System Requirements & Dependencies

Below are libraries that will be found crucial for carrying out the sentiment analysis project using the Python programming language:

- Python 3.8+
- pandas 1.3.0+
- numpy 1.20.0+
- matplotlib 3.4.0+
- seaborn 0.11.0+
- tqdm 4.61.0+
- scikit-learn 1.0.0+
- tensorflow 2.8.0+
- keras 2.8.0+ (included with TensorFlow)
- nltk 3.6.0+
- regex (re) built-in

Dataset:

- CSV files for each project such as pytorch, tensorflow, keras, incubator-mxnet, caffe
- Place files in a directory named ./datasets/
- Each CSV must have columns such as "Title", "Body", "Number" and "class" (sentiment label) Directory Structure:

The following directories should exist or will be created by code:

- ./datasets/ Input CSV files
- ./model results/ Output directory for model results
- ./model results/{project}/ Project-specific output directories

All required packages can be installed using pip or conda. See the manual for instructions on running the project.