VIMAL PROKASH

LAILA HUSSEIN

AJAY SRIVATS

KAVYA RAVI GOWDA

USER INSTRUCTION

IDS 566: ADVANCED TEXT ANALYTICS

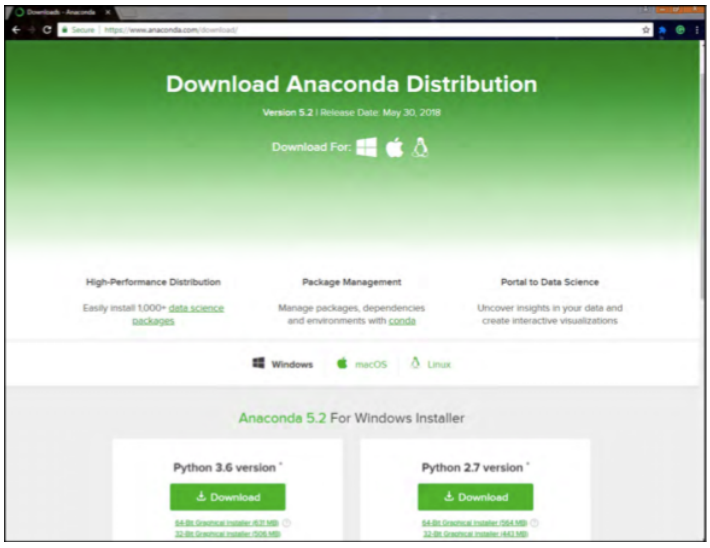
FINAL PROJECT

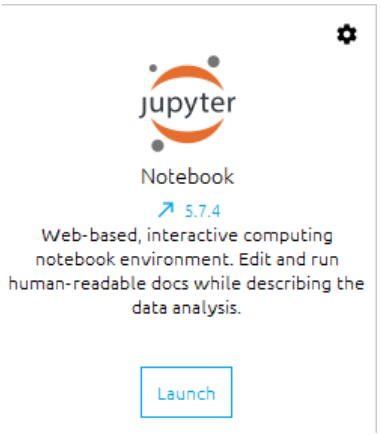
SET UP

INSTALL ANACONDA

Anaconda is a free and relatively easy to install package management and Python distribution built for users.

To install Anaconda visit URL: https://www.anaconda.com and follow the instructions to install Anaconda Distribution.





Once installation is complete, we will focus on creating Jupyter Notebook.

For this particular assignment you will need to install Tensorflow and keras for the deep learning method and hyperparameter tuning which can be done by

-pip install TensorFlow

-pip install Keras

-pip install parfit

SET UP

EXECUTING OUR NOTEBOOK

Download and open our notebook using. Jupyter. To run this file sucessfully, a few steps are required:

1.) Our code already includes all the imports necessary:

```
import pandas as pd
import re
import string
from sklearn.datasets import fetch_20newsgroups
import seaborn as sns
import matplotlib.pyplot as plt
import numpy as np
import nltk
nltk.download('wordnet')        # for lemmatizatin dictinary
from nltk.stem import WordNetLemmatizer
%matplotlib inline
```

2.) Run this step by selecting this chunk and clicking run.

3.) Run all cells up until Deep Learning

4.) To run the deep learning section, you will need to install tensor flow.

5.) Use this command below to install tensor flow:

```
import sys
!{sys.executable} -m pip install tensorflow
```

SET UP

EXECUTING OUR NOTEBOOK

6.) Once you install tensorflow, you can go ahead and run the deep learning cell. All the import functions are already included:

```
import itertools
import os
import numpy as np
import pandas as pd
import tensorflow as tf
from sklearn.preprocessing import LabelBinarizer, LabelEncoder
from sklearn.metrics import confusion_matrix
from tensorflow import keras
from keras.models import Sequential
from keras.layers import Dense, Activation, Dropout
from keras.preprocessing import text, sequence
from keras import utils
```

7.) Now run all remaining cells. Everything should run without any errors.