Project Planning Phase

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

Date	21 OCTOBER 2022
Team ID	PNT2022TMID00657
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	User can register for the application by entering email, password, and confirming the password.	4	Medium	Sakthi
Sprint 1		USN-2	User receives confirmation email once sucessfully registered for the application	4	Medium	Sakthi
Sprint 1		USN-3	User can register for the application through mobile number	2	Medium	Sakthi
Sprint 1	Login	USN-4	User can register for the application through Gmail. User can login to the application by entering email & password	8	Medium	Sakthi
Sprint 1	Dashboard	USN-5	User can give the car details by giving car brand,registration year,model,variant,state of registration,number of owners,kilometer driven.	2	High	Rakshana
Sprint 2		USN-6	All the car model is viewed to user and user pick the car.	7	High	Rakshana
Sprint 2		USN-7	User get the car specification using the car registration number.	7	High	Rakshana

Sprint 2		USN-8	User can manually modify the car condition and damages, kilometers driven,odometer,mileage and relevant added accessories	6	High	Rakshana
Sprint 3	Collecting the dataset	USN-9	Read all the data in the dataset for eliminating dummies	3	High	Swathi
Sprint 3	Data Preprocessing	USN-10	For Cleaning the data,altering the datatype for flexibility for example car model,car color,Handling the missing values,Encoding categorical data, Normalizing the dataset by numpy, matplotlib,Pandas to implement it.	7	High	Swathi
Sprint 3	Data Exploration and Analysis	USN-11	Handling outliers for the data clustering and for improving the data accurancy	7	Medium	Swathi
Sprint 3	Splitting the dependent variable and independent variable	USN-12	Identify the dependant and independent variables. Splitting the dataset for Test model and Train model	3	High	Swathi
Sprint 4	Model Building.	USN-13	The Regression Algorithm called linear regression, lasso regression, ridge regression implemented.	7	High	Swrnamalya
Sprint 4	Evaluate the Model's Performance	USN-14	Evaluating the best performed model,,the model delivers the output value for the input value with more accuracy..	5	High	Swrnamalya
Sprint 4	Build the web application with Flask	USN-15	Installing the flask framework and Import necessary libraries, to initialize the flask app, and load our machine learning model	5	High	Swrnamalya

Sprint 4	Integrate the Model with user interface	USN-16	For the integration, the app route for the default page of the web-app should be created and redirecting to compare with the machine learning model to predict the car resale value.	3	High	Swrnamalya

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

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