

## Project Planning Phase

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

Date	21 October 2022
Team ID	PNT2022TMID07461
Project Name	Smart Farmer-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	Connect Sensors and Arduino with Python Code	2	High	Keerthana, Peravali Bala Venkat, Mohamed Arshath ,Dharsini
Sprint-2	Software	USN-2	Creating device in the IBM Watson IoT platform,workflow for IoT scenarios using Node-Red	2	High	Keerthana, Peravali Bala Venkat, Mohamed Arshath ,Dharsini
Sprint-3	MIT App Inventor	USN-3	Develop an application for the Smart Farmer project using MIT App Inventor	2	High	Keerthana, Peravali Bala Venkat, Mohamed Arshath ,Dharsini
Sprint-3	Dashboard	USN-3	Design the Modules and test the App	2	High	Keerthana, Peravali Bala Venkat, Mohamed Arshath ,Dharsini
Sprint-4	Web UI	USN-4	To make the user to interact with software	2	High	Keerthana, Peravali Bala Venkat, Mohamed Arshath ,Dharsini

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

<b>Sprint</b>	<b>Total Story Points</b>	<b>Duration</b>	<b>Sprint Start Date</b>	<b>Sprint End Date (Planned)</b>	<b>Story Points Completed (as on Planned End Date)</b>	<b>Sprint Release Date (Actual)</b>
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 Oct 2022
Sprint-3	20	6 Days	07 Nov 2022	12 Nov 2022		12 Oct 2022
Sprint-4	20	6 Days	14 Nov 2022	19 Nov 2022		15 Oct 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>