

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

Date	18 October 2022
Team ID	PNT2022TMID35909
Project Name	Gas Leakage Monitoring & Alerting System for Industries
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.	10	High	Sangavi D Subushri S V
		USN-2	As a developer, I can create a database to store sensor parameters	10	Medium	Sandhiya V Neha D Sangavi D Subushri S V
Sprint-2	Development of python script	USN-3	As a user, I can set and view sensor parameters	10	High	Sandhiya V Neha D
		USN-4	Continuous monitoring of sensor parameters to detect the gas leakage	10	Medium	Sandhiya V Neha D Sangavi D Subushri S V
Sprint-3	Monitoring and Responding	USN-5	As a user , I can track the sensor parameters and store it in created database	10	Low	Sandhiya V Sangavi D

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
		USN-6	Immediately responding to the Problem	10	High	Sandhiya V Neha D Sangavi D Subushri S V
Sprint-4	Web Application using Node Red Service	USN-7	Sending the extracted sensor readings from database to web application and viewed in web application	10	High	Neha D Subushri S V
		USN-8	Alerting the user in case of gas leakage	10	High	Sandhiya V Neha D Sangavi D Subushri S V

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

<https://www.visual-paradigm.com/scrum/scrum-burndown-chart/>

<https://www.atlassian.com/agile/tutorials/burndown-charts>

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>

<https://www.atlassian.com/agile/tutorials/burndown-charts>