BBC News Classifier Deployment Instructions for Windows

Download the BBC News Classifier source code from GitHub.

Launch command prompt

cd (change directory) to the location where source code is downloaded.

Create the build distribution wheel for the source code by executing the following command:

```
(machinelearning) C:\Users\mvams\newsclassifier>python setup.py bdist_wheel
running bdist_wheel
running build
running build_py
creating build\lib
creating build\lib\src
copying src\batch.py -> build\lib\src
copying src\__init__.py -> build\lib\src
creating build\lib\src\data
copying src\data\BBCNewsCorpusReader.py -> build\lib\src\data
```

Figure 1: Build Distribution Wheel

Install virtualenv package by executing the following command:

```
C:\Users\mvams>pip install virtualenv

Requirement already satisfied: virtualenv in c:\users\mvams\appdata\local\programs\python\python37\lib\site-packages (16 .0.0)

You are using pip version 10.0.1, however version 18.0 is available.

You should consider upgrading via the 'python -m pip install --upgrade pip' command.

C:\Users\mvams>
```

Create a virtualenv (nice thing to do) machinelearning can be any name but I chose machinelearning. Execute the command in the screenshot below:

```
C:\Users\mvams>virtualenv machinelearning
Using base prefix 'c:\\users\\mvams\\appdata\\local\\programs\\python\\python37'
New python executable in C:\Users\mvams\machinelearning\Scripts\python.exe
Installing setuptools, pip, wheel...done.
C:\Users\mvams>
```

Figure 2: Create virtualenv

Activate the virtualenv by executing the activate.bat file in Scripts folder of virtualenv (machinelearning) as shown in the screenshot below:

```
C:\Users\mvams>cd newsclassifier
C:\Users\mvams\newsclassifier>C:\Users\mvams\machinelearning\Scripts\activate.bat
(machinelearning) C:\Users\mvams\newsclassifier>_
```

Figure 3:Activate virtualenv

Install the Build Distribution Wheel created in Step 2 in the virtualenv by executing the command shown in the screenshot below:

Command Prompt - pip install C:\Users\mvams\newsclassifier\dist\newsclassifier-0.1.0-py3-none-any.whl (machinelearning) C:\Users\mvams\newsclassifier>pip install C:\Users\mvams\newsclassifier\dist\newsclassifier-0.1.0-py3-none-any.whl rocessing c:\users\mvams\newsclassifier\dist\newsclassifier-0.1.0-py3-none-any.whl Collecting yellowbrick (from newsclassifier==0.1.0) Using cached https://files.pythonhosted.org/packages/ca/64/ffa3ae377d0841595335f9ae402ecd777d7a275746c7389feb68c1386110/yellowbrick-0.8-py2.py3-none-any.whl Collecting numpy (from newsclassifier==0.1.0) Using cached https://files.pythonhosted.org/packages/90/ca/fac7871a7c7d78beb78d7d9562b8d5bfce9ff316dc6c2a7ac34927895609/numpy-1.15.1-cp37-none-win_amd64.whl Collecting sklearn (from newsclassifier==0.1.0) Collecting flask (from newsclassifier==0.1.0) Using cached https://files.pythonhosted.org/packages/7f/e7/08578774ed4536d3242b14dacb4696386634607af824ea997202cd0edb4b/Flask-1.0.2-py2.py3-none-any.whl Collecting scipy (from newsclassifier==0.1.0) $Using\ cached\ https://files.pythonhosted.org/packages/c4/f3/752fd6778a9d07fddb2b02dac5895287e594d2d0d156a2a422c710f6a851/scipy-1.1.0-cp37-none-win_amd64.whl$ ollecting nltk (from newsclassifier==0.1.0) Collecting python-dotenv (from newsclassifier==0.1.0) $Using\ cached\ https://files.pythonhosted.org/packages/24/3d/977140bd94bfb160f98a5c02fdfbb72325130f12a325cf993182956e9d0e/python_dotenv-0.9.1-py2.py3-none-any.whl$ Collecting requests (from newsclassifier==0.1.0) Using cached https://files.pythonhosted.org/packages/65/47/7e02164a2a3db50ed6d8a6ab1d6d60b69c4c3fdf57a284257925dfc12bda/requests-2.19.1-py2.py3-none-any.whl ollecting matplotlib>=1.5.1 (from yellowbrick->newsclassifier==0.1.0) Using cached https://files.pythonhosted.org/packages/eb/b7/4a5ae8f5fb745109a9425c4118c449447c8119ded7b401c655e86def677a/matplotlib-2.2.3-cp37-cp37m-win_amd64.whl Collecting scikit-learn>=0.19 (from yellowbrick->newsclassifier==0.1.0) Using cached https://files.pythonhosted.org/packages/ad/af/1288e50e80309d9de6b8ffb44c3cc8c754f1283d124ffa4a9940a96f7539/scikit learn-0.19.2-cp37-cp37m-win amd64.whi

Figure 4: Install News Classifier Wheel

Start the Model Fitting process by executing the FitModel command shown in the screenshot below:

(machinelearning) C:\Users\mvams\newsclassifier>FitModel