

## Project Planning Phase

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

Date	22 October 2022
Team ID	PNT2022TMID11539
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	Hardware	USN-1	Sensors and arduino integrated with python code.	2	High	Thiviya Sathya Rithikasri Sowmiya
Sprint-2	Software	USN-2	IBM Watson IOT platform, Workflows for IOT scenarios using Node-red. Fully managed, cloud-hosted service with capabilities for device registration, connectivity, control, rapid visualization and data storage	2	High	Thiviya Sathya Rithikasri Sowmiya
Sprint-3	MIT app	USN-3	To develop an mobile application using MIT. Allows everyone even children to build fully functional apps for smartphones and tablets. .	2	High	Thiviya Sathya Rithikasri Sowmiya
Sprint-4	Web UI	USN-4	To make the user to interact with software. A Web user interface or Web app allows the user to interact with content or software running on a remote server through a Web browser	2	High	Thiviya Sathya Rithikasri Sowmiya

**Project Tracker, Velocity & Burndown Chart: (4 Marks)**

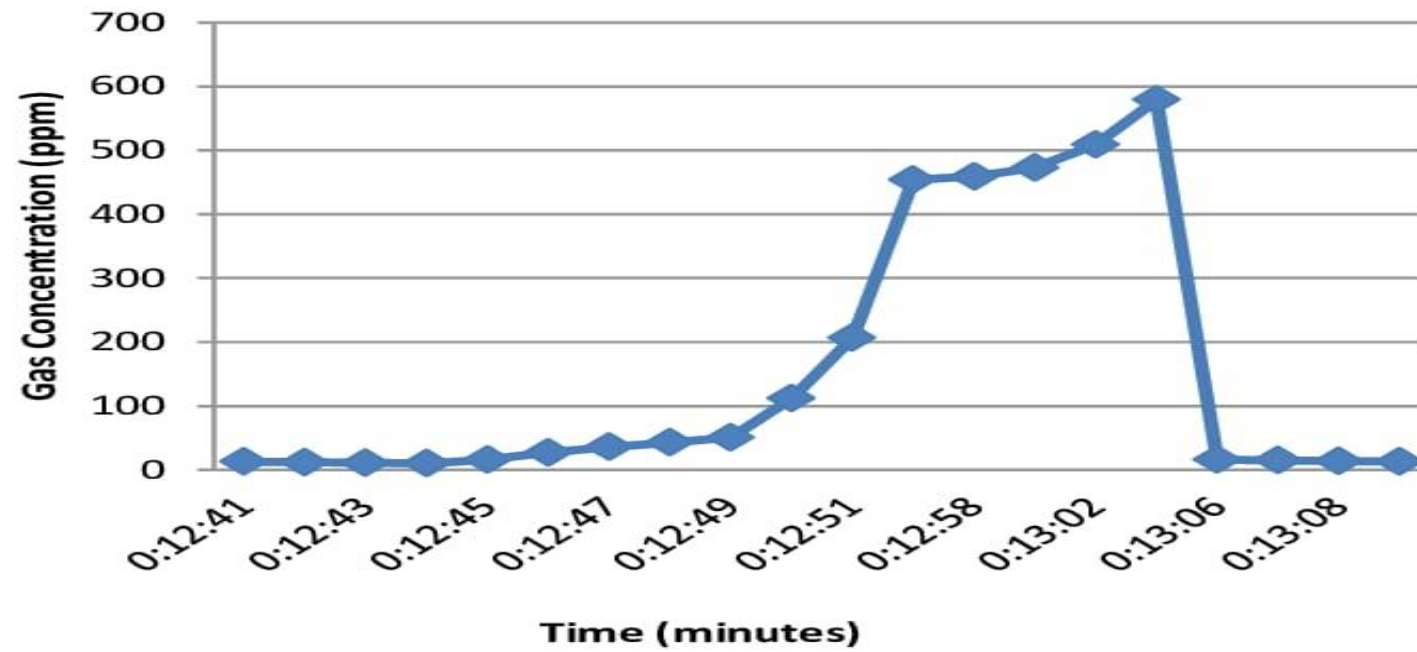
Sprint	Total Story Points	Duration	Sprint Start Date	Sprint End Date (Planned)	Story Points Completed (as on Planned End Date)	Sprint Release Date (Actual)
Sprint-1	20	6 Days	24 Oct 2022	29 Oct 2022	20	29 Oct 2022
Sprint-2	20	6 Days	31 Oct 2022	05 Nov 2022		5 Nov 2022
Sprint-3	20	6 Days	07 Nov 2022	12 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)

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

### Detection of Gas Leakage in Dangerous Condition



**Burndown Chart:**