

## Project Planning Phase

### Project Planning

Date	03 November 2022
Team ID	PNT2022TMID29259
Project Name	Project - Industry Specific Intelligent Fire Management System
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	Sensing	USN-1	Sensing the environment using the sensors.	3	High	A Arun C Dhamodharan S Manikandan R Thamizharasan
	Operating	USN-2	Turning on the exhaust fan as well as the fire sprinkler system in cause of fire and gas leakage.	3	Medium	A Arun C Dhamodharan S Manikandan R Thamizharasan
Sprint-2	Sending collected data to the IBM Watson platform	USN-3	Sending the data of the Sensors to the IBM Watson.	3	High	A Arun C Dhamodharan S Manikandan R Thamizharasan

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
	Node red	USN-4	Sending the data from the IBM Watson to the Node red.	3	High	A Arun C Dhamodharan S Manikandan R Thamizharasan
Sprint-3	Storing of sensor data	USN-5	Storing in Cloudant database.	2	Medium	A Arun C Dhamodharan S Manikandan R Thamizharasan
	Registration	USN-6	Entering my email and password to verify authentication process.	1	Medium	A Arun C Dhamodharan S Manikandan R Thamizharasan
	Web UI	USN-7	Monitors the situation of the environment which displays sensor information.	3	High	A Arun C Dhamodharan S Manikandan R Thamizharasan
Sprint-4	Fast SMS Service	USN-8	Use Fast SMS to Send alert message once the parameters like temperature, flame and gas sensor readings goes beyond the threshold value.	3	High	A Arun C Dhamodharan S Manikandan R Thamizharasan
	Turn ON/OFF the actuators	USN-9	User can turn off the Exhaust fan as well as the sprinkler system If need in that Situation.	2	Medium	A Arun C Dhamodharan S Manikandan R Thamizharasan

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
	Testing	USN-10	Testing of project and Final Deliverables.	1	Low	A Arun C Dhamodharan S Manikandan R Thamizharasan

### 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	6	3 Days	24 Oct 2022	29 Oct 2022	6	10 Nov 2022
Sprint-2	6	3 Days	31 Oct 2022	05 Nov 2022	6	13 Nov 2022
Sprint-3	6	3 Days	07 Nov 2022	12 Nov 2022	6	16 Nov 2022

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-4	6	3 Days	14 Nov 2022	19 Nov 2022	6	19 Nov 2022

## Velocity:

Imagine we have a 12-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)

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

$$AV = 3/6=0.5$$

## 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.

