

## Project Planning Phase

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

Date	18 November 2022
Team ID	PNT2022TMID42609
Project Name	Developing A Flight Delay Prediction Model 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	Shafna Azmi M Rochanaa E Varun Prasath S Arun Prasath M
Sprint-1	Build HTML Pages	USN-2	As a user, I can view the web pages to enter flight details.	1	Medium	Shafna Azmi M Rochanaa E Varun Prasath S Arun Prasath M
Sprint-2	Build Python Pages	USN-3	As a user, I am unable to engage with anything	2	High	Shafna Azmi M Rochanaa E Varun Prasath S Arun Prasath M
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	Shafna Azmi M Rochanaa E Varun Prasath S Arun Prasath M

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
Sprint-3	Integrate Flask with Model	USN-5	As a user, I can predict flight delays using the user interface.	2	High	Shafna Azmi M Rochanaa E Varun Prasath S Arun Prasath M
Sprint-3	Train The ML Model	Usn-6	As a user, I can predict flight delays using the best created ML models	2	High	Shafna Azmi M Rochanaa E Varun Prasath S Arun Prasath M
Sprint-4	Model Deployment on IBM Cloud using IBM Watson	USN-7	As a user, I can use the model by requesting the deployed model on Cloud.	2	High	Shafna Azmi M Rochanaa E Varun Prasath S Arun Prasath 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	20	6 Days	24 Oct 2022	29 Oct 2022	20	29 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

