## **Project Planning Phase**

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

TEAM ID	PNT2022TMID50089		
PROJECT NAME	IOT Based Real- Time River Quality Monitoring and Control System.		

Product Backlog, Sprint Schedule, and Estimation (4 Mark))

Sprint	Functional Requirement(Epic)	User Number	User Story / Task story	Story points	Priority	Team Members
Sprint-1	Registration	USN-1	As a user, I can register for application by enter in email, password, and confirming My password.	2	HIGH	Ramalakshmi
	Registration via Facebook	USN-3	As a user, I can register for application throughFacebook	2	LOW	Priya maheswari
	Registration via Mail ID		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 registered for the application	1	HIGH	Prama sakthi
	Login	USN-5	As a user, I can log into application by entering & password	1	HIGH	Rajalakshmi
	IBM Cloud serviceAccess		Get access to IBMservices.		HIGH	
Sprint-3	Create the IBM IoT and device Settings	USN-6	To create the IBM Platform and integrate the microcontroller with send the sensed data on Cloud	2	HIGH	Ramalaksmi Priya maheswari
	Create a node red service	USN-7	To create a node red		MEDIUM	

			integrate the IBM Watson along with the Web	UI		Prama sakthi
	Create a Web UI USN-8		To create a Web UI, to the data from the cloud and display all parameters.	2	MEDIUM	Raja lakshmi
	To develop a Python code	USN-9	Create a python code the physical quantity and store Data to Sense	2	MEDIUM	
Sprint-4	Publish Data to cloud	. USN-10	Publish Data that is sensed the microcontroller Cloud	3	HIGH	Ramalakshmi
	Fast-SMS Service	USN-11	Use Fast SMS to send messages once the parameters like pH, Turbidity and temperature the threshold goes beyond	3	HIGH	Priya maheswari Prama sakthi
	Testing	USN-12	Final Testing of project and deliverables	3	MEDIUM	Raja lakshmi

Sprint	Total Story Points	Duration	Sprint Start  Date	Sprint End Date(Planned)	Story Points Completed Planned	Sprint ReleaseDate (as on(Actual) End Date)
Sprint-1	20	4 Days 24	Oct2022	28 Oct 2022	20	29Oct 2022
Sprint-2	20	5 Days 28	Oct 2022	30 Nov 2022	20	04Nov2022
Sprint-3	20	8 Days 02	Nov 2022	04 Nov 2022	20	11Nov2022
Sprint-4	20	9 Days 10	Nov 2022	16Nov 2022	20	19Nov2022

## **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.

