Project Planning Phase
(Product Backlog, Sprint Planning, Stories, Story points)

Assignment Date	06 NOVEMBER2022
Team ID	PNT2022TMID49056
Project Name	Gas Leakage Monitoring and Alerting System

Product Backlog, Sprint Schedule, and Estimation (4 Marks)

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
Sprint-1	Create	US-1	Create the IBM Cloud services which are being used in this project.	6	High	Abinaya R Ajitha A
Sprint-1	Configure	US-2	Configure the IBM Cloud services which are being used in completing this project.	4	Medium	Abinaya R Anu A
Sprint-1	Create	US-3	IBM Watson IoT platform acts as the mediator to connect the web application to IoT devices, so create the IBM Watson IoT platform.	5	Medium	Abinaya R Archanadevi S
Sprint-1	Create	US-4	In order to connect the IoT device to the IBM cloud, create a device in the IBM Watson IoT platform and get the device credentials.	5	High	Ajitha A Abinaya R
Sprint-2	Configure	US-1	Configure the connection security and create API keys that are used in the Node-RED service for accessing the IBM IoT Platform.	10	High	Ajitha A Anu A
Sprint-2	Create	US-2	Create a Node-RED service.	10	High	Ajitha A Archanadevi S

Sprint-3	Develop	US-1	Develop a python script to publish random sensor data such as temperature, Flame level and Gas level to the IBM IoT platform	7	High	Anu A Abinaya R
Sprint-3	Configure	US-2	After developing python code, commands are received just print the statements which represent the control of the devices.	5	Medium	Anu A Ajitha A
Sprint-3	Publish	US-3	Publish Data to The IBM Cloud	8	High	Archanadevi S Abinaya R
Sprint-4	Create	US-1	Create Web UI in Node- Red	10	High	Archanadevi S Ajitha A
Sprint-4	Configure	US-2	Configure the Node-RED flow to receive data from the IBM IoT platform and also use cloudant DB nodes to store the received sensor data in the cloudant DB	10	High	Abinaya R Ajitha A Anu A Archanadevi 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	29 Oct 2022	20	01 Nov 2022
Sprint-2	20	6 Days	31 Oct 2022	05 Nov 2022	20	01 Nov 2022
Sprint-3	20	6 Days	07 Nov 2022	12 Nov 2022	20	01 Nov 2022
Sprint-4	20	6 Days	14 Nov 2022	19 Nov 2022	20	01 Nov 2022

Velocity:

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