

## Project Planning Phase

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

Date	09 November 2022
Team ID	PNT2022TMID54463
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	Simulation software	USN-1	Using WOKWI, connect temperature, flame, gas sensors to ARDUINO with python script	2	High	Shyam VDP, Subhishvar S, Triniton Simon Paul M, Yashwanth M
Sprint-2	Cloud software	USN-2	Create device in the IBM Watson IoT platform, and link it to Node-Red	2	High	Shyam VDP, Subhishvar S, Triniton Simon Paul M, Yashwanth M
Sprint-3	MIT app inverter	USN-3	Develop a mobile application using MIT App inverter	2	High	Shyam VDP, Subhishvar S, Triniton Simon Paul M, Yashwanth M
Sprint-4	linking	USN-4	Link WOKWI, IBM Cloud and the developed App Application	2	High	Shyam VDP, Subhishvar S, Triniton Simon Paul M, Yashwanth M
Sprint-4	Dashboard	USN-5	Design the modules and Test the Mobile Application	2	High	Shyam VDP, Subhishvar S, Triniton Simon Paul M, Yashwanth 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>