

Project Planning Phase

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

Date	18 October 2022
Team ID	PNT2022TMID29662
Project Name	Gas Leakage Monitoring and Alerting System for Industries
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	Simulation	USN-1	Connect sensors and Arduino with python.	2	High	Hasan sathuli H, Jeevarishibabu K M, Kaviyaran M.
Sprint-2	Software	USN-2	Creating device in the IBM Watson IoT platform, and workflow using Node-Red.	2	High	Hasan sathuli H, Kaviyaran M, Gokulnath K.
Sprint-3	MIT App Inventor	USN-3	Develop a mobile application for the Gas Leakage Monitoring and Alerting System using MIT app inventor.	2	High	Hasan sathuli H, Jeevarishibabu K M, Gokulnath K.
Sprint-3	Linking	USN-4	Link the app with the IBM cloud.	2	High	Hasan sathuli H, Jeevarishibabu K M, Gokulnath K
Sprint-4	Dashboard	USN-5	Design the modules and test the mobile application.	2	High	Hasan sathuli H, Jeevarishibabu K M, Kaviyaran M.

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	05 Nov 2022
Sprint-3	20	6 Days	07 Nov 2022	12 Nov 2022	20	12 Nov 2022
Sprint-4	20	6 Days	14 Nov 2022	19 Nov 2022	20	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)

$$AV = \frac{\text{sprint duration}}{\text{velocity}} = \frac{20}{10} = 2$$

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>