Project Planning Phase

Project Planning Template (Product Backlog, Sprint Planning, Stories, Storypoints)

Date	18October 2022
Team ID	PNT2022TMID17812
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	Objective	USN-1	The sensor must detect the gas	7	High	Manish, Athinarayanan
Sprint-1	Features	USN-2	The values must be displayed	2	Low	Mohamad Umar, Anto Nidhish
Sprint-1	Features	USN-3	Based on threshold, Danger light must be turned ON	5	High	Arun Priyan, Anto Nidhish
Sprint-1	Features	USN-4	Based on threshold, Buzzer and other alerting system must be turned ON	5	High	Mohamad Umar, Athinarayanan
Sprint-2	Focus	USN-5	Location of gas leakage must be found and attached in the alert message being generated	8	High	Anto Nidhish, Manish
Sprint-2	Focus	USN-6	Alert SMS must be sent to the registered phone number	2	Low	Arun Priyan, Mohamad Umar
Sprint-2	Features	USN-7	Pipe segment where the leakage is found must close automatically	5	Medium	Mohamad Umar, Manish
Sprint-2	Features	USN-8	Whether the pipe is closed successfully or not must be intimated to the user via message	5	Medium	Mohamad Umar, Anto Nidhish

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
Sprint-3	Data Transfer	USN-9	API key must be retrieved to transfer the data to IBM Cloud	2	Low	Mohamad Umar, Anto Nidhish
Sprint-3	Data Transfer	USN-10	Data of sensor along with its latitude and longitude must be sent to IBM Cloud	5	Medium	Arun Priyan,Anto Nidhish
Sprint-3	Data Transfer	USN-11	IBM Cloud should send data to Node Red	2	Medium	Athinarayanan, Manish
Sprint-3	Data Transfer	USN-12	Data obtained in Node Red must be forwarded to MIT App	3	Medium	Athinarayanan, Anto Nidhish
Sprint-3	Data Transfer	USN-13	Data must be displayed in the application developed using MIT.	8	High	Athinarayanan,Mohamad Umar
Sprint-4	Registration	USN-14	User must register an account using Email and Mobile Number in the website	2	High	Athinarayanan,Manish
Sprint-4	Registration	USN-15	Confirmation mail must be received to the registered Mail-ID	2	Medium	Manish,Arun Priyan
Sprint-4	Login	USN-16	User can login into web application through email and password.	3	High	Anto Nidhish, Arun Priyan
Sprint-4	Dashboard	USN-17	User can access the dashboard and make use of available resources.	2	Medium	Mohamad Umar, Manish
Sprint-4	Focus	USN-18	User must receive an SMS once the leakage is detected.	5	High	Mohamad Umar, Manish
Sprint-4	Allocation	USN-19	Admin must receive information about the leakage along with location and share exact location and route to the person.	3	High	Manish, Arun Priyan
Sprint-4	Allocation	USN-20	Admin must allot particular person to look after the leakage in a particular location.	3	High	Athinarayanan, Anto Nidhish

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		29 Oct 2022
Sprint-2	20	6 Days	31 Oct 2022	05 Nov 2022		05 Nov 2022
Sprint-3	20	6 Days	07 Nov 2022	12 Nov 2022		12 Nov 2022
Sprint-4	20	6 Days	14 Nov 2022	19 Nov 2022		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)

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

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