# **Project Planning Phase**

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

| Team ID       | PNT2022TMID46030                        |
|---------------|---|
| Project Name  | Project – Smart Farmer- IoT based Smart |
|               | Farming Application                     |
| Maximum Marks | 8 Marks                                 |

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

| Sprint   | Functional<br>Requirement (Epic) | User Story<br>Number | User Story / Task   | Story Points | Priority | Team<br>Members                                   |
|----------|----------------------------------|----------------------|---|--------------|----------|---|
| Sprint-1 | Simulation creation              | USN-1                | Connect Sensors and Arduino with python code  | 2            | High     | Harini<br>Kaviya<br>Kaviyapriya<br>Kiran rakshana |
| Sprint-2 | Software                         | USN-2                | Creating device in the IBM Watson IoT platform, workflow for IoT scenarios using Node-Red | 2            | High     | Harini<br>Kaviya<br>Kaviyapriya<br>Kiran rakshana |
| Sprint-3 | MIT App Inventor                 | USN-3                | Develop an application for the Smart farmer project using MIT App Inventor                | 2            | High     | Harini<br>Kaviya<br>Kaviyapriya<br>Kiran rakshana |
| Sprint-3 | Dashboard                        | USN-3                | Design the Modules and test the app   | 2            | High     | Harini<br>Kaviya<br>Kaviyapriya<br>Kiranrakshana  |
| Sprint-4 | Web UI                           | USN-4                | To make the user to interact with software.   | 2            | High     | Harini<br>Kaviya<br>Kaviyapriya<br>Kiran rakshana |

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

| Sprint   | Total Story<br>Points | Duration | Sprint Start Date | Sprint End Date<br>(Planned) | Story Points Completed (as on Planned End Date) | Sprint Release Date<br>(Actual) |
|----------|-----------------------|----------|-------------------|------------------------------|---|---------------------------------|
| Sprint-1 | 20                    | 6 Days   | 4 nov 2022        | 10 NOV 2022                  | 20  | 10 Nov 2022                     |
| Sprint-2 | 20                    | 6 Days   | 6 Oct 2022        | 12 Nov2022                   |   | 12 Nov 2022                     |
| Sprint-3 | 20                    | 6 Days   | 9 Nov 2022        | 15 Nov 2022                  |   | 15 Nov 2022                     |
| Sprint-4 | 20                    | 6 Days   | 12 Nov 2022       | 18 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)

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

#### **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/aqile/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