Metrics

April 10, 2023

1 Versuch 1 Calculations

[ ]:
```
import sys
sys.path.append('..')

from src.utils import Metrics
from src import DataLoader
```

1.1 Load Files

[ ]:
```
hypothesis_1 = '../data/data_v1/newstest.hyp1'
hypothesis_2 = '../data/data_v1/newstest.hyp2'
hypothesis_3 = '../data/data_v1/newstest.hyp3'
reference = '../data/data_v1/newstest.en'
```

[ ]:
```
hypothesis_1_dl = DataLoader(hypothesis_1)
hypothesis_2_dl = DataLoader(hypothesis_2)
hypothesis_3_dl = DataLoader(hypothesis_3)
reference_dl = DataLoader(reference)
hypothesis_dl = [hypothesis_1_dl,hypothesis_2_dl,hypothesis_3_dl]
```

[ ]:
```
metrics = Metrics()
```

[ ]:
```
for dataloader in hypothesis_dl:
    dataloader.load_data()
```

2 PER

[ ]:
```
for dataloader in hypothesis_dl:
    print("PER Score: ")
    print(metrics.PER(dataloader.tokenize(mode="lines"),reference_dl.
 ↪tokenize(mode="lines")))
```

```
PER Score:
0.25061086676440536
PER Score:
0.2557643609222977
```

```
PER Score:
0.4657988656389296
```

3 WER

[ ]:
```
for dataloader in hypothesis_dl:
    print("WER Score: ")
    print(metrics.WER(dataloader.tokenize(mode="lines"),reference_dl.
 ↪tokenize(mode="lines")))
```

```
WER Score:
0.3644912405408207
WER Score:
0.37188087727871816
WER Score:
0.6282968294163815
```

4 BLEU Score

[ ]:
```
for dataloader in hypothesis_dl:
    print("BLEU Score: ")
    print(metrics.bleu_score(4,dataloader.
 ↪tokenize(mode="lines_words"),reference_dl.tokenize(mode="lines_words")))
```

```
BLEU Score:
0.4850221157121662
BLEU Score:
0.47679649673421626
BLEU Score:
0.18564978528059253
```