<p style="text-align:center">Project Planning Phase
Project Planning Template (Product Backlog, Sprint Planning, Stories, Story points)</p>

Date	1 NOVEMBER 2022
Team ID	**PNT2022TMID03762**
Project Name	**REAL TIME RIVER WATER QUALITY MONITORING AND CONTROL**

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

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	NAVEEN JOEL M
Sprint-1		USN-2	As a user, I will receive confirmation email once I have registered for the application	1	High	VISHNU HARAN J
Sprint-2		USN-3	As a user, I can register for the application through Facebook	2	Low	POORNIMA R
Sprint-1		USN-4	As a user, I can register for the application through Gmail	2	Medium	NAVEEN M
Sprint-1	Login	USN-5	As a user, I can log into the application by entering email & password	1	High	NAVEEN JOEL M
	Dashboard				High	VISHNU HARAN J

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
Sprint -2	User interface experience	USN-6	As a user I need a proper user interface for the project which was contain the graphical representation of received data from the sensors	2	High	POORNIMA R
Sprint -2		USN-7	As a user, I can create a IBM cloud account for the data base which should able to store the data and gather the data from the sensors	1	Medium	NAVEEN M
Sprint -2		USN-8	As I a user I can create node-red app for providing commands to the sensors in the IBM cloud	2	Medium	VISHNU HARAN J
Sprint -2		USN-9	As a user, I can create IOT Watson assistant for converting the sensors data to the digital data	2	Low	NAVEEN JOELM NAVEEN M VISHNU HARAN J
Sprint -2		USN-10	As a user, I can create a fast to SMS app For providing alert the user which consuming water was not have the quality of consumable	1	High	VISHNU HARAN J POORNIMA R NAVEEN M
Sprint -2		USN-11	As I a user, I can make clouding data base in the IBM cloud for storing the data from the sensors for future references	2	High	NAVEEN M POORNIMA R NAVEEN JOEL M
Sprint -3	App interface creation	USN-12	As I a user, I can use the MIT APP INVERTER for creating the user interface which contains interface between of IBM cloud	1	Medium	POORNIMA R NAVEEN M VISHNU HARAN J
Sprint -3		USN-13	As I am a user, I can create a dashboard which was containing graphical representing the sensors measurements	1	Medium	NAVEEN M POORNIMA R VISHNU HARAN J
Sprint -3		USN-14	As I am a user, I can save or delete the previous measurements which was contain the sensor measurements	2	High	NAVEEN JOELM NAVEEN M VISHNU HARAN J
Sprint -3		USN-15	As I am a user, I need the devices was properly insulated and the devices was must be a water resistant	2	High	POORNIMA R NAVEEN M VISHNU HARAN J
Sprint -3		USN-16	As I am a user, I can create the devices which was implemented in the project should be	1	Low	POORNIMA R NAVEEN M

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members

			maintain properly with the particular interval of time			
Sprint -3		USN-17	As I am a user, I need a simultaneous data collecting data from the sensors and also save the received data to the cloudant /cloud dashboard	2	Low	NAVEEN JOEL M VISHNU HARAN J
Sprint -3		USN-18	As a user, I can manage the devices which was implemented in the project	1	High	VISHNU HARAN J NAVEEN M
Sprint -3	User development	USN-19	As a admin, I can manage all the devices and find the drawbacks and also rectify that	1	High	POORNIMA R VISHNU HARAN J
Sprint -3		USN-20	As a admin, I can manage the devices which was not working not properly I should replace that device	1	Medium	NAVEEN M NAVEEN JOEL M
Sprint -3		USN-21	As a admin, I can monitor the devices which was sending the correct data or not	1	Low	POORNIMA R NAVEEN JOEL M
Sprint -3		USN-22	As a admin, I can make changes in the user interface which was able to understand the measurements was easily understandable by user/industry person	2	High	NAVEEN JOEL M VISHNU HARAN J
Sprint -4	User command centre	USN-23	As a admin, I can create the command option in the user interface and able to perform the devices based on the commands	2	High	POORNIMA R NAVEEN M
Sprint -4		USN-24	As a user, I can give the command to the device which was already able understand the command and also perform the function which was mention in the command	2	Medium	POORNIMA R NAVEEN M VISHNU HARAN J
Sprint -4		USN-25	As a user, I can need user interface was always be an eco-friendly which was designed in the user interface	2	Medium	NAVEEN M POORNIMA R NAVEEN JOEL M
Sprint -4		USN-26	As a user, I need a user interface which was contains HTTP command format and also should contain the web page interface	1	High	POORNIMA R VISHNU HARAN J

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
Sprint -4		USN-27	As a user, I can make the measurements was also capable to know the web interface	1	Low	NAVEEN JOELM NAVEEN M VISHNU HARAN J
Sprint -4		USN-28	As a user, I need a proper statement of the measurements of the data and also	1	Low	VISHNU HARAN J POORNIMA R NAVEEN M

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	20	6 Days	24 Oct 2022	29 Oct 2022	20	29 Oct 2022
Sprint-2	20	6 Days	31 Oct 2022	05 Nov 2022	20	05 Nov 2022
Sprint-3	20	6 Days	07 Nov 2022	12 Nov 2022	20	12 Nov 2022
Sprint-4	20	6 Days	14 Nov 2022	19 Nov 2022	20	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

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

(story points per day)

The average velocity (AV) per iteration unit =3.33

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.