

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

Date	20 October 2022
Team ID	PNT2022TMID41908
Project Name	Hazardous area monitoring for Industrial Plant powered by IoT
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 Member
Sprint-1	Registration	USN-1	As a user, I can register for the application by entering the credentials given by the industry	3	High	J.Nitheesh
Sprint-2	Monitoring (Temperature, gas, humidity, etc.)	USN-2	As a user, I need to know the critical parameters around me inside the plant to safeguard myself	3	High	V.S.Balasubramani
Sprint-2	IoT Dashboard Interfacing & Web UI	USN-3	As a user, I should be able to view the measured critical parameters in the plant using the employee dashboard and the website	1	Medium	T.Kamalesh
Sprint-3	Cloud Setup (Cloud Services)	USN-4	The smart sensors should connect with IBM cloud services for real-time data monitoring of critical parameters inside the plant	1	Medium	M.Sivaranjani
Sprint-4	Mobile application and wearable device setup	USN-5	As a user, I should be able to access the data log through the mobile application and the wearable device and receive timely alerts	2	High	T.Kamalesh

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		Oct 2022
Sprint-2	20	6 Days	31 Oct 2022	05 Nov 2022		Oct 2022
Sprint-3	20	6 Days	07 Nov 2022	12 Nov 2022		Oct 2022
Sprint-4	20	6 Days	14 Nov 2022	19 Nov 2022		Oct 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.

Sprint goal - Hazardous area monitoring for Industrial Plant powered by IoT



