

Project Planning Phase

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

Date	2 November
Team ID	Team-592381
Project Name	Detection of Smoke using IOT Data and Trigger a Fire Alarm
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	Smoke Detection System	USN-1	As an employee, I want the system to provide real-time monitoring of the industrial facility's air quality, so I can work in a safe environment.	2	High	2
Sprint-1		USN-2	As an employee, I want the system to immediately trigger alarms if smoke is detected, so I can evacuate and ensure my safety in case of a fire hazard.	2	High	3
Sprint-2		USN-3	As an employee, I want the system to provide clear instructions for safe evacuation, so I can follow emergency protocols effectively.	3	High	1
Sprint-1		USN-4	As an employee, I want the system to allow for manual alarm acknowledgment, so I can confirm my safety during evacuation.	2	Medium	2
Sprint-2		USN-5	As an employee, I want the system to provide historical data for safety drills and compliance audits, so I can ensure regulatory compliance	3	High	2

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	06	7 Days	27 Oct 2023	2 Nov 2023	06	2 Nov 2023
Sprint-2	06	6 Days	3 Nov 2023	09 Nov 2023	06	9 Nov 2023

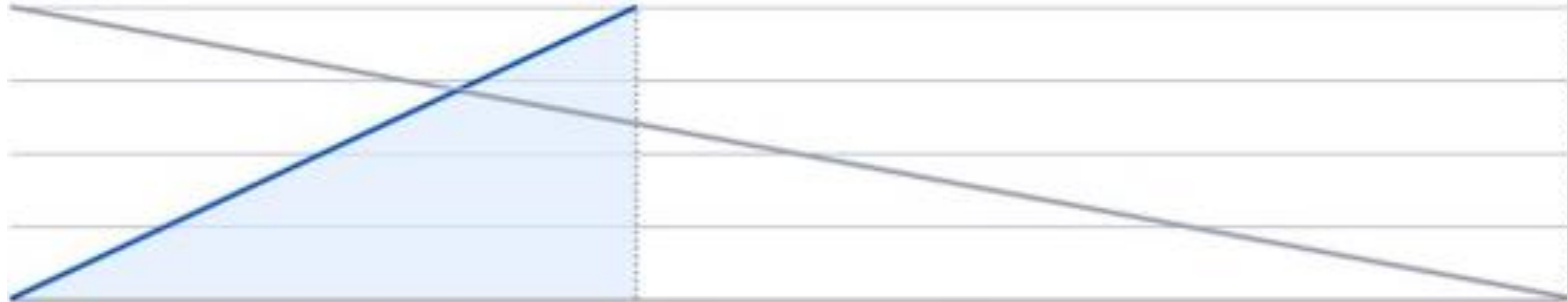
Velocity:

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)

$$\begin{aligned} AV &= \frac{\text{sprint duration}}{\text{velocity}} \\ &= 7/3 = 2.33 \end{aligned}$$

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.



NO OF SPRINTS -2

SPRINT-1-STORY POINTS-6-DURATION-5DAYS-OCTOBER 27 – NOV 2

SPRINT-2-STORY POINTS-6-DURATION-7DAYS-NOV 3-NOV 9