# **Project Planning Phase**

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

Date	31 October 2022
Team ID	PNT2022TMID31498
Project Name	SmartFarmer – IoT Enabled Smart Farming Application
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	Simulation Creation	USN-1	Connect sensors, Arduino and esp8266	2	High	Pavithra Naviyarasu
Sprint-1	Software	USN-2	Develop an application with MIT App inventor (Login page with firebase)	2	High	Pavatharani Sajetha
Sprint-2	Software and Hardware	USN-3	Connect the hardware with IBM Cloud and API Integration	2	Medium	Pavithra Naviyarasu Sajetha
Sprint-2	Software	USN-4	Application development for project	2	High	Pavatharani Sajetha
Sprint-3	Software	USN-5	Establishing Node-Red connection	2	Medium	Pavithra Pavatharani
Sprint-3	Software	USN-6	Connecting application with Node-Red and further application development	2	High	Pavithra Naviyarasu

Sprint-4	Testing	USN-7	Testing developed application and	2	High	Pavithra
			working model of hardware			Naviyarasu
						Pavatharani
						Sajetha

Project Tracker, Velocity & Burndown Chart: (4 Marks) Story

**Points – 8 points** 

Sprint	Total Story Points	Duration	Sprint Start Date	Sprint End Date (Planned)	Story Points Completed (as on Planned End	Sprint Release Date (Actual)
					Date)	
Sprint-1	16	5 Days	25 Oct 2022	29 Oct 2022		31 Oct 2022
Sprint-2	16	8 Days	31 Oct 2022	07 Nov 2022		08 Nov 2022
Sprint-3	16	6 Days	09 Nov 2022	13 Nov 2022		14 Nov 2022
Sprint-4	8	6 Days	15 Nov 2022	17 Nov 2022		17 Nov 2022 – 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)

Average Velocity = 
$$56/4 = 14$$

#### **Burndown Chart:**

A burn down chart is a graphical representation of work left to do versus time. It is often used in agile <u>software development</u> methodologies such as <u>Scrum</u>. However, burn down charts can be applied to any project containing measurable progress over time.

