

## Project Planning Phase

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

Date	23 October 2022
Team ID	PNT2022TMID42737
Project Name	Project – IoT-Enabled Smart Farmer Application
Maximum Marks	8 Marks

#### Product Backlog, Sprint Schedule, and Estimation (4 Marks)

IoT-Enabled Smart Farming Application.

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
Sprint-1	Registration	USN-1	As a user, I can register for the application by entering my email, and password, and confirming my password.	2	High	4
Sprint-1		USN-2	As a user, I will receive confirmation email once I have registered for the application	1	High	4
Sprint-4		USN-3	As a user, I can click on the OTP registration	2	Medium	4
Sprint-2		USN-4	As a user, I can register for the application through Gmail	2	Medium	4
Sprint-1	Login	USN-5	As a user, I can log into the application by entering email & password	3	High	4
Sprint-1	Dashboard	USN-6	As a user, I can read sensor readings	3	High	4
Sprint-1		USN-7	As a user, I can manually turn the ON/OFF water pump, and also can be automated.	2	High	4
Sprint-2		USN-8	As a user, I can Contact support for any queries.	1	High	4
Sprint-3		USN-9	As a user, I can select crops to be planted soil moisture readings are adjusted automatically.	2	High	4
Sprint-2		USN-10	As a user, Checking weather information which includes water safety information.	3	Medium	4
Sprint-4	Database	USN-11	As a user, I can view and access database information.	2	High	4

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
Sprint-1	Hardware	USN-12	Connect Sensors and wi-fi module with python code	2	High	4
Sprint-2	Software	USN-13	IBM Watson IoT platform, Workflows for IoT scenarios using Node-red	2	High	4
Sprint-3	Android Application	USN-13	MIT application, To develop a mobile application.	2	High	4

#### 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		29 Oct 2022
Sprint-2	10	6 Days	31 Oct 2022	05 Nov 2022		05 Nov 2022
Sprint-3	10	6 Days	07 Nov 2022	12 Nov 2022		12 Nov 2022
Sprint-4	20	6 Days	14 Nov 2022	19 Nov 2022		19 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)

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

#### **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>