LITERATURESURVEY

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Team ID	PNT2022TMID18732
ProjectName	CarResaleValuePrediction

1. CARPRICEPREDICTION[AbhayYadav,ChaviRalhanETAL,2022]

India has a considerable size of car sales on top of the world day-to-daymany buyers usually sell their cars after using for the time to another buyer, theyname them as second possessor.Numerousplatforms such as cars24.com,OLX.comthat come up with these buyers with a platform where they can sell their old cars,but what should be the price of the car, this is the long-lasting query ever by usingMachine Learning algorithms and they lead a response to this issue. Using a historyof previous used car sales data and machine learning methodologies like SupervisedLearning, they used to predict a fair price for the car. They also used machinelearning techniqueslikeRandomForestandExtraTreeRegression

2. USED CAR PRICE PREDICTION AND LIFE SPAN [Aditya Nikhade,RohanBorde,2021]

The predictions are based on dataset collected from various websites andKaggle Websites mostly. This project will compare all this data to all regressionalgorithms and performance of various machine learning algorithms such as LinearRegression, Ridge Regression, Decision tree Regressor and choose the best out ofit. Depending onvariousparameters theproject will determine the price of a carand compare the prices of old cars with new cars. The lifespan of the car can bedetermined using Government regulations and Company claims. Apart from variousfactors,theyalsoconsiderGPSnavigatortopredictthepriceofthecar.

3. Car Price Prediction Using Machine Learning [Ketan Agrahari, AyushChaubeyETAL,2021]

The rise of online websites and other tools likeit havemade it easier forboth buyers and sellers to get a better understanding of the factors that determine themarket value of a used car. Based on a set of factors, Machine Learning algorithmsmay beused toforecast the price of any automobile. The cost is calculatedusingthe amount of characteristics. They used linear regression and lasso regression todevelop a price model for used

automobiles in a comparative research. The maingoal of this study is to discover the best predictive model for estimating the price ofausedcar.

4. UsedCarPricePredictionusingK-NearestNeighborBasedModel[Samruddhi,AshokKumar,2020]

In this paper, they proposed a model to estimate the cost of the used carsusing the K nearest neighbor algorithm which is simple and suitable for small dataset. Here, they have collected a used cars dataset and analyzed the same. The datawas trained by the model and examined the accuracy of the model among differentratios of trained and test set. The same model is cross-validated for assessing theperformanceofthemodelusingtheK-Foldmethodwhichiseasytounderstandandimplement. They have used the K nearest Neighbor algorithm and got accuracy85% where the accuracy of linear regression is 71%. The proposed model is alsovalidated with 5 and 10 folds by using K Fold Method. The experimental analysisshowsthattheproposedmodelisfittedastheoptimizedmodel.

5.Car Price Prediction using Machine Learning Techniques [Enis Gegic,BecirIsakovicETAL,2019]

The major step in this prediction process is collection and preprocessing of the data.In this research ,PHP scripts were built to normalize, standardize and clean data toavoid unnecessary noise for machine learning algorithms. To build a model thatpredicting the price of used cars in Bosnia and Herzegovina, they applied threemachine learning techniques (Artificial Neural Network, Support Vector Machineand Radom Forest). However, the mentioned techniques were applied to work as anensemble.Thedatausedfortheprediction wascollectedfrom thewebportalautopijaca.ba using a web scraper that was written in PHP programming language.Respectiveperformancesofdifferentalgorithmswerethencomparedtofindonethatbestsuitstheavailable dataset.

PROJECTDESCRIPTION:

With difficult economic conditions, it is likely that sales of second-handimported (reconditioned) cars andusedcars willincrease.In manydevelopedcountries, it is common to lease a car rather than buying it outright. After the leaseperiod is over, the buyer has the possibility to buy the car at its residual value, i.e.its expected resale value. Thus, it is of commercial interest to sellers/financers to beable topredictthesalvagevalue(residualvalue)ofcarswithaccuracy.

In order to predict the resale value of the car, we proposed an intelligent,flexibleandeffectivesystemthatisbasedonusingregressionalgorithms.Consideringthemainfactors whichwouldaffecttheresalevalueofavehicle

a regression model is to be built that would give the nearest resale value ofthevehicle.We will be using variousregressionalgorithmsand algorithmswiththe best accuracy will be taken as a solution, then it will be integrated to the web-basedapplicationwhere theuserisnotifiedwiththestatusofhisproduct.

TechnicalArchitecture: