Project Planning Phase

Date	7 November 2022
Team ID	PNT2022TMID15028
Project Name	Project - SmartFarmer - IoT Enabled Smart Farming Application
Maximum Marks	8 Marks

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	Simulation creation	USN-1	To connect the sensors with Arduino by using python code.	5	High	Vijey Varshan, Koodalarasan, Naresh, Visvabarathi
Sprint-2	Software development	USN-2	To create the device in an IBM Watson IoT platform and workflow for IoT scenarios are done by using Node-Red.	6	High	Naresh, Koodalarasan, Vijey Varshan, Visvabarathi
Sprint-3	MIT App Inventor	USN-3	To develop an application for the Smart farmer project using MIT App Inventor.	3	Medium	Visvabarathi, Naresh, Koodalarasan, Vijey Varshan
Sprint-3	Dashboard	USN-4	Design the modules and to test the app.	4	Medium	Koodalasran, Vijey Varshan, Naresh, Visvabarathi
Sprint-3	Dashboard	USN-5	After logging into the software, it checks the credentials. Once checked the credentials then it goes to the manage modules.	2	Medium	Vijey Varshan, Nraesh, Visvabarathi, Koodalarsan

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
Sprint-3	Dashboard	USN-6	Then it checks the temperature, humidity and moisture and after this step it can exit the app.	2	Medium	Koodalasran, Vijey Varshan, Visvabarathi, Naresh
Sprint-4	Web UI	USN-7	To make the user to interact with software.	4	High	Vijey Varshan, Visvabarathi, Koodalarasan, Naresh

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	5	6 Days	24 Oct 2022	29 Oct 2022	5	29 Oct 2022
Sprint-2	6	6 Days	31 Oct 2022	05 Nov 2022	6	31 Oct 2022
Sprint-3	11	6 Days	07 Nov 2022	12 Nov 2022	11	06 Oct 2022
Sprint-4	4	6 Days	14 Nov 2022	19 Nov 2022	4	07 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 burn down chart is a graphical representation of work left to do versus time. It is often used in agile software development methodologies such as Scrum. However, burn down charts can be applied to any project containing measurable progress over time.