

## Project Planning Phase

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

|               |   |
|---------------|---|
| Date          | 28 October 2022   |
| Team ID       | PNT2022TMID00409  |
| Project Name  | Project – EXPLORATORY ANALYSIS OF RAINFALL DATA IN INDIA FOR AGRICULTURE. |
| 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 | Rainfall Prediction ML Model (Dataset) | USN-1             | Weather Dataset Collection, Data preprocessing, Data Visualization.                 | 5            | High     | Amareshwaran P , Aravint S |
| Sprint-1 |  | USN-2             | Train Model using Different machine learning Algorithms                             | 5            | High     | Dinesh Kumar S , Harish V  |
| Sprint-1 |  | USN-3             | Test the model and give best  | 10           | High     | Amareshwaran P , Aravint S |
| Sprint-2 | Registration                           | USN-4             | As a user, they can register for the application through Gmail. Password is set up. | 5            | Medium   | Dinesh Kumar S , Harish V  |
| Sprint-2 | Login                                  | USN-5             | As a user, they can log into the application by entering email & password           | 5            | Medium   | Amareshwaran P , Aravint S |
| Sprint-2 |  | USN-6             | Credentials should be used for multiple systems and verified                        | 4            | Medium   | Dinesh Kumar S , Harish V  |
| Sprint-2 | Dashboard                              | USN-7             | Attractive dashboard forecasting live weather                                       | 6            | Low      | Amareshwaran P , Aravint S |
| Sprint-3 | Rainfall Prediction                    | USN-8             | User enter the location, temperature, humidity                                      | 10           | High     | Dinesh Kumar S , Harish V  |

|               |                                      |                          |   |                     |                 |                            |
|---------------|--------------------------------------|--------------------------|---|---------------------|-----------------|----------------------------|
| Sprint-3      |                                      | USN-9                    | Predict the rainfall and display the result                     | 10                  | High            | Amareshwaran P , Aravint S |
| <b>Sprint</b> | <b>Functional Requirement (Epic)</b> | <b>User Story Number</b> | <b>User Story / Task</b>  | <b>Story Points</b> | <b>Priority</b> | <b>Team Members</b>        |
| Sprint-4      | Testing                              | USN-10                   | Test the application  | 10                  | High            | Dinesh Kumar S , Harish V  |
| Sprint-4      | Deploy Model                         | USN-11                   | Deploy the model in IBM cloud to make user friendly application | 10                  | High            | Amareshwaran P , Aravint 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               | 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:

Imagine we have a 5-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)

$$AV = \text{Sprint duration} / \text{Velocity} = 20/5 = 4$$

$$\text{Total Average Velocity} = 4$$

### 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.

Tool : Jira Software



