Project Planning Phase

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

Date	18 October 2022
Team ID	PNT2022TMID50528
Project Name	Machine Learning Based Vehicle Performance Analyzer
Maximum Marks	8 Marks

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	As a user, I can collect the dataset from various resources with different model vehicles.	10	Low	T.Sonabenitta
Sprint-1	Data Preprocessing	USN-2	As a user, I can load the dataset, handling the missing data, scaling and split data into train and test.	10	Medium	R.Indira
Sprint-2	Model Building	USN-3	As a user, I will get an application with ML model which provides high accuracy of vehicle performance.	5	High	M.Arulappan
Sprint-2	Add CNN layers	USN-4	Creating the model and adding the input, hidden, and output layers to it.	5	High	P.Selva Ramya M.Sivasankari

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
Sprint-2	Compiling the model	USN-5	With both the training data defined and model defined, it's time to configure the learning process.	2	Medium	M.Arulappan
Sprint-2	Train & test the model	USN-6	As a user, let us train our model with our image dataset.	6	Medium	R.Indira
Sprint-2	Save the model	USN-7	As a user, the model is saved & integrated with an android application or web application in order to predict something.	2	Low	T.Sonabenitta
Sprint-3	Building UI Application	USN-8	As a user, I will upload the different vehicle parameters to the application by clicking a upload button.	5	High	P.Selva Ramya M.Sivasankari
Sprint-3		USN-9	As a user, I can know the details of the fundamental usage of the application.	5	Low	T.Sonabenitta
Sprint-3		USN-10	As a user, I can see the analyzed vehicle parameters in the application.	5	Medium	R.Indira
Sprint-4	Train the model on IBM	USN-11	As a user, I train the model on IBM and integrate flask/Django with scoring end point.	10	High	M.Arulappan
Sprint-4	Cloud Deployment	USN-12	As a user, I can access the web application and make the use of the product from anywhere.	10	High	P.Selva Ramya M.Sivasankari

Project Tracker, Velocity & Burndown Chart: (4 Marks)

JIRA SOFTWARE DASHBOARD OF THE PROJECT:

Default dashboard - Jira (atlassian.net)

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	05 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.

https://www.visual-paradigm.com/scrum/scrum-burndownchart/

https://www.atlassian.com/agile/tutorials/burndowncharts

Reference:

https://www.atlassian.com/agile/project-management

https://www.atlassian.com/agile/tutorials/how-to-do-scrum-with-jirasoftware

https://www.atlassian.com/agile/tutorials/epics

https://www.atlassian.com/agile/tutorials/sprints

https://www.atlassian.com/agile/project-management/estimation

https://www.atlassian.com/agile/tutorials/burndown-charts