Project Planning Phase

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

Date	18 October 2022
Team ID	PNT2022TMID16204
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	Datasets collected from various online resources are preprocessed, cleaned so as to provide valid data to the Machine learning model for training.	2	high	Tamil Mani P, Saravana Kumar P B, Srikanth M U, Suriya Raaj P
Sprint-1	Model Building	USN-2	Machine Learning models are built using Python Notebook available in the Watson Studio.	1	high	Tamil Mani P, Saravana Kumar P B, Srikanth M U, Suriya Raaj P
Sprint-2	Model Evaluation	USN-3	Many different models are trained and evaluated and the model with the best performance metrics is chosen for deployment.	2	high	Tamil Mani P, Saravana Kumar P B, Srikanth M U, Suriya Raaj P
Sprint-2	Model Deployment on IBM Cloud using IBM Watson	USN-4	The selected model is deployed in the IBM cloud using the deployment space available in the Watson Studio.	1	Medium	Tamil Mani P, Saravana Kumar P B, Srikanth M U, Suriya Raaj P
Sprint-2	Basic user interaction Dashboard	USN-5	Dashboard is provided for each user which is interactive and informative.	2	high	Tamil Mani P, Saravana Kumar P B,
Sprint-3	Improved Dashboard and GUI	USN-6	The dashboard can be further improved to provide more interactivity.	1	Medium	Saravana Kumar P B, Srikanth M U, Suriya Raaj P
Sprint-3	Registration	USN-7	As a user, I can register a new account by providing E-mail, password and name.	2	High	Tamil Mani P, Saravana Kumar P B,
Sprint-3	Login	USN-8	As a user, I can login to my registered account by providing e-mail and password which is already available in the stored database.	2	Medium	Tamil Mani P, Saravana Kumar P B,

						Suriya Raaj P
Sprint-4	Raise query/complaint and give feedback	USN-9	As a user, I can raise queries related to the service provided and also provide feedback on the performance of the web-application.	1	Medium	Tamil Mani P, Saravana Kumar P B
Sprint-4	Improve overall web app	USN-10	Taking into account the feedback provided by various users, the overall performance and the usability of the app can be improved.	1	High	Tamil Mani P, Saravana Kumar P B, Srikanth M U, Suriya Raaj 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	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)

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

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.