## Read Me

The script program is created for the purpose of training a labeled data set for creating a machine learning model that predicts the type of the document from a seen or unseen data point.

## Setting up:

1.download the labeled data file, and the script into the destination directory note: do not change the file name

Launch the program from command line:

- 1. set the current directory 'cd: ~'
- 2. 'python3 classifier.py'

"Enter labeled data file path: " (eg. Enter labeled data file path: /Users/jbi/Downloads/) "mode=" (eg. mode=predict)

"input=" (eg. input=3,1350,9450,Mrs. Jerri Larsen,turkey-kingstown-20190920-press, 1982-10-13T20:54:49.000Z )

Note: when entering unknown data point, please make sure that the features comma separated.

## Output:

mode=train

outputs: list of validation accuracy scores on the train set and on the test set

mode=predict

output: the result of prediction eg. ['other']

Launch the program from an Editor:

Note: by launching the program from the editor, the attributes and the methods will be accessible, the classifier can thus be changed.

Classifier:

**RandomForest** is the chosen classifier. **Naive Bayes** with Gaussian distribution has been trained and compared with RandomForest. RF yields better results.

The classifier can be changed in the source code.

- 1. open script
- 2. go to 'def main()'
- 3. instantiate Naive Bayes instead of RandomForest

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