

Project Planning Phase

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

Date	14 November 2022
Team ID	PNT2022TMID02619
Project Name	Industry-Specific Intelligent Fire Management System
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	Hardware or Software Simulation	USN-1	Making Hardware device or using Wokwi to connect temperature, flame, gas sensor to Nano with Arduino Uno.	2	High	Pranesh Boopathy, Rupesh S, Praveenkumar K, Rajagopal Narayanan
Sprint-1	Cloud Software	USN-2	Create Device in the IBM Watson IOT Platform and link it to Node-Red.	2	High	Pranesh Boopathy, Rupesh S, Praveenkumar K, Rajagopal Narayanan
Sprint-2	Web page	USN-3	Develop a webpage or Web UI.	2	High	Pranesh Boopathy, Rupesh S, Praveenkumar K, Rajagopal Narayanan
Sprint-1	Linking	USN-4	Link Device, IBM cloud and the developed webpage.	2	High	Pranesh Boopathy, Rupesh S, Praveenkumar K, Rajagopal Narayanan
Sprint-1	Dashboard	USN-5	Design the modules and test the device.	2	High	Pranesh Boopathy, Rupesh S, Praveenkumar K, Rajagopal Narayanan

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>