Project Planning Phase

Team ID	PNT2022TMID15011
Project Name	IoT based Smart crop Protection System for agriculture
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		US-1	Create the IBM Cloud services which are beingused in this project.	6	High	Brijesh Chandra Aksharan K Sujith S Shri Raam PM Saravanan R
Sprint-1		US-2	Configure the IBM Cloud services which are beingused in completing this project.	4	Medium	Brijesh Chandra Aksharan K Sujith S Shri Raam PM Saravanan R
Sprint-2		US-3	IBM Watson IoT platform acts as the mediator toconnect the web application to IoT devices, so create the IBM Watson IoT platform.	5	Medium	Brijesh Chandra Aksharan K Sujith S Shri Raam PM Saravanan R
Sprint-2		US-4	In order to connect the IoT device to the IBMcloud, create a device in the IBM Watson IoT platform and get the device credentials.	5	High	Brijesh Chandra Aksharan K Sujith S Shri Raam PM Saravanan R
Sprint-3		US-1	Configure the connection security and create APIkeys that are used in the Node-RED service for accessing the IBM IoT Platform.	10	High	Brijesh Chandra Aksharan K Sujith S Shri Raam PM Saravanan R

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
Sprint-3		US-2	Create a Node-RED service.	10	High	Brijesh Chandra Aksharan K Sujith S Shri Raam PM Saravanan R
Sprint-3		US-1	Develop a python script to publish random sensordata such as temperature, moisture, soil and humidity to the IBM IoT platform	7	High	Brijesh Chandra Aksharan K Sujith S Shri Raam PM Saravanan R
Sprint-3		US-2	After developing python code, commands are received just print the statements which representthe control of the devices.	5	Medium	Brijesh Chandra Aksharan K Sujith S Shri Raam PM Saravanan R
Sprint-4		US-3	Publish Data to The IBM Cloud	8	High	Brijesh Chandra Aksharan K Sujith S Shri Raam PM Saravanan R
Sprint-4		US-1	Create Web UI in Node- Red	10	High	Brijesh Chandra Aksharan K Sujith S Shri Raam PM Saravanan R.
Sprint-4		US-2	Configure the Node-RED flow to receive data fromthe IBM IoT platform and also use Cloudant DB nodes to store the received sensor data in the cloudant DB	10	High	Brijesh Chandra Aksharan K Sujith S Shri Raam PM Saravanan R.

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	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

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 burndown chart is a graphical representation of work left to do versus time However, burndown charts can be applied to any project containing measurable progress overtime.