# Project Planning Phase

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

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|---|---|
| Date | 18 October 2022 |
| Team ID | PNT2022TMID30209 |
| 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 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. | 3 | High | Sarada S P |
| Sprint-1 | | USN-2 | As a user, I will receive confirmation email once I have registered for the application | 1 | High | Sivatharani V |
| Sprint-1 | | USN-4 | As a user, I can register for the application through Gmail | 2 | Medium | Sparsha S |
| Sprint-1 | Login | USN-5 | As a user, I can log into the application by entering email & password | 1 | High | Revathi R |
| Sprint-1 | Profile Page | USN-6 | As a user, I can view my profile | 1 | High | Sivatharani V |
| Sprint-2 | | USN-3 | As a user, I can register for the application through Facebook, Instagram, other social media | 2 | Low | Sparsha S |
| Sprint-2 | Search | USN-7 | As a user, I can search for flights for different locations | 2 | High | Revathi R |
| Sprint-2 | View | USN-8 | As a user, I can view the details of flights | 1 | High | Sarada S P |
| Sprint-2 | Analyse | USN-12 | As an admin, I will analyse the given dataset | 5 | High | Sivatharani V |
| Sprint-2 | Predict | USN-13 | As an admin, I will predict the delays | 8 | High | Sparsha S |

| Sprint | Functional Requirement (Epic) | User Story Number | User Story / Task | Story Points | Priority | Team Members |
|---|---|---|---|---|---|---|
| Sprint-3 | Visualisation | | Visualize the predicted data | 5 | High | Sarada S P |
| Sprint-3, 4 | Receive notifications | USN-9 | As a user, I will receive notifications about the flights | 3 | Low | Sparsha S |
| Sprint-3, 4 | | | Backend for notifications | 5 | Low | Revathi R |
| Sprint- 3, 4 | Track | USN-10 | As a user, I can track the location of my flight | 3 | Medium | Sivatharani V |
| Spint-3, 4 | GPS | USN-11 | As an admin, I will need the location of flights | 3 | High | Revathi R |

## 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 | 8 | 4 Days | 22 Oct 2022 | 25 Oct 2022 | | |
| Sprint-2 | 15 | 9 Days | 26 Oct 2022 | 03 Nov 2022 | | |
| Sprint-3 | 19 | 9 Days | 02 Nov 2022 | 10 Nov 2022 | | |
| Sprint-4 | 14 | 9 Days | 04 Nov 2022 | 12 Nov 2022 | | |

**Velocity:**

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

Average Velocity for Sprint 1:

AV = 8/4 = 2

Average Velocity for Sprint 2:

AV = 15/9 = 1.6

Average Velocity for Sprint 3:

AV = 19/9 =2.1

Average Velocity for Sprint 4:

AV = 14/9 = 1.5