

Project Planning Phase

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

Date	10 NOVEMBER 2022
Team ID	PNT2022TMID36194
Project Name	Gas leakage monitoring and alerting system using IOT
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 / Task	Story Points	Priority	Team Members
Sprint-1	Related work	Introduced GSM based gas leakage detection system in which the GSM module is introduced for wireless alert and gas leakage detection ,efficiently implemented.	2	High	MANIKANDAN S KEERTHI J LAVANYA V RUPAVATHY S
Sprint-1	Proposed method	Send alert SMS to the in charge of the plant whose number is saved in SIM card by using GSM modem.	2	High	MANIKANDAN S KEERTHI J LAVANYA V RUPAVATHY S
Sprint-2	Hardware description	Arduino UNO, Gas leakage sensor, GSM module, Buzzer, LCD these hardware are used to monitor and alerting purpose .	1	Low	MANIKANDAN S KEERTHI J LAVANYA V RUPAVATHY S
Sprint-3	Software implementation	This system monitors the gas, smoke by sensor. If any gas is detected the signal of sensor goes low and activate the Arduino UNO. This is send to LCD display.	1	Medium	MANIKANDAN S KEERTHI J LAVANYA V RUPAVATHY S
Sprint-4	Result and discussion	Buzzer and GSM modem alerts the people who are present in the danger place.	2	High	MANIKANDAN S KEERTHI J LAVANYA V RUPAVATHY S

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	30 Oct 2022	20	01 Nov 2022
Sprint-2	20	6 Days	31 Oct 2022	07 Nov 2022	20	08 Nov 2022
Sprint-3	20	6 Days	07 Nov 2022	11 Nov 2022	20	12 Nov 2022
Sprint-4	20	6 Days	14 Nov 2022	18 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)

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

Burndown chart

