access the data from the cloud and display all parameters.	2	MEDIUM	POONGUNDRAN MOHAMED ASHARAF
	To develop a Python code	USN-9	Create a python code to sense the physical quantity and store data	2	MEDIUM	
Sprint-4	Publish Data to cloud.	USN-10	Publish Data that is sensed by the microcontroller to the Cloud	3	HIGH	MOHAMED ASHARAF
	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	POONGUNDRAN
	Testing	USN-12	Testing of project and final deliverables	3	MEDIUM	NAVEEN KUMAR

Sprint	**Total Story Points**	**Duration**
Sprint-1	20	4 Days
Sprint-2	20	5 Days
Sprint-3	20	8 Days
Sprint-4	20	9 Days

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.