**Project Planning Phase**

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

|  |  |
| --- | --- |
| Date | 18 October 2022 |
| Team ID | PNT2022TMID35841 |
| Project Name | Gas Leakage Monitoring and Alerting 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 | Registration | USN-1 | As a user, I can start by  registering my credentials so that I get notifications in case of a gas leakage | 10 | High | SUDARSHAN A R,  B ADITYA,  C PRADUMNA |
|  |  | USN-2 | As a user, I will receive confirmation once  I have registered for the application. | 5 | High | SUDARSHAN A R,  B ADITYA,  C PRADUMNA |
|  | Login | USN-3 | As a user, I can log into the application by  entering my credentials | 5 | High | SUDARSHAN A R,  B ADITYA,  C PRADUMNA |
| Sprint-2 | Action | USN-4 | As a user, I can get the notification if there is a gas leak | 15 | High | SUDARSHAN A R,  B ADITYA,  PREETHI B |
|  |  | USN-5 | As a user, I get the instant message | 5 | Low | SUDARSHAN A R  B ADITYA,  PREETHI B |
| Sprint-3 | Data Viewing | USN-6 | As a user, I can view the parameters and statistics on the kitchen environment | 20 | High | SUDARSHAN A R,  B ADITYA,  PREETHI B |
| Sprint-4 | Storage | USN-7 | As a user, I can access data from cloud using  interactive UI. | 10 | High | SUDARSHAN A R,  B ADITYA,  C PRADUMNA |
|  |  | USN-8 | As a user, I can experience enhanced features  and highly sensitive gas leakage detection | 10 | Medium | SUDARSHAN A R,  B ADITYA,  C PRADUMNA |

**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 = 20/6 = 3.333**

**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](https://www.visual-paradigm.com/scrum/what-is-agile-software-development/) methodologies such as [Scrum](https://www.visual-paradigm.com/scrum/scrum-in-3-minutes/). However, burn down charts can be applied to any project containing measurable progress over time.

