

## Project Planning Phase

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

|               |   |
|---------------|---|
| Date          | 11 NOVEMBER 2022  |
| Team ID       | PNT2022TMID01185  |
| Project Name  | SMART FARMER IOT ENABLED SMART FARMING APPLICATION SYSTEM |
| 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 | Registration                  | USN-1             | As a user, I can register for the application by entering my email, password, and confirming my password. | 2            | High     | THANOJ KR       |
| Sprint-1 |                               | USN-2             | As a user, I will receive confirmation email once I have registered for the application                   | 1            | High     | THANOJ KR       |
| Sprint-1 |                               | USN-3             | As a user, I can register for the application through Facebook  | 2            | Low      | SHAHUL HAMEED J |
| Sprint-1 |                               | USN-4             | As a user, I can register for the application through Gmail   | 2            | Medium   | VIVEK ANAND S   |
| Sprint-1 | Login                         | USN-5             | As a user, I can log into the application by entering email & password                                    | 1            | High     | SHAHUL HAMEED J |

| Sprint   | Functional Requirement (Epic) | User Story Number | User Story / Task  | Story Points | Priority | Team Members      |
|----------|-------------------------------|-------------------|--|--------------|----------|-------------------|
| Sprint-1 | Dashboard                     | USN-6             | As a user, I can log into the application by entering email & password and access all the resources and services available                                 | 2            | High     | SHAHUL HAMEED J   |
| Sprint-2 | Login                         | USN-1             | As a weather data controller, I log into my profile and start monitoring the weather updates   | 3            | High     | THANOJ KR         |
| Sprint-2 | Dashboard                     | USN-2             | I receive all the information about weather from web from weather API. Whenever there is change in weather, corresponding updates are made on sign boards. | 2            | Medium   | VISWA BHARATH G V |
| Sprint-3 | Login                         | USN-1             | As a image controller, I keep note of all the images received from various areas and detect traffic in that particular area.                               | 3            | High     | THANOJ KR         |
| Sprint-3 | Dashboard                     | USN-2             | With the traffic, updates I change the status of sign board as "take diversion".   | 2            | Medium   | VISWA BHARATH G V |
| Sprint-4 | Login                         | USN-1             | As a zonal officer, I ensure that boards near school display "slow down" and near hospitals display "no horn".   | 3            | High     | VISWA BHARATH G V |
| Sprint-4 | Login                         | USN-1             | As an administrator, I ensure that all departments work coordinated and ensure the accuracy and efficiency.  | 2            | Medium   | VIVEK ANAND S     |

#### 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               |   |                              |

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

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