Project Planning Phase

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

Date	4 November 2022
Project Name	Real Time River 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	N Vishnu Kumar Mathan Kumar T Suresh S Sasi Kumar K
	Registration via facebook	USN-3	As a user, I can register for the application through Facebook	2	Low	
	Registration via Mail ID	USN-4	As a user, I can register for the application through Gmail	2	Medium	
Sprint-2	Confirmation	USN-2	As a user, I will receive confirmation email once I have registered for the application	1	High	
	Login	USN-5	As a user, I can log into the application by entering email & password	1	High	
	IBM Cloud service access		Get access to IBM cloud services.	2	High	

Sprint-3	Create the IBM Watson IoT and device Settings	USN-6	To create the IBM Watson IoT Platform and integrate the microcontroller with it, to send the sensed dataon cloud	2	High	Suresh Mathan Kumar
	Create a node red service	USN-7	To create a node red service to integrate the IBM Watson along with the Web UI	2	Medium	Vishnu Kumar Suresh
	Create a Web UI	USN-8	To create a Web UI, to access the data from the cloud and display all parameters.	2	Medium	Vishnukumar
	To develop a Python code	USN-9	Create a python code to sense the physical quantity and store data.	2	Medium	Mathan Kumar Sasi Kumar

	Publish Data to cloud.	USN-10	Publish Data that is sensed by the microcontroller to the Cloud	3	High	Vishnu Kumar Mathan Kumar Suresh Sasi Kumar
Sprint-4	Fast-SMS Service	USN-11	Use Fast SMS to send alert messages once the parameters like pH, Turbidity and temperature goes beyond the threshold	3	High	Vishnu Kumar Mathan Kumar Suresh Sasi Kumar
	Testing	USN-12	Testing of project and final deliverables	3	Medium	

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	2 Days	24 Oct 2022	26 Oct 2022	20	29 Oct 2022
Sprint-2	20	4 Days	26 Oct 2022	30 Oct 2022	40	
Sprint-3	20	12 Days	1 Nov 2022	12 Nov 2022	60	
Sprint-4	20	6 Days	13 Nov 2022	19 Nov 2022	80	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)

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

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.