

Project Planning Phase

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

Date	18 October 2022
Team ID	PNT2022TMID06371
Project Name	Project - 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-2	Home Page	USN-1	Description about flight delay.	7	High	Suresh M Ranjith V
Sprint-2		USN-2	Details about the test vitals required for the testing.	8	High	Witny Caroline K Santhiya K Nagulan M
Sprint-3	Registration	USN-3	As a user, I can register for the application by entering my email, password, and confirming my password.	5	Low	Santhiya K Nagulan M Witny Caroline K
Sprint-3	Login	USN-4	As a user, I can log into the application by entering email & password	4	Medium	Suresh M Ranjith V Witny Caroline K
Sprint-3	Main Page (Test vitals)	USN-5	As a user, I submit the required image for the prediction.	4	High	Nagulan M Santhiya K Witny Caroline K
Sprint-3	Result	USN-6	Results will be displayed.	4	High	Suresh M Ranjith V

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
Sprint-1	Data Collection	USN-7	Collect the required data for the detection of flight delay.	6	Medium	Ranjith V Santhiya K
Sprint-1	Data Preprocessing	USN-8	Clean and analyze the data to avoid noise and duplications.	7	Medium	Nagulan M Suresh M
Sprint-1	Model Building	USN-9	Build the model using Random forest classifier to classify the images.	6	Medium	Ranjith V Witny Caroline K
Sprint-4	Deploy the model	USN-10	Deployment of ML model using IBM Watson Studio, object storage.	8	High	Nagulan M Ranjith V
Sprint-4	Integrate the web app with the IBM model	USN-11	Use flask for the integration purpose.	9	High	Suresh M Santhiya K

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	19	30 Oct 2022
Sprint-2	20	6 Days	31oct 2022	05 Nov 2022	15	06 Nov 2022
Sprint-3	20	6 Days	07 Nov 2022	12 Nov 2022	17	13 Nov 2022
Sprint-4	20	6 Days	14 Nov 2022	19 Nov 2022	17	20 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)

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