

Project Planning Phase

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

Date	18 October 2022
Team ID	PNT2022TMID39426
Project Name	Project – Hazardous Area Monitoring For Industrial Plant Powered By IoT
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	Detection of hazard	USN-1	As a worker, I will receive information from control node when hazard reported.	4	High	D.Keerthana S.Anandhi B.Hemaranjani M.Yogasri
		USN-2	As a worker, I can monitor the humidity and temperature to have stable environment	3	Medium	D.Keerthana S.Anandhi B.Hemaranjani M.Yogasri
Sprint-2	Air monitoring	USN-3	As a worker, I can identify harmful gas leakages through mobile notifications	4	High	D.Keerthana S.Anandhi B.Hemaranjani M.Yogasri
Sprint-3	Emergency shutdown system	USN-4	As a worker, I can measure the machine condition and shut down the entire system in the case of peak condition	3	Medium	D.Keerthana S.Anandhi B.Hemaranjani M.Yogasri

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
Sprint-4	Fire and smoke detection	USN-5	As a worker, I can detect fire using temperature, smoke and flame sensors with automatic water sprinkler	4	High	D.Keerthana S.Anandhi B.Hemaranjani M.Yogasri
	Alerting through message	USN-6	As a worker, I can receive the message in the form of audio, visual notification and graphical notification.	3	Low	

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	3 Days	05 Nov 2022	07 Nov 2022	20	07 Nov 2022
Sprint-2	20	3 Days	08 Nov 2022	10 Nov 2022	20	10 Nov 2022
Sprint-3	20	3 Days	11 Nov 2022	13 Nov 2022	20	13 Nov 2022
Sprint-4	20	3 Days	14 Nov 2022	17 Nov 2022	20	17 Nov 2022

Sprint	Total Story Points	Duration	Sprint Start Date	Sprint End Date (Planned)	Story Points Completed (as on Planned End Date)	Sprint Release Date (Actual)

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)

$$AV = \text{Sprint Duration} / \text{Velocity}$$

$$= 20 / 3 = 6.66$$

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.

