

DEVELOPING A FLIGHT DELAY PREDICTION MODEL USING MACHINE LEARNING

TEAM LEADER: Jaysri S

TEAM MEMBER 1: Beeulah Marry M

TEAM MEMBER 2: Hemalatha R

TEAM MEMBER 3: Priya Dharshini K

Product Backlog, Sprint Schedule, and Estimation

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 Pre-processing	USN-1	As a user, I can't interact anything. Waiting is user's task. User can listen the relationship exist between the various attributes of data by presentation of developer	2	high	Jaysri S, Beeulah Marry M
Sprint-1	Model Building	USN-2	As a user, I can predict flight delay by various developed ML models by console	1	high	Jaysri S, Beeulah Marry M
Sprint-2	Model Evaluation	USN-3	As a user, I can predict flight delay by best Model in various developed ML model by console	2	high	Jaysri S, Beeulah Marry M
Sprint-2	Model Deployment on IBM Cloud using IBM Watson	USN-4	As a user, I can use the model by requesting the deployed model on Cloud	1	Medium	Jaysri S, Beeulah Marry M
Sprint-2	Basic user interaction Dashboard	USN-5	As a user, I can use the model or prediction from model by interacting with dashboard	2	high	Jaysri S, Hemalatha R
Sprint-3	Improved Dashboard and GUI	USN-6	As a user, I can use the model or prediction from model by interacting with improved dashboard	1	Medium	Hemalatha R, Jaysri S
Sprint-3	Registration	USN-7	As a user, I can register for the application by entering my email, password, and confirming my password.	2	High	Hemalatha R, Priya Dharshini K
Sprint-3	Registration	USN-7	As a user, I can register for the application by entering my email, password, and confirming my password.	2	High	Hemalatha R, Priya Dharshini K
Sprint-3	Login	USN-8	As a user, I can log into the application by entering email & password and I can register .login to the application through Gmail	2	Medium	Hemalatha R, Priya Dharshini K
Sprint-4	Raise query/complaint and give feedback	USN-9	As a user, I can raise complaint or query and give feedback	1	Medium	Hemalatha R, Priya Dharshini K
Sprint-4	Improve overall web app	USN-10	As a user, I can user revised and improved version of web application	1	High	Jaysri S, Beeulah Marry M, Hemalatha R, Priya Dharshini K

Project Tracker, Velocity & Burndown Chart:

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)

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

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.

