Project Planning Phase

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

Date	22 October 2022
Team ID	PNT2022TMID02525
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	Objective	USN-1	As a system, the access is done through QR code	2	High	Sandhiya V, Sarumathi M, Priyadharshini V, Pavithra P
Sprint-1	Features	USN-2	As a system, the gas sensor should detect the gas	2	Low	Sandhiya V
Sprint-1	Features	USN-3	As a system, the fire should be detected using open CV	1	Medium	Priyadharshini V
Sprint-1	Features	USN-4	As a system, after the detection of Fire the rainwater sprinkler should actuated	2	High	Sarumathi M, Pavithra P
Sprint-2	Focus	USN-5	As a system, as soon as the detected gas reaches the threshold level, the alert should be turned ON	1	Low	Sandhiya V, Sarumathi M
Sprint-2	Focus	USN-6	As a system, as soon as the detected gas reaches the threshold level, the alert should send to admin via website	2	Medium	Priyadharshini V, Pavithra P

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
Sprint-2	Features	USN-7	As a system, it should the send the location where the gas is detected	2	High	Sandhiya V
Sprint-3	Features	USN-8	As a program, it should retrieve the API key of the IBM cloud to send the details of the system.	1	Low	Priyadharshini V
Sprint-3	Data Transfer	USN-9	As a cloud system, the IBM cloud should send the data to NodeRed	2	High	Sarumathi M
Sprint-3	Data Transfer	USN-10	As a system, it should collect the data from the NodeRed and give it to the backend of the website	2	High	Pavithra P
Sprint-3	Data Transfer	USN-11	As an application, it should display the details of the gas level and other details to the user through the frontend of the website.	2	High	Sandhiya V
Sprint-4	Data Transfer	USN-12	As a user, I can access the dashboard and make use of available resources.	2	Medium	Priyadharshini V
Sprint-4	Data Transfer	USN-13	As a user, I must receive an alert once the leakage is detected.	1	High	Pavithra P
Sprint-4	Registration	USN-14	As an admin, I must receive information about the leakage along with location and share exact location and route to the person.	2	High	Sarumathi M

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
Sprint-4	Registration	USN-15	As an admin, I must allot particular person to look after the leakage in a particular location.	2	Medium	Sandhiya V, Sarumathi M, Priyadharshini V, Pavithra P

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)

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