

## Project Planning Phase

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

Date	16 November 2022
Team ID	PNT2022TMID00517
Project Name	Flight Delay Prediction Using Machine Learning
Maximum Marks	8 Marks

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

Use the below template to create product backlog and sprint schedule

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
Sprint-1	Data Collection and Preprocessing	USN-1	As a user, I am unable to engage with anything.	2	High	Priyadharshini N Manjari B Madhumathi B Mrinalini Sendhil Lavanya P
Sprint-1	Build HTML Pages	USN-2	As a user, I can view the web pages to enter flight details.	1	Medium	Priyadharshini N Manjari B Madhumathi B Mrinalini Sendhil Lavanya P
Sprint-2	Build Python Pages	USN-3	As a user, I am unable to engage with anything.	2	High	Priyadharshini N Manjari B Madhumathi B Mrinalini Sendhil

						Lavanya P
Sprint-2	Execute And Test Your Model	USN-4	As a user, I can predict flight delays using the best created ML models.	2	High	Priyadharshini N Manjari B Madhumathi B Mrinalini Sendhil Lavanya P
Sprint-3	Train The ML Model	USN-6	As a user, I can predict flight delays using the best created ML models.	2	High	Priyadharshini N Manjari B Madhumathi B Mrinalini Sendhil Lavanya P
Sprint-3	Integrate Flask with Model	USN-5	As a user, I can predict flight delays using the user interface.	2	High	Priyadharshini N Manjari B Madhumathi B Mrinalini Sendhil Lavanya P
Sprint-4	Model Deployment on IBM Cloud using IBM Watson	USN-8	As a user, I can use the model by requesting the deployed model on Cloud.	2	High	Priyadharshini N Manjari B Madhumathi B Mrinalini Sendhil Lavanya P

**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	20	6 Days	10 Oct 2022	16 Nov 2022	20	16 Nov 2022
Sprint-2	20	5 Days	09 Oct 2022	14 Nov 2022	20	16 Nov 2022
Sprint-3	20	7 Days	09 Nov 2022	16 Nov 2022	20	16 Nov 2022
Sprint-4	20	5 Days	11 Nov 2022	16 Nov 2022	20	16 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 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.

**Burndown Chart**

