Project Planning Phase

Date	05 November r 2022
Team ID	PNT2022TMID28957
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 IBM Wastin IOT platform	6	High	Nivetha.S Saranya. Sakthi Priya k Rithika S
Sprint-1		US-2	Create a device and configure the IBM IOT platform	4	Medium	Nivetha.S Saranya.R Sakthi Priya k Rithika S
Sprint-2		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	Nivetha.S Saranya.R Sakthi Priya k Rithika S

Sprint-2		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	Hidh	Nivetha.S Saranya.R Sakthi Priya k Rithika S
Sprint-3		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	Nivetha.S Saranya.R Sakthi Priya k Rithika S
Sprint -3		US-2	Create a node -Red service.	10	High	Nivetha.S Saranya.R Sakthi Priya k Rithika S
Sprint-3		US-1	Create a database in cloudant DB to store location data	5	Medium	Nivetha.S Saranya.R Sakthi Priya k Rithika S
Sprint-4		US-2	Develop a python script to publish random sensor data such as temperature, moisture, soil and humidity to the IBM IoT platform	7	High	Nivetha.S Saranya.R Sakthi Priya k Rithika S
Sprint -4		US-3	Publish data to the IBM Cloud	8	High	Nivetha.S Saranya.R Sakthi Priya k Rithika S
Sprint -4		US-4	Create web UI in Node Red	10	High	Nivetha.S Saranya.R Sakthi Priya k Rithika S

Sprint-4		Us-1	Display the image in the Node-RED web UI and also display the temperature, humidity, and soil moisture levels. Integrate the buttons in the UI to control the Motors.	10	High	Nivetha.S Saranya.R Sakthi Priya k Rithika 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	29 Oct 2022
Sprint-2	20	6 Days	31 Oct 2022	05 Nov 2022	20	05Nov 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)

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