

### Project Planning Phase

Team ID	PNT2022TMID30534
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 Number	User Story / Task	Story Points	Priority	Team Members
Sprint-1	Registration	USN-1	As a user, I can register for the application by entering my email, password, and confirming My password.	2	High	BIRUNTHIKA.S
Sprint-2	Confirmation	USN-2	As a user, I will receive confirmation email once I have registered for the application	1	High	
	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	GOMATHI.B
	Create a node red service	USN-7	To create a node red service to integrate the IBM Watson along with the Web UI	2	Medium	JAYALAKSHMI.S
	Create a Web UI	USN-8	To create a Web UI, to access the data from the cloud And display all parameters.	2	Medium	MUNISHA.R
	To develop a Python code	USN-9	Create a python code to sense the physical quantity And store data.	2	Medium	BIRUNTHIKA.S

	Publish Data to cloud.	USN-10	Publish Data that is sensed by the microcontroller to the Cloud	3	High	GOMATHI.B
Sprint-4	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	JAYALAKSHMI.S MUNISHA.R
	Testing	USN-12	Testing of project and final deliverables	3	Medium	

### Project Tracker, Velocity & Burn down 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	20	9 Days	28 Oct 2022	05 Nov 2022	20	05 Nov 2022
Sprint-2	20	4 Days	06 Nov 2022	09 Nov 2022	20	09 Nov 2022
Sprint-3	20	9 Days	09 Nov 2022	18 Nov 2022	20	18 Nov 2022
Sprint-4	20	5 Days	18 Nov 2022	22 Nov 2022	20	22 Nov 2022

### Velocity:

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

**Burndown Chart:**

