

Project Planning Phase

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

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|---------------|---|
| Date | 21 October 2022 |
| Team ID | PNT2022TMID05114 |
| 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 | Vimalkanth Yuvan |
| Sprint-2 | Software | USN-2 | Creating device in the IBM Watson IoT Platform, workflow for IoT scenarios using Node-Red | 2 | High | Vimalkanth Sudharsan |
| Sprint-3 | MIT App Inventor | USN-3 | Develop an application for the Smart farmer project using MIT App Inventor | 2 | High | Sudharsan Somnath |
| Sprint-3 | Dashboard | USN-3 | Design the Modules and test the app | 2 | High | Vimalkanth Yuvan Sudharsan |
| Sprint-4 | Web UI | USN-4 | To make the user interact with software. | 2 | High | Yuvan Sudharsan |

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 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 burndown 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>