1. How to build the environment for flair:

1.1 The environment is built in anaconda, so need to install anaconda in @hubble. (It should be already installed in @hubble).
Flair is based on PyTorch 1.5+ and Python 3.6+

>conda create -n flair python=3.6

>conda activate flair

>pip install flair

Those commands can install a bunch of packages and build the environment needed for flair.

1.2 Check whether pytorch is installed:

>python3

>>>import torch

>>>print(torch.__version__)

>>>exit()

```
>>> import torch
>>> print(torch.__version__)
1.7.1
```

1.7.1 is the version for pytorch
This means pytorch is correctly installed.

2. Data format

```
16  # define columns
17  columns = {0: 'text', 1: 'ner'}
```

This line defines the format of the data file. It means the first column is the word token in the sentence, and the second column is the label. Below is an example:

```
Organizational O
members O
carry O
with O
them O
mental B-TH
models I-TH
of O
deeply O
ingrained O
assumptions O
, O
```

If your data is in this format, modify it to columns = {0: 'text', 3: 'ner'}

```
SOCCER NN B-NP O
- : O O
JAPAN NNP B-NP B-LOC
GET VB B-VP O
LUCKY NNP B-NP O
WIN NNP I-NP O
, , O O
CHINA NNP B-NP B-PER
IN IN B-PP O
SURPRISE DT B-NP O
DEFEAT NN I-NP O
. . O O
```

3. Run the code in flair

>python3 code_name

Outpt is stored in a folder named “resources”. It has the model file, loss graph and other relevant information. Remove this one when you start a new training.

You can change the embeddings in this line:

```
40  # 4. initialize embeddings
41  embeddings = TransformerWordEmbeddings('roberta-base')
```

More information about TransformerWordEmbeddings can be found here:

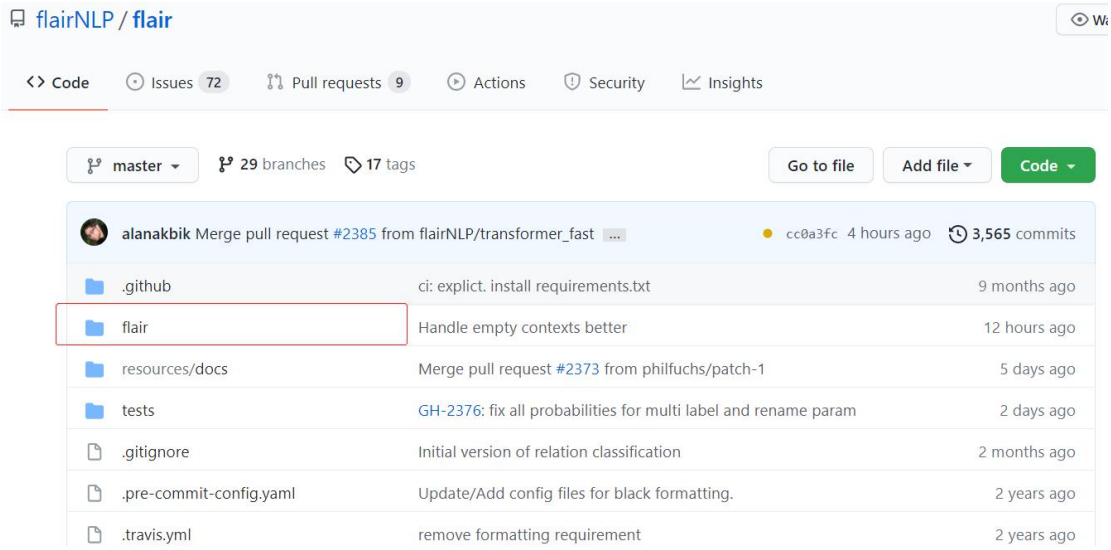
https://github.com/flairNLP/flair/blob/master/resources/docs/embeddings/TRANSFORMER_EMBEDDINGS.md

https://github.com/flairNLP/flair/blob/master/resources/docs/TUTORIAL_4_ELMO_BERT_FLAIR_EMBEDDING.md

More Resources

This is the github repository for flair. It's about almost everything, for example, the source code, tutorials and the environment.
https://github.com/flairNLP/flair

source code



tutorials

Tutorials

We provide a set of quick tutorials to get you started with the library:

- Tutorial 1: Basics
- Tutorial 2: Tagging your Text
- Tutorial 3: Embedding Words
- Tutorial 4: List of All Word Embeddings
- Tutorial 5: Embedding Documents
- Tutorial 6: Loading a Dataset
- Tutorial 7: Training a Model
- Tutorial 8: Training your own Flair Embeddings
- Tutorial 9: Training a Zero Shot Text Classifier (TARS)