Project Planning Phase

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

Date	29 October 2022
Team ID	PNT2022TMID08017
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 Collection	USN-1	Task is to collect or download the flight dataset to train the model	4	High	Sathish, Sheik Hassain Sadiq
Sprint-1	Data preprocessing	USN-2	Task of preprocessing the dataset by analysing ,removing unnecessary data and splitting the dataset.	8	High	Sathish, Sheik Hassain Sadiq
Sprint-2	Build Model	USN-3	Building a model to predict the delay	6	High	Varun, Udaya Balaji
Sprint-2	Train	USN-4	Train the model with the processed dataset	6	High	Varun, Udaya Balaji
Sprint-3	Dashboard	USN-5	As a user,i can fill the flight details for which i want to get the prediction	4	High	Sathish, Sheik Hassain Sadiq

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
Sprint-3	Integration	USN-6	As a user i click on predict to predict the delay	4	High	Sathish, Sheik Hassain Sadiq
Sprint-3	Notification	USN-7	As a user i get notified about the delay	4	High	Sathish, Sheik Hassain Sadiq
Sprint-4	Test	USN-8	Test the model for prediction with different inputs	4	High	Varun, Udaya Balaji
Sprint-4	Deployment	USN-9	As a user i can access the model from the cloud	8	High	Varun, Udaya Balaji

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	12	6 Days	24 Oct 2022	29 Oct 2022	12	29 Oct 2022
Sprint-2	12	6 Days	31 Oct 2022	05 Nov 2022	12	05 Nov 2022
Sprint-3	12	6 Days	07 Nov 2022	12 Nov 2022	12	12 Nov 2022
Sprint-4	12	6 Days	14 Nov 2022	19 Nov 2022	12	19 Nov 2022

Velocity:

Imagine we have a 6-day sprint duration, and the velocity of the team is 12 (points per sprint). Let's calculate the team's average velocity (AV) per iteration unit (story points per day)

$$AV = \frac{\text{Sprint duration}}{\text{Velocity}} = \frac{12}{6} = 2$$

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.