

Project Planning Phase

Project Planning

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| Date | 16 November 2022 |
| Team ID | PNT2022TMID15750 |
| 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 | R. HARIHARAN S. HARIKARAN C.R. INDRAJITH R.M. KARUPPANNAN |
| | Operating | USN-2 | Turning on the exhaust fan as well as the fire sprinkler system in cause of fire and gas leakage. | 3 | Medium | R. HARIHARAN S. HARIKARAN C.R. INDRAJITH R.M. KARUPPANNAN |
| Sprint-2 | Sending collected data to the IBM Watson platform | USN-3 | Sending the data of the Sensors to the IBM Watson. | 3 | High | R. HARIHARAN S. HARIKARAN C.R. INDRAJITH R.M. KARUPPANNAN |

| 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 | R. HARIHARAN S. HARIKARAN C.R. INDRAJITH R.M. KARUPPANNAN |
| Sprint-3 | Storing of sensor data | USN-5 | Storing in Cloudant database. | 2 | Medium | R. HARIHARAN S. HARIKARAN C.R. INDRAJITH R.M. KARUPPANNAN |
| | Registration | USN-6 | Entering my email and password to verify authentication process. | 1 | Medium | R. HARIHARAN S. HARIKARAN C.R. INDRAJITH R.M. KARUPPANNAN |
| | Web UI | USN-7 | Monitors the situation of the environment which displays sensor information. | 3 | High | R. HARIHARAN S. HARIKARAN C.R. INDRAJITH R.M. KARUPPANNAN |
| 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 | R. HARIHARAN S. HARIKARAN C.R. INDRAJITH R.M. KARUPPANNAN |
| | 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 | R. HARIHARAN S. HARIKARAN C.R. INDRAJITH R.M. KARUPPANNAN |

| 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 | R. HARIHARAN S. HARIKARAN C.R. INDRAJITH R.M. KARUPPANNAN |

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 | 6 Days | 24 Oct 2022 | 29 Oct 2022 | 6 | 29 Oct 2022 |
| Sprint-2 | 6 | 6 Days | 31 Oct 2022 | 05 Nov 2022 | 6 | 05 Nov 2022 |
| Sprint-3 | 6 | 6 Days | 07 Nov 2022 | 12 Nov 2022 | 6 | 12 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 | 6 Days | 14 Nov 2022 | 19 Nov 2022 | 6 | 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)

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

$$AV = 6/6=1$$

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.

