

Project Planning Phase

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

Date	26 October 2022
Team ID	PNT2022TMID17661
Project Name	Project – 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.	2	High	Mogit, Naveen, Santhosh, Prasad
Sprint-1	Registration via Facebook	USN-2	As a user, I can register for the application through Facebook	2	Low	Mogit, Naveen, Santhosh, Prasad
Sprint-1	registration via Gmail	USN-3	As a user, I can register for the application through Gmail	2	Medium	Mogit, Naveen, Santhosh, Prasad
Sprint-2	Confirmation	USN-4	As a user I will receive confirmation email once I have registered for the application	1	High	Mogit, Naveen, Santhosh,
Sprint-2	Login	USN-5	As a user, I can log into the application by entering email & password	1	High	Mogit, Naveen, Prasad
Sprint-2	IBM cloud service	USN-6	Get access to IBM cloud services	2	High	Mogit, Naveen

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
Sprint-3	Create IBM Watson and device settings	USN-7	To create the IBM Watson IOT platform and Intergrate the microcontroller with it to send sensed data to cloud	2	High	Mogit, Naveen,
Sprint-3	Create node red service	USN-8	To create a node red service to integrate the IBM Watson along with Web UI	2	Medium	Mogit, Naveen, Santhosh, Prasad
Sprint-3	Create Web UI	USN-9	To create Web UI to access the data from cloud And display all parameters	2	Medium	Mogit, Naveen, Santhosh, Prasad
Sprint-3	To develop a python code	USN-10	Create python code to sense the physical quantity and store data	1	Medium	Mogit, Naveen, Santhosh, Prasad
Sprint-4	Publish data to cloud	USN-11	Publish data that is sensed by the microcontroller to the cloud	3	High	Mogit, Naveen, Santhosh, Prasad
Sprint-4	Fast SMS service	USN-12	Use fast SMS to send alert message once the parameters like ph , turbidity and temperature goes beyond the threshold	3	High	Mogit, Naveen, Santhosh,
Sprint-4	Testing	USN-13	Testing of project and final deliverables	3	Medium	Mogit, Naveen, Santhosh, Prasad

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	29 Oct 2022	04 Nov 2022	20	09 Nov 2022
Sprint-2	20	6 Days	04 Oct 2022	12 Nov 2022	20	17 Nov 2022
Sprint-3	20	8 Days	12 Nov 2022	20 Nov 2022	20	23 Nov 2022
Sprint-4	20	6 Days	18 Nov 2022	24 Nov 2022	20	28 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)

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

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

Burndown Chart

