

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

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| Team ID | PNT2022TMID14209 |
| Project Name | Industry-specific intelligent fire management system |

Product Backlog, Sprint Schedule, and Estimation

| Sprint | Functional Requirement | User Story Number | User Story / Task | Story Points | Priority | Team Members |
|---------------|-------------------------------|--------------------------|---|---------------------|-----------------|---------------------|
| Sprint-1 | Registration | USN-1 | As a user, I can register for the application by entering my email, password, and confirming my password. | 2 | High | Chandramohan S |
| Sprint-1 | User Confirmation | USN-2 | As a user, I will receive confirmation email once I have registered for the application | 1 | High | Aravind M |
| Sprint-1 | Login | USN-3 | As a user, I can log into the application by entering email & password | 1 | High | Kailesh K |
| Sprint-2 | Sensor | USN-4 | In industry, sensor sense the fire and smoke. | 2 | High | Karthick K |

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|----------|------------------|-------|--|---|------|----------------|
| Sprint-2 | Actuators | USN-5 | If the sensor detected the fire, next step is extinguishing the fire with the help of Sprinkler. | 2 | High | Chandramohan S |
| Sprint-3 | Cloud | USN-6 | All the values are stored in the cloud database. | 2 | High | Aravind M |
| Sprint-4 | Siren | USN-7 | If the fire is detected, employee should Evacuate by the intimation by Siren/Buzzer. | 2 | High | Kailesh K |
| Sprint-4 | Event management | USN-8 | Notification message will be sent to the fire Department, proprietor. | 2 | High | Karthick K |

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 | 31 Oct 2022 |

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

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