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

| Date | 28 October 2022 |
| --- | --- |
| Team ID | PNT2022TMID46860 |
| Project Name | Project – Smart Farmer- IoT based 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 | S.karthickraj, A.arunnathan |
| Sprint-2 | Software | USN-2 | Creating device in the IBM Watson IoT platform, workflow for IoT scenarios using Node-Red | 2 | High | W.deepakevlin S.karthickraj |
| Sprint-3 | MIT App Inventor | USN-3 | Develop an application for the Smart farmer project using MIT App Inventor | 2 | High | G.sivanantham T.dharun,A.arunnathan |
| Sprint-3 | Dashboard | USN-3 | Design the Modules and test the app | 2 | High | G.sivanatham ,W.deepakevlin |
| Sprint-4 | Web UI | USN-4 | To make the user to interact with software. | 2 | High | S.karthickraj,T.dharun |

**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 | 5Days | 29 Oct 2022 | 02 Oct 2022 | 20 | 02Oct 2022 |
| Sprint-2 | 20 | 5Days | 02 Oct 2022 | 06 Nov 2022 | | 06 Oct 2022 |
| Sprint-3 | 20 | 5Days | 07 Nov 2022 | 11Nov 2022 | | 12 Oct 2022 |
| Sprint-4 | 20 | 5 Days | 14 Nov 2022 | 19 Nov 2022 | | 18Oct 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 suchas 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.visual-paradigm.com/scrum/scrum-burndown-chart/)

[https://www.atlassian.com/agile/tutorials/burndown-charts](https://www.atlassian.com/agile/tutorials/burndown-charts)

**Reference:**

[https://www.atlassian.com/agile/project-management](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/how-to-do-scrum-with-jira-software)

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[https://www.atlassian.com/agile/project-management/estimation](https://www.atlassian.com/agile/project-management/estimation)

[https://www.atlassian.com/agile/tutorials/burndown-charts](https://www.atlassian.com/agile/tutorials/burndown-charts)