

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

Date	22 October 2022
Team ID	PNT2022TMID22052
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

<b>Sprint</b>	<b>Functional Requirement (Epic)</b>	<b>User Story Number</b>	<b>User Story / Task</b>	<b>Story Points</b>	<b>Priority</b>	<b>Team Members</b>
Sprint-1	Simulation Creation	USN-1	Connect sensors, Arduino and esp8266	2	High	Spencer, Sooria
Sprint-1	Software	USN-2	Develop an application with MIT App inventor (Login page with firebase)	2	High	Prem Kumar, Vhoom Prakash
Sprint-2	Software and Hardware	USN-3	Connect the hardware with IBM Cloud and API Integration	2	Medium	Spencer, Sooria
Sprint-2	Software	USN-4	Application development for project	2	High	Prem Kumar, Spencer, Vhoom Prakash
Sprint-3	Software	USN-5	Establishing Node-Red connection	2	Medium	Prem Kumar, Sooria
Sprint-3	Software	USN-6	Connecting application with Node-Red and further application development	2	High	Vhoom Prakash, Spencer, Sooria
Sprint-4	Testing	USN-7	Testing developed application and working model of hardware	2	High	Prem Kumar, Spencer, Vhoom Prakash, Sooria

### 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 Date)	Sprint Release Date (Actual)
Sprint-1	16	5 Days	25 Oct 2022	29 Oct 2022		30 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)

Total Sprint Points = 56

Total Sprint = 4

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 software development methodologies such as Scrum. However, burn down charts can be applied to any project containing measurable progress over time.

