

## **MODULES DESCRIPTION**

### **Data Use :**

So, in this project we are using different packages and to load and read the data set we are using pandas. By using pandas, we can read the .csv file and then we can display the shape of the dataset with that we can also display the dataset in the correct form. We will be training and testing the data, when we use supervised learning it means we are labeling the data.

### **Preprocessing :**

Cleaning the data is always the first step. In this, those words are removed from the dataset. That helps in mining the useful information. Whenever we collect data online, it sometimes contains the undesirable characters like stop words, digits etc. which creates hindrance while spam detection. It helps in removing the texts which are language independent entities and integrate the logic which can improve the accuracy of the identification task.

### **Feature Extraction :**

Feature extraction is the process of selecting a subset of relevant features for use in model construction. Feature extraction methods help in to create an accurate predictive model. They help in selecting features that will give better accuracy. When the input data to an algorithm is too large to be handled and it is supposed to be redundant then the input data will be transformed into a reduced illustration set of features also named feature vectors

### **Algorithms :**

One of supervised learning algorithm based on probabilistic classification technique.

It is a powerful and fast algorithm for predictive modelling.

In this project, I have used the Multinomial Naive Bayes Classifier.

### **Support Vector Machine- SVM**

SVM's are a set of supervised learning methods used for classification, and regression.

Effective in high dimensional spaces.

Uses a subset of training points in the support vector, so it is also memory efficient.

### **Logistic Regression :**

Linear model for classification rather than regression.

The expected values of the response variable are modeled based on combination of values taken by the predictors

### **SOURCE CODE**

```
from PyQt5 import QtCore, QtGui, QtWidgets
from Admin import Ui_Admin
import pandas as pd
class Ui_Dialog(object):
    def admin(self, event):
    try:
    self.admn = QtWidgets.QDialog()
    self.ui = Ui_Admin(self.admn)
    self.ui.setupUi(self.admn)
    self.admn.show()
    except Exception as e:
    print(e.args[0])
    tb = sys.exc_info()[2]
    print(tb.tb_lineno)
    event.accept()
```