**Project Planning Phase**

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

|  |  |
| --- | --- |
| Date | 03 November 2022 |
| Team ID | PNT2022TMID25975 |
| Project Name | Project - Gas Leakage monitoring & Alerting system for Industries |
| 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 | Monitor the gas leakage | USN-1 | The Industrialist have own industries so the  industry owner must take of workers.The  workers have family so the industries give  security assurance of workers. | 2 | High | Dasa saranya  Kristavarapu Ramyasri  Vangala Sowmya  Ragavi B |
| Sprint-1 | Registration  And Login | USN-2 | As a user, can register for the application by entering email, password, and confirming password. User will receive confirmation email once have registered for the application. | 2 | High | Dasa saranya  Kristavarapu Ramyasri  Vangala Sowmya  Ragavi B |
| Sprint-2 | Avoid From Disaster | USN-3 | The gas leakage occur at the time fire service will take care to protect the people from the disaster. | 1 | High | Dasa saranya  Kristavarapu Ramyasri  Vangala Sowmya  Ragavi B |
| Sprint-3 | Detect the gas | USN-4 | We have monitor the gas by 24/7 hrs. To avoid leakage,the industry have quality pipes to transfer the gas and proper maintanence service once in a month. The industry must take care of what are the necessary process to avoid the gas leakage. | 2 | Low | Dasa saranya  Kristavarapu Ramyasri  Vangala Sowmya  Ragavi B |
| Sprint-3 | The model is trained  and tested by sample  dataset. | USN-5 | The programmer design the model to detect the  gas leakage. | 1 | Medium | Dasa saranya  Kristavarapu Ramyasri  Vangala Sowmya  Ragavi B |
| Sprint- 4 | sensor value < threshold value | USN-6 | As a user, I should get an indication through  red LED. | 2 | Medium | Dasa saranya  Kristavarapu Ramyasri  Vangala Sowmya  Ragavi B |
| Sprint-4 | Repeat the process for  maintaining strict safety with warning message. | USN-7 | Incase any gas leakage occur, the device give the alarm and alert message to concerned user within a minute. | 1 | High | Dasa saranya  Kristavarapu Ramyasri  Vangala Sowmya  Ragavi B |

**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 | 02 Nov 2022 | 08 Nov 2022 | 20 | 08 Nov 2022 |
| Sprint-2 | 20 | 6 Days | 03 Nov 2022 | 09 Nov 2022 |  | 09 Nov 2022 |
| Sprint-3 | 20 | 6 Days | 05 Nov 2022 | 11 Nov 2022 |  | 11 Nov 2022 |
| Sprint-4 | 20 | 6 Days | 07 Nov 2022 | 14 Nov 2022 |  | 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)



**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.

**<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-jira-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>**