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

| Date          | 18 November 2022                   |
|---------------|------------------------------------|
| Team ID       | PNT2022TMID20427                   |
| 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 a product backlog and sprint schedule

| Sprint   | Functional<br>Requirement (Epic) | User Story<br>Number | User Story / Task  | Story<br>Points | Priority | Team Members  |
|----------|----------------------------------|----------------------|--|-----------------|----------|---|
| Sprint-1 | Sensing the values               | USN-1                | As a user, I want to see the temperature values              | 3               | High     | Ganesh<br>Arravind<br>B,Lokeshdurai<br>V,Naveenraj B<br>M,Abiswetha S |
| Sprint-1 | Sensing the values               | USN-2                | As a user, I want to see gas values                          | 2               | High     | Ganesh Aravind B,Lokeshdurai V,Naveenraj B M,Abiswetha S              |
| Sprint-1 | Sensing the values               | USN-3                | As a user, I want to see if flame is present                 | 2               | High     | Ganesh Aravind<br>B,Lokeshdurai<br>V,Naveenraj B<br>M,Abiswetha S     |
| Sprint-2 | Displaying temperature value     | USN-4                | As a user, I want to see the temperature values in dashboard | 2               | Medium   | Ganesh Aravind<br>B,Lokeshdurai<br>V,Naveenraj B<br>M,Abiswetha S     |
| Sprint-2 | Displaying gas value             | USN-5                | As a user, I want to see the gas values in dashboard         | 2               | Medium   | Ganesh Arravind B,Lokeshdurai V,Naveenraj B M,Abiswetha S             |

| Sprint   | Functional User Story User Story / Task Number |        | Story<br>Points  | Priority | Team Members |   |
|----------|--|--------|--|----------|--------------|---|
| Sprint-2 | Displaying flame value                         | USN-6  | As a user, I want to see flame values in dashboard   | 2        | Medium       | Ganesh<br>Arravind B,<br>Lokeshdura.V<br>Naveenraj B M<br>Abiswetha S |
| Sprint-3 | Alarm On                                       | USN-7  | As a user, the alarm should be turned on immediately if temperature, gas, flame values exceeds a particular threshold in web application       | 3        | High         | Ganesh Arravind B<br>Lokeshdurai V<br>Naveenraj B M<br>Abiswetha S    |
| Sprint-3 | Alarm Off                                      | USN-8  | As a user, I need to turn off alarm in web application   | 2        | Low          | Ganesh Arravind B<br>Lokeshdurai V<br>Naveenraj B M<br>Abiswetha S    |
| Sprint-3 | Sprinkler On                                   | USN-9  | As a user, the sprinkler should be turned on immediately if temperature, gas, flame values exceeds a particular threshold in web application   | 3        | High         | Ganesh<br>Arravind B<br>Lokeshdurai V<br>Naveenraj B M<br>Abiswetha S |
| Sprint-3 | Sprinkler Off                                  | USN-10 | As a user, I need to turn off sprinkler in web application   | 2        | Low          | Ganesh<br>Arravind B<br>Lokeshdurai V<br>Naveenraj B M<br>Abiswetha S |
| Sprint-4 | Registration                                   | USN-11 | As a user, I can register for the application by entering email, password, and confirming my password  | 3        | High         | Ganesh<br>Arravind B<br>Lokeshdurai V<br>Naveenraj B M<br>Abiswetha S |
| Sprint-4 | Displaying sensor values                       | USN-12 | Displaying gas, flame and temperature sensor values  | 3        | High         | Ganesh<br>Arravind B<br>Lokeshduri V<br>Naveenraj B M<br>Abiswetha S  |
| Sprint-4 | Alarm On                                       | USN-13 | As a user, the alarm should be turned on immediately if temperature, gas, flame values exceeds a particular threshold using mobile application | 3        | High         | Ganesh<br>Arravind B<br>Lokeshdurai V<br>Naveenraj B M<br>Abiswetha S |

| Sprint-4 | Alarm Off     | USN-14 | As a user, I need to turn off alarm using mobile application   | 2 | Low  | Ganesh<br>Arravind B<br>Lokeshdurai V<br>Naveenraj B M<br>Abiswetha S |
|----------|---------------|--------|--|---|------|---|
| Sprint-4 | Sprinkler On  | USN-15 | As a user, the sprinkler should be turned on immediately if temperature, gas, flame values exceeds a particular threshold using mobile application | 3 | High | Ganesh<br>Arravind<br>B,Lokeshdurai<br>V,Naveenraj B<br>M,Abiswetha S |
| Sprint-4 | Sprinkler Off | USN-16 | As a user, I need to turn off sprinkler using mobile application   | 2 | Low  | Ganesh Arravind B, Lokeshdurai V, Naveenraj B M Abiswetha S           |

### **Project Tracker, Velocity & Burndown Chart: (4 Marks)**

| Sprint   | Total Story<br>Points | Duration | Sprint Start Date | Sprint End Date<br>(Planned) | Story Points<br>Completed (as on<br>Planned End Date) | Sprint Release Date<br>(Actual) |
|----------|-----------------------|----------|-------------------|------------------------------|---|---------------------------------|
| Sprint-1 |                       | 6 Days   | 24 Oct 2022       | 29 Oct 2022                  | 7   |                                 |
| Sprint-2 |                       | 6 Days   | 31 Oct 2022       | 05 Nov 2022                  | 6   |                                 |
| Sprint-3 |                       | 6 Days   | 07 Nov 2022       | 12 Nov 2022                  | 10  |                                 |
| Sprint-4 |                       | 6 Days   | 14 Nov 2022       | 19 Nov 2022                  | 16  |                                 |
|          |                       |          |                   |                              |   |                                 |
|          |                       |          |                   |                              |   |                                 |
|          |                       |          |                   |                              |   |                                 |
|          |                       |          |                   |                              |   |                                 |

## 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)

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

#### 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-iira-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