

**Project Planning Phase**  
**Project Planning (Product Backlog, Sprint Planning, Stories, Story points)**

Date	14 November 2022
Team ID	PNT2022TMID46686
Project Name	Developing a Flight Delay Prediction Using Machine Learning
Maximum Marks	8 Marks

## Product Backlog, Sprint Schedule, and Estimation

Sprint	Functional Requirement(Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
Sprint-1	Data Collection	USN-1	As a user, I can't interact anything. Waiting is user's task. User can listen the relationship exist between the various attributes of data by presentation of developer	2	high	Devipriya
Sprint-1	Data Pre-processing And Model Building	USN-2	As a user, I can predict flight delay by various developed ML models by console	1	high	Suguna Devipriya Akshayalakshmi Tharanika
Sprint-3	Application Building	USN-3	As a user, I can register for the application by entering my username, password, and confirming my password.	2	high	Devipriya Tharanika
Sprint-2	Train the Model on IBM	USN-4	As a user, I can use the model by requesting the deployed model on Cloud	1	Medium	Suguna Devipriya
Sprint-3	Ideation Phase	USN-5	As a user, I can gather the relevant information on project use case and capture the project gains and pains and analyse three ideas on the feasibility and importance	2	high	Devipriya Suguna Akshayalakshmi Tharanika
Sprint-3	Project Design phase - I	USN-6	As a user, I can analyse and prepare the solution document	1	Medium	Devipriya Suguna Akshayalakshmi Tharanika
Sprint-3	Project Design phase - II	USN-7	As a user, I can prepare the user interaction and experience of the applications	2	High	Devipriya Suguna Akshayalakshmi Tharanika

Sprint-3	Project Planning Phase	USN-7	As a user, we can prepare activity list of project	2	High	Devipriya Suguna Akshayalakshmi Tharanika
sprint-4	Project Development Phase	USN-8	As a user, we can prepare developed coding and testing it	2	Medium	Devipriya S Suguna S Akshayalakshmi Tharanika K

## Project Tracker, Velocity & Burndown Chart:

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	31 Oct 2022
Sprint-2	20	6 Days	31 Oct 2022	05 Nov 2022	20	07 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 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)

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

## 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.

