

RUNNING BASELINE MODEL

We are preprocessing the data, basically tokenizing the raw medical reports files into sentences and further tokenizing the sentences into words. So, ultimately the raw medical report files are converted into list of list of words with their corresponding NER type tags (BIO format). There are 29 tags/labels for the task which we mentioned in Milestone 2.

Step 1. How to preprocess the raw text files -

Training files -

```
$python preprocessing_data.py --dataDir ./train/gold/ --train
```

After this pre-processing step, a pickle file - train_word_ner_startidx_dict.pickle - is created which has the data in the NER type tag format (BIO) which is used for building the model.

Dev files -

```
$python preprocessing_data.py --dataDir ./dev/gold/ --dev
```

After this pre-processing step, a pickle file - dev_word_ner_startidx_dict.pickle - is created which has the data in the NER type tag format (BIO) which is used for building the model.

Test files -

```
$python preprocessing_data.py --dataDir ./test/gold/ --test
```

After pre-processing step, a pickle file - test_word_ner_startidx_dict.pickle - is created which has the data in the NER type tag format (BIO) which is used for building the model.

Step 2. How to run baseline model (baseline.py)

baseline.py assumes that the data should be in the current working directory in the same folder hierarchy as is submitted with this Milestone 3.

```
$python baseline.py
```

How to evaluate -

Evaluation on Training Data -

```
$ python evaluate.py brat ner ./train/gold/ ./train/system
```

Report (SYSTEM: system):

| SubTrack 1 [NER] | Measure | Micro |
|------------------|-----------|--------|
| <hr/> | | |
| Total (401 docs) | Precision | 0.9792 |
| | Recall | 0.9408 |
| | F1 | 0.9597 |

Evaluation on Dev Data -

```
$ python evaluate.py brat ner ./dev/gold/ ./dev/system
```

Report (SYSTEM: system):

| SubTrack 1 [NER] | Measure | Micro |
|------------------|-----------|--------|
| <hr/> | | |
| Total (193 docs) | Precision | 0.8868 |
| | Recall | 0.8199 |
| | F1 | 0.852 |

Evaluation on Test Data -

```
$ python evaluate.py brat ner ./test/gold/ ./test/system
```

Report (SYSTEM: system):

| SubTrack 1 [NER] | Measure | Micro |
|------------------|-----------|--------|
| <hr/> | | |
| Total (156 docs) | Precision | 0.8918 |
| | Recall | 0.8337 |
| | F1 | 0.8618 |
