

UNIVERSITY ADMIT ELIGIBILITY PREDICTOR

Team ID : PNT2022TMID20988

Project Name : UNIVERSITY ADMIT ELIGIBILITY PREDICTOR

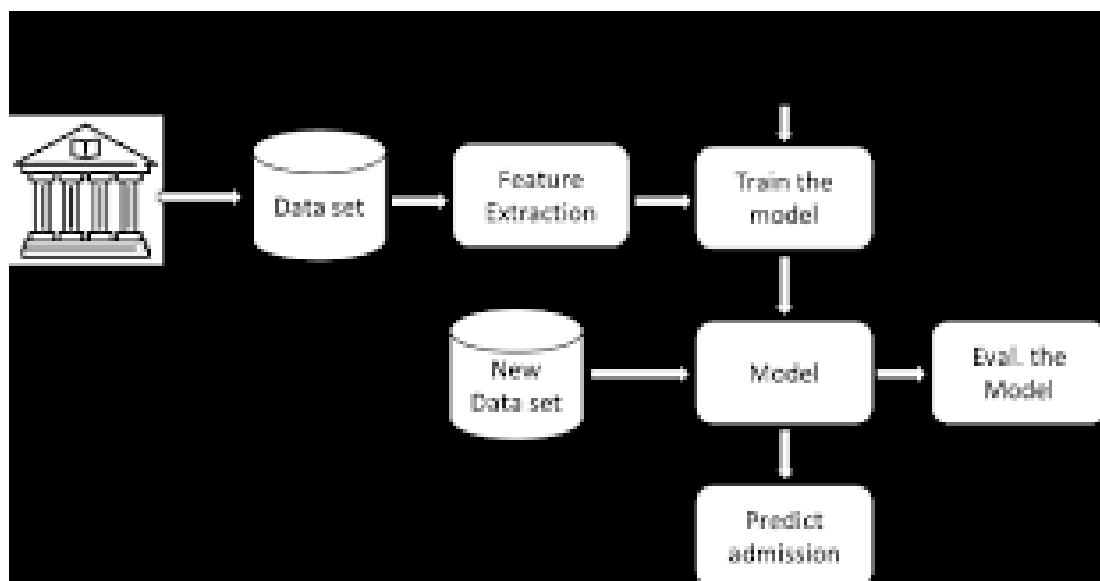
Prior Knowledge:

This project Engineering Admission Predictor System is web based application in which students can register with their personal as well as marks details for prediction the admission in colleges and the administrator can allot the seats for the students.

Administrator can add the college details and he batch details. Using this software, the entrance seat allotment became easier and can be implemented using system.

The main advantage of the project is the computerization of the entrance seat allotment process. Administrator has the power for the allotment. He can add the allotted seats into a file and the details are saved into the system.

The total time for the entrance allotment became lesser and the allotment process became faster.

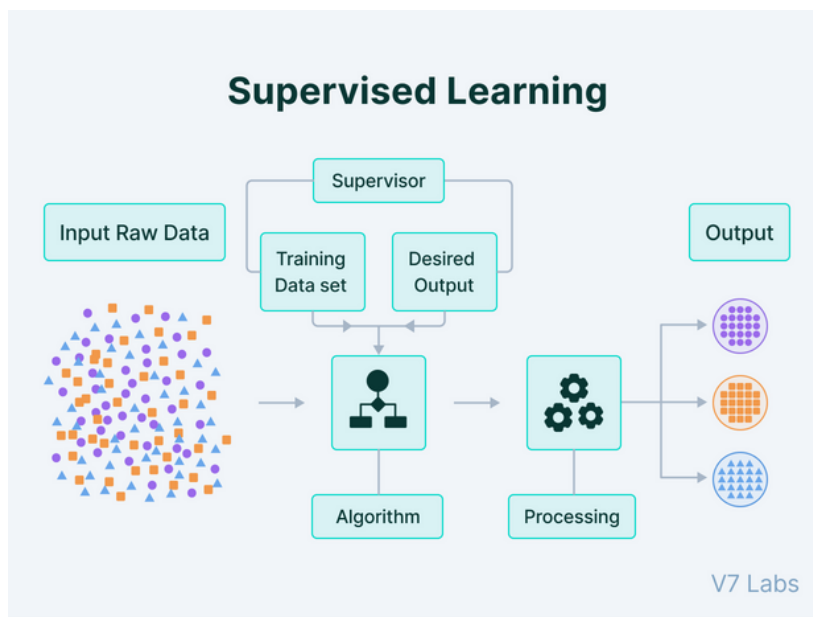


Supervised and Unsupervised learning:

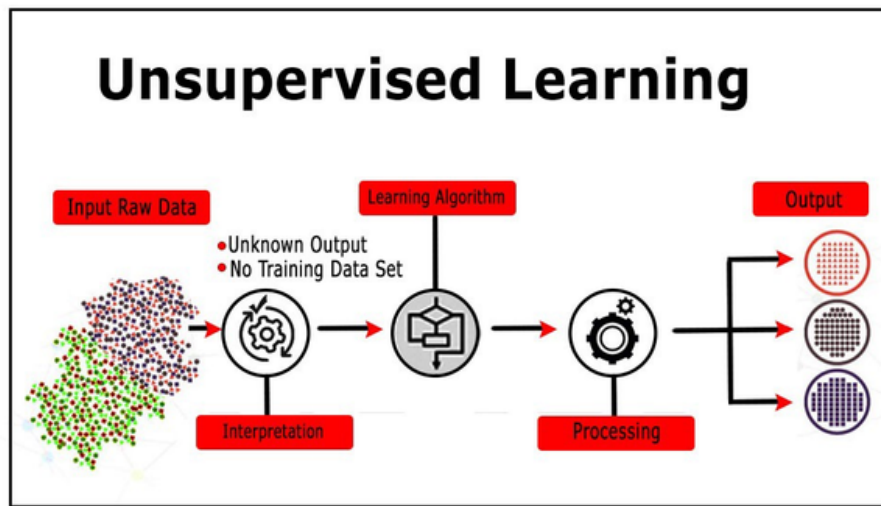
Supervised learning is defined by its use of labeled datasets. These datasets are designed to train or “supervise” algorithms into classifying data or predicting outcomes accurately. Using labeled inputs and outputs, the model can measure its accuracy and learn over time

Classification problems use an algorithm to accurately assign test data into specific categories, such as separating apples from oranges. Or, in the real world, supervised learning algorithms can be used to classify spam in a separate folder from your inbox

Regression is another type of supervised learning method that uses an algorithm to understand the relationship between dependent and independent variables.



Unsupervised learning uses machine learning algorithms to analyze and cluster unlabeled data sets. These algorithms discover hidden patterns in data without the need for human intervention. Clustering is a data mining technique for grouping unlabeled data based on their similarities or differences. Association is another type of unsupervised learning method that uses different rules to find relationships between variables in a given dataset. Dimensionality reduction is a learning technique used when the number of features (or dimensions) in a given dataset is too high. It reduces the number of data inputs to a manageable size while also preserving the data integrity



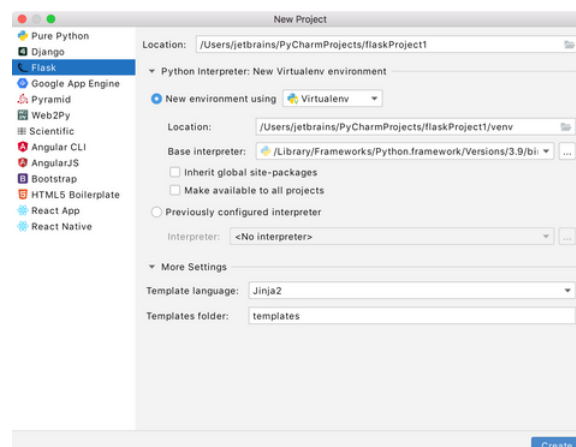
Clustering, Classification and Regression :

The first one is clustering. Clustering is an unsupervised technique. With clustering, the algorithm tries to find a pattern in data sets without labels associated with it. This could be a clustering of buying behavior of customers. Classification algorithms look at existing data and predicts what a new data belongs to. Classification is used for spam for years now and these algorithms are more or less mature in classifying something as spam or not. With machine data, it could be used to predict a material quality by several known parameters.

Regression is often confused with clustering, but it is still different from it. With a regression, no classified labels are predicted. Instead, regression outputs continuous, often unbound, numbers.

Flask:

Flask is a web framework that provides libraries to build lightweight web applications in python. It is developed by Armin Ronacher who leads an international group of python enthusiasts (POCCO). It is based on WSGI toolkit and jinja2 template engine. Flask is considered as a micro framework



Python Flask:

A Flask application is an instance of the Flask class. Everything about the application, such as configuration and URLs, will be registered with this class.

Flask provides configuration and conventions, with sensible defaults, to get started. This section of the documentation explains the different parts of the Flask framework and how they can be used, customized, and extended. Beyond Flask itself, look for community-maintained extensions to add even more functionalit.

Instead of creating a Flask instance globally, you will create it inside a function. This function is known as the application factory. Any configuration, registration, and other setup the application needs will happen inside the function, then the application will be returned.

