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

Date	1 NOVEMBER 2022
Team ID	PNT2022TMID30972
Project Name	**IOT ENABLED – 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	Jayakumar R Kavinkarthik A Manokar S Raghu G
Sprint-1		USN-2	As a user, I will receive confirmation emailonce I have registered for the application	1	High	Jayakumar R, Kavinkarthik A, Manokar S, Raghu G
Sprint-2		USN-3	As a user, I can register for the applicationthrough Facebook	2	Low	Jayakumar R, Kavinkarthik A, Manokar S, Raghu G
Sprint-1		USN-4	As a user, I can register for the applicationthrough Gmail	2	Medium	Jayakumar R, Kavinkarthik A, Manokar S, Raghu G
Sprint-1	Login	USN-5	As a user, I can log into the application byentering email & password	1	High	Jayakumar R, Kavinkarthik A, Manokar S, Raghu G
	Dashboard				High	Jayakumar R, Kavinkarthik A, Manokar S, Raghu G

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	Jayakumar R, Kavinkarthik A, Manokar S, Raghu G
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	Jayakumar R, Kavinkarthik A, Manokar S, Raghu G
Sprint -2		USN-8	As I a user I can create node-red app for providing commands to the sensors in the IBMcloud	2	Medium	Jayakumar R, Kavinkarthik A, Manokar S, Raghu G
Sprint -2		USN-9	As a user, I can create IOT Watson assistant forconverting the sensors data to the digital data	2	Low	Jayakumar R, Kavinkarthik A, Manokar S, Raghu G
Sprint -2		USN-10	As a user, I can create a fast to SMS app For providing alert the user which consuming waterwas not have the quality of consumable	1	High	Jayakumar R, Kavinkarthik A, Manokar S, Raghu G
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	Jayakumar R, Kavinkarthik A, Manokar S, Raghu G
Sprint -3	App interface creation	USN-12	As I a user, I can use the MIT APP INVERTERfor creating the user interface which contains interface between of IBM cloud	1	Medium	Jayakumar R, Kavinkarthik A, Manokar S, Raghu G
Sprint -3		USN-13	As I am a user, I can create a dashboard whichwas containing graphical representing the sensors measurements	1	Medium	Jayakumar R, Kavinkarthik A, Manokar S, Raghu G

Sprint -3		USN-14	As I am a user, I can save or delete the previousmeasurements which was contain the sensor measurements	2	High	Jayakumar R, Kavinkarthik A, Manokar S, Raghu G
Sprint -3		USN-15	As I am a user, I need the devices was properlyinsulated and the devices was must be a water resistant	2	High	Jayakumar R, Kavinkarthik A, Manokar S, Raghu G
Sprint -3		USN-16	As I am a user, I can create the devices whichwas implemented in the project should be	1	Low	Jayakumar R, Kavinkarthik A, Manokar S, Raghu G

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	Jayakumar R, Kavinkarthik A, Manokar S, Raghu G
Sprint -3		USN-18	As a user, I can manage the devices which was implemented in the project	1	High	Jayakumar R, Kavinkarthik A, Manokar S, Raghu G
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	Jayakumar R, Kavinkarthik A, Manokar S, Raghu G
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	Jayakumar R, Kavinkarthik A, Manokar S, Raghu G
Sprint -3		USN-21	As a admin, I can monitor the devices which was sending the correct data or not	1	Low	Jayakumar R, Kavinkarthik A, Manokar S, Raghu G
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	Jayakumar R, Kavinkarthik A, Manokar S, Raghu G
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	Jayakumar R, Kavinkarthik A, Manokar S, Raghu G
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	Jayakumar R, Kavinkarthik A, Manokar S, Raghu G

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	Jayakumar R, Kavinkarthik A, Manokar S, Raghu G
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	Jayakumar R, Kavinkarthik A, Manokar S,Raghu G

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	Jayakumar R, Kavinkarthik A, Manokar S, Raghu G
Sprint -4		USN-28	As a user, I need a proper statement of the measurements of the data and also	1	Low	Jayakumar R, Kavinkarthik A, Manokar S, Raghu G

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	01 Nov 2022	06 Nov 2022	20	06 Nov 2022
Sprint-2	20	6 Days	07 Nov 2022	12 Nov 2022	20	12 Nov 2022
Sprint-3	20	6 Days	13 Nov 2022	18 Nov 2022	20	18 Nov 2022
Sprint-4	20	6 Days	19 Nov 2022	24 Nov 2022	20	24 Nov 2022

Project Tracker, Velocity & Burndown Chart: (4 Marks)

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)

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