# **Project Planning Phase**

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

| Date          | 29 October 2022                            |
|---------------|--|
| Team ID       | PNT2022TMID08017                           |
| Project Name  | Developing A Flight Delay Prediction Model |
|               | Using Machine Learning                     |
| Maximum Marks | 8 Marks                                    |

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

| Sprint   | Functional<br>Requirement<br>(Epic) | User Story<br>Number | User Story / Task   | Story Points | Priority | Team<br>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     | Sathish,<br>Sheik<br>Hassain<br>Sadiq |
| Sprint-1 |                                     | USN-2                | As a user, I will receive confirmation email once I have registered for the application                   | 1            | High     | Sathish,<br>Sheik<br>Hassain<br>Sadiq |
| Sprint-2 |                                     | USN-3                | As a user, I can register for the application through Gmail   | 2            | Medium   | Varun,<br>Udaya Balaji                |
| Sprint-1 | Login                               | USN-4                | As a user, I can log into the application by entering email & password                                    | 1            | High     | Sathish,<br>Sheik<br>Hassain<br>Sadiq |
| Sprint-2 | Dashboard                           | USN-5                | As a user,i can fill the flight details for which i want to get the prediction                            | 3            | High     | Varun,<br>Udaya Balaji                |
| Sprint-2 | Prediction                          | USN-6                | As a user i click on start to predict the delay   | 3            | High     | Varun,<br>Udaya Balaji                |

| Sprint   | Functional<br>Requirement<br>(Epic) | User Story<br>Number | User Story / Task  | Story Points | Priority | Team<br>Members                       |
|----------|-------------------------------------|----------------------|--|--------------|----------|---------------------------------------|
| Sprint-3 |                                     | USN-7                | As a user i give details and wait for the prediction               | 3            | High     | Sathish,<br>Sheik<br>Hassain<br>Sadiq |
| Sprint-3 | Notification                        | USN-8                | As a user i get notified about the delay                           | 3            | High     | Sathish,<br>Sheik<br>Hassain<br>Sadiq |
| Sprint-4 | Access                              | USN-9                | As a administrator, I can access and change the database and model | 2            | Medium   | Varun,<br>Udaya Balaji                |
| Sprint-4 | Notification                        | USN-10               | As a user i get a mail about the delay                             | 2            | Medium   | Varun,<br>Udaya Balaji                |

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

| Sprint   | Total Story<br>Points | Duration | Sprint Start Date | Sprint End Date<br>(Planned) | Story Points Completed (as on Planned End Date) | Sprint Release Date<br>(Actual) |
|----------|-----------------------|----------|-------------------|------------------------------|---|---------------------------------|
| Sprint-1 | 5                     | 6 Days   | 24 Oct 2022       | 29 Oct 2022                  | 5   | 29 Oct 2022                     |
| Sprint-2 | 6                     | 6 Days   | 31 Oct 2022       | 05 Nov 2022                  | 6   | 05 Nov 2022                     |
| Sprint-3 | 5                     | 6 Days   | 07 Nov 2022       | 12 Nov 2022                  | 5   | 12 Nov 2022                     |
| Sprint-4 | 4                     | 6 Days   | 14 Nov 2022       | 19 Nov 2022                  | 4   | 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 = 
$$\frac{\text{Sprint duration}}{\text{Velocity}} = \frac{24}{4} = 6$$

#### **Burndown Chart:**

A burndown 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.

