Project Planning Phase

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

| Date | 22 October 2022 |
|---------------|--|
| Team ID | PNT2022TMID12801 |
| 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 | Data Engineering | USN-1 | Data Collection, Data Preprocessing and Feature Extraction | 4 | High | Sujith Kumar M A | |
| Sprint-1 | Machine Learning Prediction Model | USN-2 | Building a Machine Model for Flight Delay Prediction, Testing with different metrics. | 4 | High | Anusha Devi R | |
| Sprint-2 | Flask Web Page | USN-3 | Building Home Page and Prediction Page. | 4 | Low | Nandish Chandrasekar | |
| Sprint-1 | Integration. | USN-4 | Integrating the flask pages with the ML Model and IBM Cloud Deployment | 4 | Medium | Tamilselvan M | |

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 | 4 | 6 Days | 24 Oct 2022 | 29 Oct 2022 | 4 | 29 Oct 2022 |
| Sprint-2 | 4 | 6 Days | 31 Oct 2022 | 05 Nov 2022 | 4 | 05 Nov 2022 |
| Sprint-3 | 4 | 6 Days | 07 Nov 2022 | 12 Nov 2022 | 4 | 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)

$$AV = \frac{sprint\ duration}{velocity} = \frac{24}{16} = 1.5$$

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.

