

## Project Planning Phase

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

|               |  |
|---------------|--|
| Date          | 28 October 2022                              |
| Team ID       | PNT2022TMID24342                             |
| Project Name  | Estimate The Crop Yield Using Data Analytics |
| Maximum Marks | 8 Marks                                      |

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

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 by entering my Agri - id card and request..   | 2            | High     | Dharani<br>Shree vidhyaa<br>Kaviya<br>Shanmugapriya |
|          |                               | USN-3             | As a user, I can register for the application through Gmail   | 2            | Medium   | Kaviya<br>Dharani                                   |
|          | Login                         | USN-4             | As a user, I can Call and request or Approach for dataset   | 4            | High     | Shreevidhyaa<br>Shanmugapriya                       |
|          | Working with the Dataset      | USN-5             | To work on the given dataset, Understand the Dataset.   | 2            | High     | Shanmugapriya<br>Shreevidhyaa<br>Dharani<br>Kaviya  |
|          |                               | USN-6             | Load the dataset to Cloud platform then Build the required Visualizations.  | 10           | High     | Kaviya<br>Shreevidhyaa                              |
| Sprint-2 | Data Visualization Chart      | USN-7             | Using the Crop production in Indian dataset, create various graphs and charts to highlight the insights and visualizations.<br>*Build a Visualization to showcase Average Crop Production by Seasons. | 4            | Medium   | Kaviya<br>Dharani                                   |
|          |                               |                   | *Showcase the Yearly usage of Area in Crop Production.  | 4            | Medium   | Shreevidhyaa<br>Shanmugapriya                       |

| Sprint   | Functional Requirement (Epic) | User Story Number | User Story / Task  | Story Points | Priority | Team Members               |
|----------|-------------------------------|-------------------|--|--------------|----------|----------------------------|
|          |                               |                   | Build a visualization to show case top 10 States in Crop Yield Production by Area.                       | 4            | Medium   | Dharani Shreevidhyaa       |
|          |                               |                   | Build the required Visualization to showcase the Crop Production by State.                               | 4            | Medium   | Shanmugapriya Dharani      |
|          |                               |                   | Build Visual analytics to represent the Sates with Seasonal Crop Production using a Text representation. | 4            | Medium   | Kaviya Shreevidhyaa        |
| Sprint-3 | Creating The dashboard        | USN-8             | Create the Dashboard by using the created visualizations.  | 20           | High     | Kaviya Dharani             |
| Sprint-4 | Export The Analytics          | USN-9             | Export the created Dashboard   | 20           | High     | Shanmugapriya Shreevidhyaa |

#### Project Tracker, Velocity & Burn down 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  | 05 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  | 19 Nov 2022                  |

#### Velocity:

We have a 24-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)

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$$AV = \text{Sprint Duration} / \text{Velocity} = 24 / 20 = 1.2$$

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**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 such as Scrum. However, burn down charts can be applied to any project containing measurable progress over time.

