PRIOR KNOWLEDGE

TEAM ID	PNT2022TMID45616
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

ALGORITHMS USED:

MULTI-LINEAR REGRESSION

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

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

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.

DECISION TREE REGRESSION

Decision used to forecast numerical values (regression) decision trees over neural networks is that they are easier to evaluate and audit.

RANDOM FORESTS REGRESSOR

The machine learning algorithm predicts a value or category in a random forest by combining
the results 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 trees from random forests. In contrast to decision trees, random forests

K-NEAREST NEIGHBORS

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.

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_{it} comes to prediction. When $_{it}$data, decision trees are currently the best.

TECHNOLOGIESUSED

PYTHON

Python$_{is an}$agile,dynamicallytyped,expressive,open$_{source}$programming language$_{that}$supportsmultipleprogrammingphilosophies,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$_{}$markuplanguage.HTMLdeconstructand$_{}$compartmentaliseyour pages$_{,}$aswellasbuild separate components that are not only meant to arrange your site logically$_{,}$butarealso$_{}$designed$_{to}$provideyour$_{site}$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 and formatting of a markup

It adds a new functionality to HTML. It is

document, such as plain XML, SVG, or XUL.

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

create contemporary web applications that allow them to engage without having to reload the page every time. The typical website makes use of js

TOOLS USED

FLASK

Flask is a terrific and relatively light Python framework for constructing sophisticated online apps, as well as an amazing tool for generating dynamic and interactive webpages. You can construct fascinating applications using this strategy, even conversions before 7.X. We can acquire outstanding results quickly using Flask and update management procedures with new apps.

IBM CLOUD

The term "IBM Cloud" refers to IBM's hardware, software, and services 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.