

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

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| Date | 03 November 2022 |
| Team ID | PNT2022TMID35659 |
| Project Name | Project – Smart Farmer- IoT based SmartFarming 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 | Danush Gupta V K, Sham Ganesh M, Premal Raj Vellaisamy, Cyril Tony A |
| Sprint-2 | Software | USN-2 | Creating device in the IBM Watson IoT platform, workflow for IoT scenarios using Node-Red | 2 | High | Danush Gupta V K, Sham Ganesh M, Premal Raj Vellaisamy, Cyril |

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|----------|------------------|-------|---|---|------|--|
| | | | | | | Tony A |
| Sprint-3 | MIT App Inventor | USN-3 | Develop an application for the Smart farmerproject using MIT App Inventor | 2 | High | Danush Gupta V K, Sham Ganesh M, Premal Raj Vellaisamy, Cyril Tony A |

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| Sprint-3 | Dashboard | USN-3 | Design the Modules and test the app | 2 | High | Danush Gupta V K, Sham Ganesh M, Premal Raj Vellaismy, Cyril Tony A |
| Sprint-4 | Web UI | USN-4 | To make the user to interact with software. | 2 | High | Danush Gupta V K, Sham Ganesh M, Premal Raj Vellaismy, Cyril Tony A |

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 | 7 Days | 30 Oct 2022 | 06 Nov 2022 | 20 | 29 Oct 2022 |
| Sprint-2 | 20 | 9 Days | 31 Oct 2022 | 09 Nov 2022 | 20 | 05 Oct 2022 |

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|----------|----|--------|-------------|-------------|----|-------------|
| Sprint-3 | 20 | 6 Days | 06 Nov 2022 | 13 Nov 2022 | 20 | 12 Oct 2022 |
| Sprint-4 | 20 | 6 Days | 11 Nov 2022 | 17 Nov 2022 | 20 | 15 Oct 2022 |

Velocity:

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

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)