

Following steps were carried to setup Fast Text Environment:

1. git clone <https://github.com/facebookresearch/fastText.git>
2. Cd fastText
3. Make

This sets up the FastText environment. Further include the file that was processed for FastText. Which included encoding the labels in FastText understandable format. We performed further steps in the CLI:

1. `cat <train_data_file.txt> | sed -e "s/([.!?,/()])/\1 /g" | tr "[:upper:]" "[:lower:]" > raw.processed_test.txt`

2. Further, the train data was split into train and test in 70:30 ratio.

```
head -n 455000 raw.processed_test.txt > train.txt
```

```
tail -n 195000 raw.processed_test.txt > test.txt
```

3. Once the data is split into test and train, we can build a model and train the data by running the following command :

```
./fasttext supervised -input train.txt -output model_processed -wordNgrams 3
```

4. Once the model has trained, we can get predictions on the test data. Additionally , we can use the console to type in sentences to get predictions

to get predictions for each sentence you type in :

```
./fasttext predict model_processed.bin -
```

To get the accuracy of the built model using cross validation

```
./fasttext test model_processed.bin test.txt
```

To get predictions recorded in a separate file for entire test set:

```
./fasttext predict model_processed.bin test.txt > predictions.txt
```

Once the predictions have been written to an external file, we can preprocess this file in order to get numerical values and then test the accuracy of the predictions by uploading the processed file to Kaggle.