Project Planning Phase

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

Team ID	PNT2022TMID16026
Project Name	Smart Farmer - IoT Enabled Smart Farming Application

Product Backlog, Sprint Schedule, and Estimation

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
Sprint-1	Simulation creation	USN-1	Connect the Arduino and sensors with python code	2	High	Jayanthi Harshini
Sprint-2	Software	USN-2	Creation of device in the IBM Watson IoT platform, checking the workflow for IoT scenarios using Node-Red	1	High	Janani (6056) Jayavarthni
Sprint-3	MIT App Inventor	USN-3	To develop an application for the Smart Farmer - IoT Enabled Smart	2	Medium	Janani (6057)

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
			Farming Application project using MIT App Inventor			Janani (6056)
Sprint-4	Dashboard	USN-4	To design the Modules and test the application	2	Medium	Jayavarthni Jayanthi
Sprint-5	Web UI	USN-5	To make the user interact with the software.	1	High	Harshini Janani (6057)

Project Tracker, Velocity & Burndown Chart:

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	10	5 Days	24 Oct 2022	28 Oct 2022	10	27 Oct 2022
Sprint-2	4	4 Days	29 Oct 2022	01 Nov 2022	4	01 Nov 2022
Sprint-3	12	6 Days	02 Nov 2022	07 Nov 2022	12	06 Nov 2022
Sprint-4	5	5 Days	08 Nov 2022	13 Nov 2022	5	12 Nov 2022
Sprint-5	5	5 Days	14 Nov 2022	19 Nov 2022	5	18 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)

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

AV for sprint 1 = sprint duration / velocity = 10/5 = 2
AV for sprint 2 = sprint duration / velocity = 4/4 = 1
AV for sprint 3 = sprint duration / velocity = 12/6 = 2
AV for sprint 4 = sprint duration / velocity = 5/5 = 1
AV for sprint 5 = sprint duration / velocity = 5/5 = 1

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.