Project Planning Phase

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

Date	22 October 2022
Team ID	PNT2022TMID20562
Project Name	Project - Machine Learning based Vehicle Performance Analyzer

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	Download the dataset	20	High	Narendiran(1), Srivathsav(2)
Sprint-2	Data Pre-processing	USN-2	Import libraries and read the dataset	4	Medium	Sandhya(3), Rangashri(4)
Sprint-2		USN-3	Handle the missing value and label the encoding	4	Medium	1,2
Sprint-2		USN-4	Split the dataset into Dependent and independent variables	6	Medium	3,4
Sprint-2		USN-5	Split the dataset into train and test data	6	Medium	1,2
Sprint-3	Model Building	USN-6	Train the datasets to run smoothly and see an incremental improvement in the prediction rate for the available Machine Learning algorithms.	5	Low	3,4
Sprint-3		USN-7	Build The Model with Random Forest Algorithm	6	Low	1,2
Sprint-3		USN-8	Predict The Values	5	Low	3,4
Sprint-3		USN-9	Model Evaluation	4	Low	1,2
Sprint-4	Application Building	USN-10	Building An Index. Html File	5	Low	1,3

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
Sprint-4		USN-11	Build Python Code	5	Low	2,4
Sprint-4		USN-12	Run the app using flask	5	Low	1,2,3,4
Sprint-4		USN-13	Output	5	Low	1,2,3,4

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

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

Burndown Chart: