train

utterance	slots	intent

13084 rows

will it be rainy in tenino

79 class

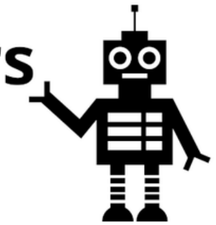
O O O B-condition_description O B-city

7 class

GetWeather

intent classification

ทั้งประโยคไป classify

Simple Transformers 

classification model
bert-base-uncase

```
model_args = {
    "reprocess_input_data": True,
    'train_batch_size':5,
    "use_early_stopping": True,
    "early_stopping_delta": 0.01,
    "early_stopping_metric": "mcc",
    "early_stopping_metric_minimize": False,
    "early_stopping_patience": 2,
    "evaluate_during_training_steps": 500,
    "fp16": False,
    "overwrite_output_dir":True,
    'use_cached_eval_features' : False,
    'max_seq_length': 128,
    'no_cache': True,
    "warmup_ratio":0.06,
    "num_train_epochs":1,
    "adam_epsilon":1e-08,
}
```

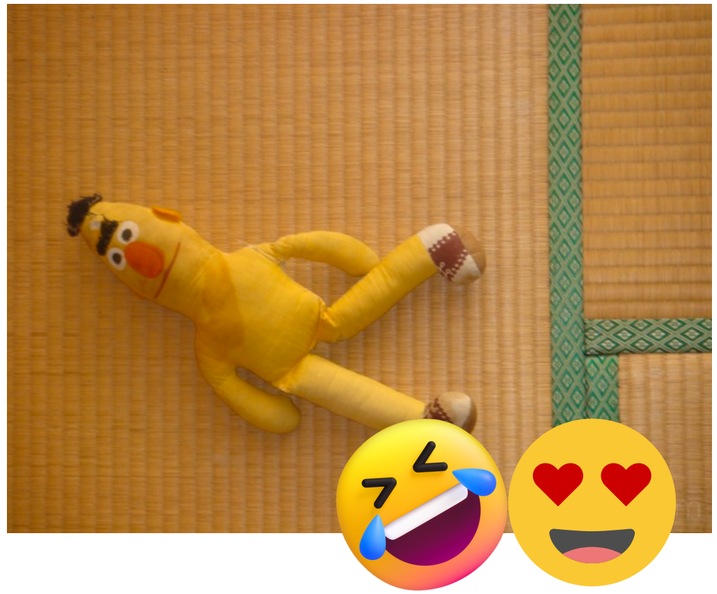
intent classification

public_f1_score=1.0000
private_f1_score=0.9866

bert-fine-tuned

<

bert-base-uncase



obsei-ai/sell-buy-intent-classifier-bert-mini

train

utterance	slots	intent

will it be rainy in tenino

79 class

O O O B-condition_description O B-city

7 class

GetWeather

slot filling

we want

id_word	slot
1_1	o
1_2	o
1_3	o
1_4	b-con
1_5	o
1_6	b-city

1'st sentence

1 2 3 4 5 6

will it be rainy in tenino

ดูคล้ายกับ NER

slot filling

```
all_sentence_id=[]
all_words=[]
all_slots=[]
def collect_word_n_slot(a_train_df,count):
    for idx,rows in a_train_df.iterrows():
        a_utterance=rows["utterance"]
        a_slots=rows["slots"]
        a_t_tokens=nltk.word_tokenize(a_utterance)
        a_t_slots=nltk.word_tokenize(a_slots)
        if len(a_t_tokens)==len(a_t_slots):
            for word in a_t_tokens:
                all_sentence_id.append(count)
                all_words.append(word)
            count+=1
            for slot in a_t_slots:
                all_slots.append(slot)
```

nltk.word_tokenize

1'st **will | it | be | rainy | in | tenino**

o | o | o | b-com | o | b-city

2'nd **give | the | current | book | 4 |stars |**

o | o | b-obj_select | b-com | b-rating_val | b-obj_rati

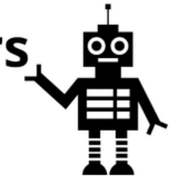
sentence_id	slot	word
1	o	will
1	o	it
1	o	be
1	b-con	rainy
1	o	in
1	b-city	tenino
2	o	give
2	o	the
2	b-object_select	current

```
model_args = {
    "reprocess_input_data": True,
    'train_batch_size':8,
    "use_early_stopping": True,
    "early_stopping_delta": 0.01,
    "early_stopping_metric": "mcc",
    "early_stopping_metric_minimize": False,
    "early_stopping_patience": 2,
    "evaluate_during_training_steps": 500,
    "fp16": False,
    "overwrite_output_dir":True,
    'use_cached_eval_features' : False,
    'max_seq_length': 128,
    'no_cache': True,
    "warmup_ratio":0.06,
    "num_train_epochs":3,
    "adam_epsilon":1e-08,
}
```

slot filling

sentence_id	slot	word
1	o	will
1	o	it
1	o	be
1	b-con	rainy
1	o	in
1	b-city	tenino
2	o	give
2	o	the
2	b-object_select	current

Simple Transformers



NER model

bert-base-uncase

bert_base_case_11.csv Complete · 8h ago	0.9745	0.97596
bert_base_case_finedtuned.csv Complete · 8h ago	0.97523	0.97887
bert_stn (1).csv Complete · 9h ago	0.98106	0.98106
bert_stn.csv Complete · 10h ago	0.97887	0.97742

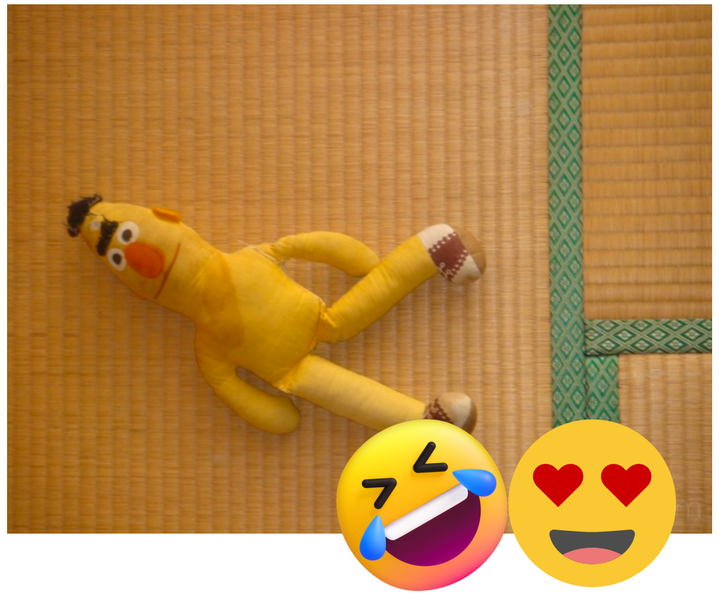
slot filling

public_f1_score=0.9816
private_f1_score=0.9816

bert-base-uncase

bert-fine-tuned

<



dslim/bert-base-NER

การใช้ประโยชน์ intent,slot

sentence_id	slot	word
1	o	will
1	o	it
1	o	be
1	b-con	rainy
1	o	in
1	b-city	tenino
2	o	give
2	o	the
2	b-object_select	current