Project Planning Phase

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

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	Manishankar Kiran Kannan Anishvikram Ashwin
Sprint-1	Build HTML Pages	USN-2	As a user, I can view the web pages to enter flight details.	1	Medium	Manishankar Kiran Kannan Anishvikram Ashwin
Sprint-1	User registration and Login	USN-3	As a user, I am able to login successfully and register my login info in the database.	2	High	Manishankar Kiran Kannan Anishvikram Ashwin
Sprint-2	Build Python Pages	USN-4	As a user, I am unable to engage with anything.	2	High	Manishankar Kiran Kannan Anishvikram Ashwin

Sprint-2	Build a user dashboard	USN-5	As a user, I can view the flight delay dashboard or insights on flight delays in the visual form.	2	Medium	Manishankar Kiran Kannan Anishvikram Ashwin
Sprint-3	Train the ML Model	USN-6	As a user, I can predict flight delays using the best created ML models.	2	High	Manishankar Kiran Kannan Anishvikram Ashwin
Sprint-3	Save the trained model and use it to obtain predictions.	USN-7	As a user, I can give flight details as input to the ML model.	2	High	Manishankar Kiran Kannan Anishvikram Ashwin
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	Manishankar Kiran Kannan Anishvikram Ashwin
Sprint-4	Integrate Flask with Model for the user to obtain predictions	USN-9	As a user, I can predict flight delays using the user interface.	2	High	Manishankar Kiran Kannan Anishvikram Ashwin

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)

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

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.