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

Date	21 OCTOBER 2022
Team ID	PNT2022TMID34943
Project name	Car Resale Value Prediction

Product Backlog, Sprint Schedule, and Estimation

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story points	Priority	Team Members
Sprint 1	Registration	USN-1	As a user, I can register for the application by entering my email, password, and confirming my password.	5	Medium	Roshan
Sprint 1		USN-2	As a user, I will receive confirmation email once I have registered for the application	5	Medium	Aakif Muhsin
Sprint 3		USN-3	As a user, I can register for the application through mobile number	5	Low	Puthin Christ
Sprint 1		USN-4	As a user, I can register for the application through Gmail	3	Medium	Roshan
Sprint 1	Login	USN-5	As a user, I can log into the application by entering email & password	7	Medium	Packeer Mydeen
Sprint 2	Create the User Interface	USN-6	User can give the car details by giving car brand,registration year,model,varient,state of registration,number of owners,kilometre driven.	3	High	Aakif Muhsin
Sprint 2	Dashboard	USN-7	the car model is able to viewed to user and user pick the car.	5	High	Roshan

Sprint 2		USN-8	User get the car specification using the car registration number.	7	High	Roshan
Sprint 2		USN-9	User can manually modify the car health and damages, kilometres driven,odometer,mileage and relevant added accessories	5	High	Aakif Muhsin
Sprint 3	Dataset	USN-10	Create a dataset with the details about car models and their specification	5	High	Puthin Christ
Sprint 3	Reading the dataset	USN-11	To read all the dataset for the eliminating dummies	5	High	Puthin Christ
Sprint 3	Collecting the dataset	USN-12	Collect the details from the dataset , for gathering and combining the data from different car models and their specification to obtain the model for preprocessing.	5	High	Puthin Christ
Sprint 4	Data Preprocessing	USN-13	For Cleaning the data,altering the datatype for flexibility for example car model,car colour,Handling the missing values,Encoding categorical data ,Normalizing the dataset,Splitting the dataset by numpy, matplotlib,Pandas to implement it.	5	High	Packeer Mydeen
Sprint 4	Data Exploration and Analysis	USN-14	Handling outliers for the data clustering and for improving the data accurancy	5	Medium	Packeer Mydeen
Sprint 4	Feature Selection		For selecting the best subset for improving the better performance by learning the regression algorithm using sklearn.	5	High	Roshan
Sprint 4	Model Building.		The Regression Algorithm called linear regression, lasso regression, ridge regression implemented.	5	High	Aakif Muhsin

Sprint 5	Data visualization of prediction results		To visualize the relationship between the values.	5	High	Puthin Christ
Sprint 5	Evaluate the Model's Performance		To Evaluating the best performed value,the model delivers the output value for the input value.	5	High	Packeer Mydeen
Sprint 5	Build the web application with Flask		Installing the flask framework and Import necessary libraries, to initialize the flask app, and load our machine learning model	5	High	Packeer Mydeen
Sprint 5	Integrate the Model with user interface		For the integration, the app route for the default page of the web-app should be created and redirecting the API or to predict the car resale value.	5	High	Aakif Muhsin

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	8 days	27-10-2022	3-11-2022	20	3-11-2022
Sprint 2	20	8 days	5-11-2022	12-11-2022	20	12-11-2022
Sprint 3	20	8 days	13-11-2022	20-11-2022	20	21-11-2022
Sprint 4	20	8 days	21-11-2022	28-11-2022	20	30-11-2022
Sprint 5	20	8 days	29-11-2022	6-12-2022	20	6-12-2022

Velocity:

Let's calculate the team's average velocity (AV) per iteration unit (story points per day).

$$\mathbf{AV = Velocity / Sprint\ Duration}$$
$$\mathbf{= 20 / 8}$$
$$\mathbf{= 2.5}$$

Burndown Chart :

X-axis - Days
Y-axis - Story Points