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

| Date | 21 October 2022 |
|---|---|
| Team ID | PNT2022TMID35489 |
| Project Name | Project – 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 | Detection | USN-1 | As a system, it must sense/detect the leakage of any gas through the sensor. | 4 | High | M. Saranya |
| Sprint-2 | | USN-2 | As a system , it must detect the amount of gas leaked. | 3 | Medium | M.Pon Ajiritha |
| Sprint-2 | | USN-3 | As a system, it must update the website about the level of leakage in industries surrounding the area. | 3 | Medium | M.Saranya |
| Sprint-1 | Registration | USN-1 | As a user, I must first register my e-mail and mobile number in the website. | 3 | High | M. Pon Ajiritha |
| Sprint-1 | | USN-2 | As a user, I must receive confirmation mail and SMS on registration. | 2 | Low | D. Sanghavai Bhuvaneswari |
| Sprint-2 | Login | USN-3 | As a user, I can login into the web application through e-mail and password. | 3 | Medium | D.Sanghavai Bhuvaneswari |
| Sprint-4 | Dashboard | USN-4 | As a user, I can access the dashboard and make use of available resources. | 3 | Low | M.Saranya |
| Sprint-3 | Notification | USN-5 | As a user, I must receive an E-mail once the leakage is detected. | 3 | High | M.Saranya |
| Sprint-3 | | USN-6 | As a user, I must receive an SMS once the leakage is detected. | 3 | High | M.Pon Ajiritha |
| Sprint-1 | Registration | USN-1 | As an admin, I must first register myself in the portal using E-mail. | 3 | High | M.Subarna |

| Sprint | Functional Requirement (Epic) | User Story Number | User Story / Task | Story Points | Priority | Team Members |
|---|---|---|---|---|---|---|
| Sprint-2 | | USN-2 | As an admin, I must receive confirmation mail. | 3 | Medium | M. Subarna |
| Sprint-3 | Login | USN-3 | As an admin, I can login into the web application through e-mail and password. | 3 | Medium | D.Sanghavai Bhuvaneswari |
| Sprint-4 | Dashboard | USN-4 | As an admin, I can access the dashboard and make use of available resources. | 3 | Low | M.Pon Ajiritha |
| Sprint-3 | Notification | USN-5 | As an admin, I must receive information about the leakage along with location. | 3 | High | M.Subarna |
| Sprint-4 | Allocation | USN-6 | As an admin, I must allot particular person to look after the leakage in a particular location. | 3 | Medium | D.Sanghavai Bhuvaneswari |
| Sprint-4 | | USN-7 | As an admin, I must share exact location and route to the person. | 3 | High | M.Subarna |

**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 | 12 | 6 Days | 24 Oct 2022 | 29 Oct 2022 | | 29 Oct 2022 |
| Sprint-2 | 12 | 6 Days | 31 Oct 2022 | 05 Nov 2022 | | 05 Nov 2022 |
| Sprint-3 | 12 | 6 Days | 07 Nov 2022 | 12 Nov 2022 | | 12 Nov 2022 |
| Sprint-4 | 12 | 6 Days | 14 Nov 2022 | 19 Nov 2022 | | 19 Nov 2022 |

**Velocity:**

Imagine we have a 6-day sprint duration, and the velocity of the team is 12 (points per sprint). Let's calculate the team's average velocity (AV) per iteration unit (story points per day)

$$AV = Velocity/Sprint\ Duration = 12/6 = 2$$

**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-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