PRIOR KNOWLEDGE

TEAM ID	PNT2022TMID07231
Project Name	**Car Resale Value Prediction**

MACHINE LEARNING

Machine learning is a subfield of artificial intelligence (AI) and computer science that uses data and algorithms to replicate how humans learn, gradually improving its accuracy.
Machine learning is a vital component of the rapidly increasing study of classifications or predictions and to gain important insights in data mining operations. These insights then affect decision making within applications and companies, ideally influencing key growth indicators. As big data expands and grows, so will the market demand for data scientists. They will be required to assist in finding the most pertinent business questions and the data to answer them.

LEARNT OVER

- Supervised and unsupervised learning
- Regression Classification and Clustering
- Random Forest Regressor
- Flask

an extension of linear regression and is sometimes referred to as simply multiple regression. The variable we want to predict is known as the dependent variable, and the variables we use to predict the value of the

ALGORITHMS USED:

MULTI-LINEAR REGRESSION

Multiple linear regression is a statistical technique that predicts the outcomeof a variable based on the values of two or more variables. It is

SUPPORT VECTOR MACHINE

The algorithm represents the data points in three dimensions. With the dimensional space for the n number of features in the dataset and then attempts to create hyperplanes that divide the data points with the greatest margin.

Decisionusedto forecast numericalvalues (regression)
decision trees over neural networksis that they are easier to evaluateand audit.

DECISION TREE REGRESSION

parametric, supervised learning classifier that uses proximity to classify or predict the grouping of a single data point. While it can be used for either classification algorithm, assuming that similar points can be found near one another.lts of multiple decision trees. The random
forest algorithm is a bagging technique extension that generates an uncorrelated forest of decision trees by combining bagging and feature "the random subspace approach," ensures minimal correlation among decision trees by selecting features at random. This distinguishes decision

XGBOOST

XGBoost, or Extreme Gradient Boost, is a machine learning technique used to create gradient boosting decision trees. When it comes to unstructured data, such as photos and unstructured text data, ANN comes to prediction. When data, decision trees are currently the best.

RANDOM FORESTS REGRESSOR K-NEAREST

NEIGHBORS

TECHNOLOGIESUSED

PYTHON

Python is an agile, dynamically typed, expressive, open source programming language that supports multiple programming philosophies, including procedural, and

powerful function to be

HTML

HTML is a programming language used to organise web content. Its goal is to make online design and development easier by developing a standardised markup language. HTML deconstruct and compartmentalise your pages, as well as build
separate components that are not only meant to arrange your site logically, but are also designed to provide your site syndication
capabilities. HTML might be referred to as the "information mapping

method
mapping, separating and labelling data to make it easier to use and comprehend. This is the basis for HTML tremendous semantic and

CSS

CSS is an abbreviation for Cascading Style Sheets. It is a style sheet language that is used to specify the look andformatting of a markup

Itaddsanewfunctionalitytoto HTML. Itis

document,suchas plain XML,SVG, orXUL.

JAVASCRIPT

is used to script webpages on many websites. When applied to an HTML

document, it

enables dynamic interactivity on website. Users may use JavaScript to

IBMCLOUD

create contemporary web applications that allow them toengage without

Theterm "IBMCloud" refers to IBM's hardware, software, andservices for assisting organisations in building private clouds, as well as its

Bluemix public cloud services. The moniker "Bluemix" was formerly

reserved for IBM's PaaS services for developers, however Bluemix now

now provides certain IaaS services.

TOOLSUSED

FLASK

Flask is a terrific and relatively light Python framework for constructing sophisticated online apps, as well as an amazing tool forgenerating dynamicandinteractivewebpages.Youcanconstructfascinating applications usingthis strategy, evenonversions before7.X. We can acquire outstanding results quickly using Flask andupdatemanagement procedureswithnewapps.