# Project Planning Phase

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

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|---|---|
| Date | 18 October 2022 |
| Team ID | PNT2022TMID53630 |
| Project Name | Smart Farmer - IoT Enabled Smart Farming Application |
| Maximum Marks | 8 Marks |

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

Use the below template to create product backlog and sprint schedule

| 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, password, and confirming my password. | 2 | High | **Revilla Jyosthna, Pannave K, Iyswarya S, Pritha R** |
| **Sprint-1** | **User confirmation** | USN-2 | As a user, I will receive confirmation email once I have registered for the application | 1 | High | |
| **Sprint-1** | **Login** | USN-3 | As a user, I can log into the application by entering email & password | 1 | High | |
| **Sprint-1** | **Simulation creation** | USN-4 | Connect hardware devices with esp8266 | 4 | High | |
| **Sprint-2** | **Dashboard** | USN-5 | Real time sensor values are sent to IBM Watson IoT platform and sent to Node-red | 4 | High | |
| **Sprint-3** | **Software** | USN-6 | To develop a mobile application using MIT app | 4 | High | |
| **Sprint-3** | **Software** | USN-7 | Connecting application with Node-Red and further application development | 3 | High | |
| **Sprint-4** | **Testing** | USN-8 | Testing developed application and working model | 2 | High | |

**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 | 20 | 08 Nov 2022 |
| Sprint-3 | 20 | 6 Days | 07 Nov 2022 | 12 Nov 2022 | 20 | 14 Nov 2022 |
| Sprint-4 | 20 | 6 Days | 14 Nov 2022 | 19 Nov 2022 | 20 | 18-19 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 I iteration unit (story points per day)

Total Sprint Points=21

Total Sprint = 7

Average Velocity = 21/7 = 3

**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.