

Project Planning Phase

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

Date	10 November 2022
Team ID	PNT2022TMID02419
Project Name	Real-Time River 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	HARISH GOWTHAM REDDY JANANI JAYALAKSHMI
	Registration via Mail ID	USN-2	As a user, I can register for the application through Gmail	2	MEDIUM	HARISH GOWTHAM REDDY JANANI JAYALAKSHMI
Sprint-2	Confirmation	USN-3	As a user, I will receive confirmation email once I have registered for the application	1	HIGH	HARISH GOWTHAM REDDY
	Login	USN-4	As a user, I can log into the application by entering email & password	1	HIGH	JANANI
	IBM Cloud service Access		Get access to IBM cloud services.	2	HIGH	JAYALAKSHMI
Sprint-3	Create the IBM Watson IoT and device Settings	USN-5	To create the IBM Watson IoT Platform and integrate the microcontroller with it, to send the sensed data on Cloud	2	HIGH	HARISH GOWTHAM REDDY
	Create a node red service	USN-6	To create a node red service to	2	MEDIUM	JANANI JAYALAKSHMI

			integrate the IBM Watson along with the Web UI			HARISH GOWTHAM REDDY
	Create a Web UI	USN-7	To create a Web UI, to access the data from the cloud and display all parameters.	2	MEDIUM	JANANI
	To develop a Python code	USN-8	Create a python code to sense the physical quantity and store data	2	MEDIUM	JAYALAKSHMI
Sprint-4	Publish Data to cloud.	USN-9	Publish Data that is sensed by the microcontroller to the Cloud	3	HIGH	HARISH
	Fast-SMS Service	USN-10	Use Fast SMS to send alert messages once the parameters like pH, Turbidity and temperature goes beyond the threshold	3	HIGH	GOWTHAM REDDY
	Testing	USN-11	Testing of project and final deliverables	3	MEDIUM	JAYALAKSHMI JANANI

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:

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

Burndown Chart:

