

## Project Planning Phase

Date	26 October 2022
Team ID	PNT2022TMID35867
Project Name	Project – Gas Leakage Monitoring and Alerting System for Industries
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	IoT Device design	USN-1	Design system with gas sensor and microcontroller (Technology stack)	4	High	Prakash E, Joey Infant Rex A, Vasanth Kumar M S, Akhilesh Chandra
Sprint-1	IoT Device testing	USN-2	Testing system with different types of concentration of particular gas (Appropriate gas sensor)	5	High	Joey Infant Rex A, Akhilesh Chandra
Sprint-1	IoT Device Verification	USN-2	Configure Buzzer with Device and Verify Gas Leakage	1	Low	Prakash E, Vasanth Kumar M S
Sprint-2	Cloud Service and Authentication	USN-3	Create Cloud storage, configure cloud with IoT device (IoT platform) and Administered by User with credentials	3	Low	Joey Infant Rex A, Prakash E, Vasanth Kumar M S, Akhilesh Chandra
Sprint-2	Cloud Service Verification	USN-3	Updating cloud database with gas concentration always	4	Medium	Joey Infant Rex A, Prakash E,
Sprint-3	SMS alert	USN-4	Message “Alert” sent to intended user via SMS	5	High	Joey Infant Rex A, Prakash E, Vasanth Kumar M S, Akhilesh Chandra
Sprint-3	App Design and Configuration	USN-4	Design Alert App and Interface Gas Leakage details with Alert App	2	Low	Vasanth Kumar M S, Akhilesh Chandra
Sprint-4	App Login and Authentication	USN-5	Provide Username and Password to Intended User for Security Purpose	4	Medium	Prakash E, Akhilesh Chandra

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
Sprint-4	App Service and Verification	USN-6	Provide Gas Leakage Location with Concentration to User via Alert App with Login Credentials	5	High	Joey Infant Rex A, Prakash E, Vasanth Kumar M S, Akhilesh Chandra

### 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

### Average Velocity:

$$AV = \frac{\text{TotalStoryPoints}}{\text{TotalDuration}} = \frac{80}{24} = 3.33$$

Burndown Chart:

