

**Project Planning Phase**  
**Project Planning Template (Product Backlog, Sprint Planning, Stories, Storypoints)**

Date	18October 2022
Team ID	PNT2022TMID44989
Project Name	Real-Time River Water Quality Monitoring and Control System
Maximum Marks	8 Marks

**Product Backlog, Sprint Schedule, and Estimation (4 Marks)**

Use the below template to create product backlog and sprint schedule

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.	3	High	Dinesh, Srikanth
Sprint-1	Confirmation	USN-2	As a user, I will receive confirmation email once I have registered for the application.	2	Medium	Dinesh, Srikanth
Sprint-1	Registration using Gmail	USN-4	As a user, I can register for the application through Gmail.	2	Medium	Dinesh, Srikanth
Sprint-1	Login	USN-5	As a user, I can log into the application by entering email & password.	3	High	Dinesh, Srikanth
Sprint-2	IBM cloud	USN-6	As a user, I can get access to IBM cloud service.	2	Medium	Surendran, Shyam
Sprint-2	IBM Watson and device setting	USN-7	Creating IBM Watson and device setting for integrate the microcontroller to get the sensed data.	3	High	Surendran, Shyam
Sprint-2	Node red	USN-8	To create the Node red service.	3	High	Surendran, Shyam
Sprint-3	Create Web UI	USN-9	To create Web UI to access the data from the cloud.	3	High	Srikanth, Surya
Sprint-3	Create web application	USN-10	To create the web application.	2	Medium	Srikanth, Surya
Sprint-3	Source code creation	USN-11	To create the source code for the project.	3	High	Srikanth, Surya
Sprint-4	Publish data	USN-12	Publish the sensed data to the cloud.	3	High	Dinesh, Surya
Sprint-4	SMS	USN-13	If the sensed values are higher than the standard values it sends the message to the authorities.	3	High	Dinesh, Surya
Sprint-4	Testing	USN-14	Testing the developed project.	3	High	Dinesh, Surya

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	10	6 Days	24 Oct 2022	29 Oct 2022	10	29 Oct 2022
Sprint-2	10	6 Days	31 Oct 2022	05 Nov 2022	10	05 Nov 2022
Sprint-3	10	6 Days	07 Nov 2022	12 Nov 2022	10	12 Nov 2022
Sprint-4	10	6 Days	14 Nov 2022	19 Nov 2022	10	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.

