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

Date	18 October 2022
Team ID	PNT2022TMID27531
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 for IBM	USN-1	As a user, I can register for the application by entering my email, password, and confirming my password.	2	High	Alagu, Oviyalakshmi, Packmar Rion Louji, Sakthi Soundarya
Sprint-1	Mail verification	USN-2	As a user, I will receive confirmation email once I have registered for the application	1	Medium	Alagu, Oviyalakshmi, Packmar Rion Louji, Sakthi Soundarya
Sprint-1	Project Topic hunting	USN-3	We surfed through various project domains in IBM and chose the one we want to work on	2	High	Alagu, Oviyalakshmi, Packmar Rion, Sakthi Soundarya

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
Sprint-1	Project Approval	USN-4	Patiently waited for our project approval by the college and industrial mentor.	2	High	Alagu, Oviyalakshmi, Packmar Rion Louji, Sakthi Soundarya
Sprint-2	Training Session	USN-5	Attended training sessions conducted by IBM to gain knowledge on how to work on our project	1	High	Alagu, Oviyalakshmi, Packmar Rion Louji, Sakthi Soundarya,
Sprint-2	Quiz & Assignments	USN-6	Attended the quiz sessions and completed the corresponding assignments during training	2	High	Alagu, Oviyalakshmi, Packmar Rion Louji, Sakthi Soundarya
Sprint-3	Creating IBM Cloud account	USN-7	Created IBM cloud account as a prerequisite for our project	2	High	Sakthi Soundarya
Sprint-3	Creating NodeRed app and IBM WatsonIOT platform	USN-8	Created NodeRed app and IBM WatsonIOT platform as a prerequisites for our project	2	High	Sakthi Soundarya
Sprint- 3	Ideation and Design phase	USN-9	Analysing the requirements and designing flow for the project	1	Medium	Alagu, Oviyalakshmi, Packmar Rion Louji, Sakthi Soundarya
Sprint-3	Mobile App Development	USN-10	Developing Mobile app to send alert message and to control the water motor	1	Medium	Alagu, Oviyalakshmi, Packmar Rion Louji, Sakthi Soundarya
Sprint-4	Project planning phase	USN-11	Documentation of proposed solution, proposed solution fit, solution architecture	1	Medium	Alagu, Oviyalakshmi

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
Sprint-4	Project planning phase	USN-12	Documentation of Milestone and Activity list	1	Low	Alagu, Oviyalakshmi
Sprint-4	Project development phase	USN-13	Documentation of Sprint delivery	2	Medium	Alagu, Oviyalakshmi, Packmar Rion Louji, Sakthi Soundarya

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

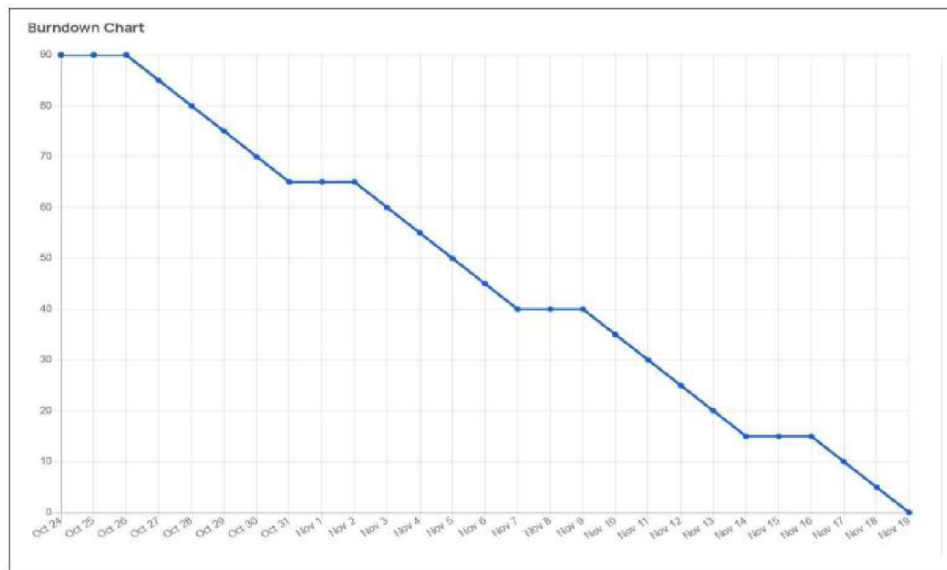| Sprint	Total Story Points	Duration	Sprint Start Date	Sprint End Date (Planned)	Story Points Completed (as on Planned End Date)	Sprint Release Date (Actual)
Sprint-1	20	6 Days	24 Oct 2022	29 Oct 2022	20	29 Oct 2022
Sprint-2	20	6 Days	31 Oct 2022	05 Nov 2022	19	05 Nov 2022
Sprint-3	20	6 Days	07 Nov 2022	12 Nov 2022	17	14 Nov 2022
Sprint-4	20	6 Days	14 Nov 2022	19 Nov 2022	18	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.

Reference:
https://www.atlassian.com/agile/project-management
https://www.atlassian.com/agile/tutorials/how-to-do-scrum-with-jira-software
https://www.atlassian.com/agile/tutorials/epics
https://www.atlassian.com/agile/tutorials/sprints
https://www.atlassian.com/agile/project-management/estimation
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