PROJECT PLANNING PHASE

Date	22 October 2022
Team ID	PNT2022TMID48300
Project Name	Gas Leakage Monitoring and Alerting System
Maximum Marks	8 Marks

PRODUCT BACKLOG, SPRINT SCHEDULE AND ESTIMATION:

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
Sprint-1	Objective	USN-1	As a system, the gas sensor should detect the gas	8	High	Vigneshwaran Ajay
Sprint-1	Features	USN-2	As a system, the gas sensor values should be displayed in a LED screen	2	Low	Yuvadharshini Rashmika
Sprint-1	Features	USN-3	As a system, as soon as the detected gas reaches the threshold level, the red color LED should be turned ON.	5	High	Vigneshwaran Yuvadharshini
Sprint-1	Features	USN-4	As a system, as soon as the detected gas reaches the threshold level, the siren should be turned ON.	5	High	Rashmika Ajay
Sprint-2	Focus	USN-5	As a system, it should the send the location where the gas is detected	8	High	Vigneshwaran Rashmika
Sprint-2	Focus	USN-6	As a system, it should also send the alerting SMS to the registered phone number	2	Low	Yuvadharshini Ajay

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
Sprint-2	Features	USN-7	As a system, the gas leakage pipe should be closed automatically once there it attains the threshold value	5	Medium	Yuvadharshini Ajay
Sprint-2	Features	USN-8	As a system, it will indicate that the gas leakage pipe is closed in the LCD screen and send SMS to the registered mobile number.	5	Medium	Ajay Vigneshwaran
Sprint-3	Data Transfer	USN-9	As a program, it should retrieve the API key of the IBM cloud to send the details of the system.	2	Low	Ajay Rashmika
Sprint-3	Data Transfer	USN-10	As a system, it should send the data of sensor values along with latitudes and longitudes to the IBM cloud	5	Medium	Ajay Yuvadharshini
Sprint-3	Data Transfer	USN-11	As a cloud system, the IBM cloud should send the data to NodeRed	2	Medium	Rashmika Vigneshwaran
Sprint-3	Data Transfer	USN-12	As a system, it should collect the data from the NodeRed and give it to the backend of the mit app.	3	Medium	Yuvadharshini Rashmika
Sprint-3	Data Transfer	USN-13	As an application, it should display the details of the gas level and other details to the user through the frontend of the mit app.	8	High	Rashmika Vigneshwaran
Sprint-4	Registration	USN-14	As a user, I must first register my email and mobile number in the website	2	High	Vigneshwaran Yuvadharshini

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
Sprint-4	Registration	USN-15	As a user, I must receive confirmation mail and SMS on registration	2	Medium	Ajay Yuvadharshini
Sprint-4	Login	USN-16	As a user, I can login into the web application through email and password.	3	High	Vigneshwaran Rashmika
Sprint-4	Dashboard	USN-17	As a user, I can access the dashboard and make use of available resources.	2	Medium	Yuvadharshini Rashmika
Sprint-4	Focus	USN-18	As a user, I must receive an SMS once the leakage is detected.	5	High	Ajay Vigneshwaran
Sprint-4	Allocation	USN-19	As an admin, I must receive information about the leakage along with location and share exact location and route to the person.	3	High	Yuvadharshini Vigneshwaran
Sprint-4	Allocation	USN-20	As an admin, I must allot particular person to look after the leakage in a particular location.	3	High	Ajay Yuvadharshini

PROJECT TRACKER, VELOCITY & BURNDOWN CHART:

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:

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