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

Date	18 October 2022
Team ID	**PNT2022TMID01820**
Project Name	**REAL TIME WATER QUALITY MONITORING AND CONTROL SYSTEM**
Maximum Marks	8 Marks

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	Priyadharshini, Sandhana
Sprint-1		USN-2	As a user, I will receive confirmation email once I have registered for the application	1	High	Riyani Jose, Preethi
Sprint-2		USN-3	As a user, I can register for the application through Facebook	2	Low	Priyadharshini, Sandhana
Sprint-1		USN-4	As a user, I can register for the application through Gmail	2	Medium	Priyadharshini, Sandhana
Sprint-1	Login	USN-5	As a user, I can log into the application by entering email & password	1	High	Riyani Jose, Preethi
	Dashboard				High	

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	Priyadharshini , Sandhana
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	Riyani Jose, Preethi
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	Priyadharshini, Sandhana
Sprint -2		USN-9	As a user, I can create IOT Watson assistant for converting the sensors data to the digital data	2	Low	Riyani Jose, Preethi
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	Priyadharshini , Sandhana
Sprint -2		USN-11	As I a user, I can make cloudant data base in the IBM cloud for storing the data from the sensors for future references	2	High	Riyani Jose, Preethi
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	Priyadharshini, Sandhana
Sprint -3		USN-13	As I am a user, I can create a dashboard which was containing graphical representing the sensors measurements	1	Medium	Riyani Jose, Preethi
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	Priyadharshini, Sandhana
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	Riyani Jose, Preethi
Sprint -3		USN-16	As I am a user, I can create the devices which was implemented in the project should be	1	Low	Priyadharshini, Sandhana

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	Priyadharshini, Sandhana
Sprint -3		USN-18	As a user, I can manage the devices which was implemented in the project	1	High	Priyadharshini, Sandhana
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	Riyani Jose, Preethi
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	Priyadharshini, Sandhana
Sprint -3		USN-21	As a admin, I can monitor the devices which was sending the correct data or not	1	Low	
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	Priyadharshini, Sandhana
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	Riyani Jose, Preethi
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	Priyadharshini, Sandhana
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	Riyani Jose, Preethi
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	Priyadharshini, Sandhana

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	Riyani Jose, Preethi
Sprint -4		USN-28	As a user, I need a proper statement of the measurements of the data and also	1	Low	Priyadharshini, Sandhana

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 (story points per day)

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

The average velocity (AV) per iteration unit =3.33

Burndown Chart:

A burndown 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.