

## Project Planning Phase

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

Date	18 October 2022
Team ID	PNT2022TMID30750
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	USN-1	Create the Simulation by connecting the sensors by using the Arduino and connect with the code.	2	High	Bhavana V Dharshini Priya PR Gopika S
Sprint-2	Software	USN-2	Create the device on IBM cloud platform and the node red platform to set the iot device workflow.	2	High	Durga N Kanimozhi P Gopika S
Sprint-3	Mobile App/Web Application	USN-3	Develop the Application for Smartfarmer Iot enabled smart farming Application project using MIT App Inventor.	2	High	Dharshini Priya PR Bhavana V Kanimozhi P
Sprint-4	Dashboard	USN-4	Design all the modules and create all the features of the App and test the application.	2	High	Kanimozhi P Dharshini Priya PR Durga N
Sprint-4	Login/User Interface	USN-5	Using the login make connections with the end users and make them interact with the software	2	High	Gopika S Bhavana V Durga N

**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		05 Nov 2022
Sprint-3	20	6 Days	07 Nov 2022	12 Nov 2022		12 Nov 2022
Sprint-4	20	6 Days	14 Nov 2022	19 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)

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

### **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.

<https://www.visual-paradigm.com/scrum/scrum-burndown-chart/>

<https://www.atlassian.com/agile/tutorials/burndown-charts>

### **Reference:**

<https://www.atlassian.com/agile/project-management>

<https://www.atlassian.com/agile/tutorials/how-to-do-scrum-with-jira-software>

<https://www.atlassian.com/agile/tutorials/epics>

<https://www.atlassian.com/agile/tutorials/sprints>

<https://www.atlassian.com/agile/project-management/estimation>

<https://www.atlassian.com/agile/tutorials/burndown-charts>