

## 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	Login, Registration	USN-3	Building Login Page, Register Page, Prediction Page.	4	Low	Nandish Chandrasekar
Sprint-1	Integration.	USN-4	Integrating the flask pages with the ML Model on IBM Cloud.	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)

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

## 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.

### Actual Work and Estimated Work

