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

Date	18 October 2022	
Team ID	PNT2022TMID04228	
Project Name	MONITORING AND CONTROL SYSTEM	IOT ENABLED – REAL TIME WATER QUALITY 1
Maximum Marks		8 Marks

Sprint	Number		Story Points	Priority	Team Members	
Sprint-1			2	High	Hemanth Kumar	
Sprint-1		USN-2	As a user, I will receive confirmation email once I have registered for the application	1	High	Chris Joel
Sprint-2		USN-3	As a user, I can register for the application through Facebook	2	Low	John Jestin
Sprint-1		USN-4	As a user, I can register for the application through Gmail	2	Medium	Hemanth Kumar, John Jestin
Sprint-1	Login	USN-5	As a user, I can log into the application by entering email & password	1	High	Hemanth Kumar, Abinesh
	Dashboard				High	

Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
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		High	Chris Joel, Abinesh
	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		Medium	Hemanth Kumar, John Jestin
	USN-8	As I a user I can create node-red app for providing commands to the sensors in the IBM cloud	- Tourier out of the control of the		Hemanth Kumar, Chris Joel
	USN-9	As a user, I can create IOT Watson assistant for converting the sensors data to the digital data	2	Low	Hemanth Kumar, Abinesh
	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	e user which consuming water		Hemanth Kumar, John Jestin
	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	IIIC		Hemanth Kumar, Abinesh
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		John Jestin, Chris Joel
	USN-13	As I am a user, I can create a dashboard which was containing graphical representing the sensors measurements	1 Mediun		Chris Joel, Abinesh
	USN-14	As I am a user, I can save or delete the previous measurements which was contain the sensor measurements			Hemanth Kumar, Chris Joel
	USN-15	As I am a user, I need the devices was properly insulated and the devices was must be a water resistant			Hemanth Kumar, John Jestin
	USN-16	As I am a user, I can create the devices which was implemented in the project should be	1	Low	John Jestin, Chris Joel
	Requirement (Epic) User interface experience  App interface	Requirement (Epic)  User interface experience  USN-6  USN-7  USN-8  USN-9  USN-10  USN-11  App interface creation  USN-12  USN-13  USN-14	Requirement (Epic) Number  User interface experience  USN-6  USN-7  As a user I need a proper user interface for the project which was contain the graphical representation of received data from the sensors  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  USN-8  As I a user I can create node-red app for providing commands to the sensors in the IBM cloud  USN-9  As a user, I can create IOT Watson assistant for converting the sensors data to the digital data  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  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  App interface  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  USN-13  As I am a user, I can create a dashboard which was containing graphical representing the sensors measurements  USN-14  As I am a user, I can save or delete the previous measurements which was contain the sensor measurements  USN-15  As I am a user, I can create the devices was properly insulated and the devices was must be a water resistant  USN-16  As I am a user, I can create the devices which	Requirement (Epic) Number  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  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  USN-8  As I a user I can create node-red app for providing commands to the sensors in the IBM cloud  USN-9  As a user, I can create IOT Watson assistant for converting the sensors data to the digital data  USN-10  As a user, I can create a fast to SMS app For providing alter the user which consuming water was not have the quality of consumable  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  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  As I am a user, I can create a dashboard which was containing graphical representing the sensors measurements  USN-14  As I am a user, I can save or delete the previous measurements which was contain the sensor measurements  USN-15  insulated and the devices was must be a water resistant  USN-16  As I am a user, I need the devices which  1	Requirement (Epic) 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  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  USN-8 As I a user I can create node-red app for providing commands to the sensors in the IBM cloud  USN-9 As a user, I can create IOT Watson assistant for converting the sensors data to the digital data  USN-10 As a user, I can create IST Watson assistant for converting the sensors data to the digital data  USN-10 As a user, I can create a fast to SMS app For providing active was not have the quality of consumining water was not have the quality of consumining water was not have the quality of consumining water was not have the quality of consumining the data from the sensors for future references  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  USN-13 As I am a user, I can create a dashboard which was containing graphical representing the sensors measurements  USN-14 As I am a user, I can save or delete the previous measurements which was contain the sensor was properly insulated and the devices was must be a water resistant  USN-16 As I am a user, I can create the devices which

Abinesh, Chrish Joel

	Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
				maintain properly with the particular interval of time			
h	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	Hemanth Kumar, John Jestin
	Sprint -3		USN-18	As a user, I can manage the devices which was implemented in the project	1	High	Hemanth Kumar,Chris Joel
Ī	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	Hemanth Kumar,Abinesh
	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	Hemanth Kumar, Chris Joel
	Sprint -3		USN-21	As a admin, I can monitor the devices which was sending the correct data or not	1	Low	Hemanth Kumar, John Jestin
	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	Hemanth Kumar,Abinesh
	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	Hemanth Kumar,Chris Joel
	Sprint -4		USN-24	As a user, I can give the command to the device which was already able understand the command	2	Medium	Hemanth Kumar, John Jestin
	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	Hemanth Kumar,Abinesh
	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	Hemanth Kumar, Chris Joel

Sprint	Functional	User Story	User Story / Task	Story Points	Priority	Team
	Requirement (Epic)	Number				Members
Sprint -4		USN-27	As a user, I can make the measurements was also capable to know the web interface	1	Low	Hemanth Kumar, Abinesh
Sprint -4		USN-28	As a user, I need a proper statement of the measurements of the data and also	1	Low	Hemanth Kumar, John Jestin

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

## Sprint Total Story Duration Sprint Start Date

Points				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 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.

