

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

|               |  |
|---------------|--|
| Date          | 10 November 2022                       |
| Team ID       | PNT2022TMID04755                       |
| Project Name  | SmartFarmer- IOT Enabled smart farming |
| Maximum Marks | 8 Marks                                |

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

Use the below template to create product backlog and sprint schedule

| <b>Sprint</b> | <b>Functional requirement</b> | <b>User Story Number</b> | <b>User Story / Task</b>  | <b>Story Points</b> | <b>Priority</b> | <b>Team Members</b> |
|---------------|-------------------------------|--------------------------|---|---------------------|-----------------|---------------------|
| Sprint-1      | Registration                  | USN-1                    | As a user, I can register for the application by entering my Gmail, email or through phone number then you can received the OTP or Verification Code. | 10                  | High            | Subikshna. V        |
| Sprint-1      | Confimation                   | USN-2                    | As a user, I will receive confirmation Gmail once I have registered for the application.  | 4                   | Low             | Shandheep E         |
| Sprint-1      | Login                         | USN-3                    | As a user, I can log into the application by entering email & password  | 6                   | Medium          | Yazhini B           |
| Sprint-2      | Simulation                    | USN-4                    | Connect sensors and ESP 32  | 4                   | Low             | Tharani dharan D    |
| Sprint -2     | Software                      | USN-5                    | Develop a python code to publish random sensor data   | 6                   | Medium          | Subikshna V         |
| Sprint-2      | Simulation                    | USN-6                    | Connect the data with IBM cloud   | 10                  | High            | Shandheep E         |
| Sprint-3      | Simulation                    | USN-7                    | Establishing Node-RED connection  | 8                   | Medium          | Yazhini B           |
| Sprint-3      | App development               | USN-8                    | Application development using MIT app inventor  | 12                  | High            | Tharani dharan D    |

|          |            |        |  |    |        |                  |
|----------|------------|--------|--|----|--------|------------------|
| Sprint-4 | Simulation | USN-9  | Connecting the developed application with Node-RED | 6  | Medium | Tharani dharan D |
| Sprint-4 | Testing    | USN-10 | Testing the application                            | 12 | High   | Yazhini B        |

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

| Sprint   | Total Story Point | 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  | 10 Nov 2022                  |
| Sprint-2 | 20                | 6 Days   | 31 Oct 2022       | 05 Nov 2022               | 20  | 12 Nov 2022                  |
| Sprint-3 | 20                | 6 Days   | 07 Nov 2022       | 12 Nov 2022               | 20  | 12 Nov 2022                  |
| Sprint-4 | 20                | 6 Days   | 14 Nov 2022       | 19 Nov 2022               | 20  | 15 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)

$$AV = \text{Sprint duration} / \text{velocity} = 20 / 10 = 2$$

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