Actividad NLP – 2.0 – Aplicación de análisis de sentimientos

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Instalación de transformers

```
!pip install transformers
```

Librerias utilizadas

```
import pandas as pd
from transformers import pipeline
```

Modelos pre-entrenados

Los modelos fueron tomados de los siguientes links y los derechos corresponden a sus respectivos autores:

- https://colab.research.google.com/drive/1G4nvWf6NtytiEyiIkYxs03nno5ZupIJn?usp=sharing#scrollTo=9s-KqAx1s6qo

- https://huggingface.co/cardiffnlp/twitter-roberta-base-sentiment-latest

```
# En el reporte se menciona a profundidad el porque fuerom utilizados
# de esta manera.

data = ["You are the worst person ever", "I hate you", "I miss you",
        "Best day of my life", "I've been promoted", "Lol", "My eye
hurts"]
```

Primer Modelo

```
sentiment_pipeline = pipeline("sentiment-analysis")
sentiment_pipeline(data)

No model was supplied, defaulted to distilbert-base-uncased-finetuned-
sst-2-english and revision af0f99b (https://huggingface.co/distilbert-
base-uncased-finetuned-sst-2-english).
Using a pipeline without specifying a model name and revision in
production is not recommended.

[{'label': 'NEGATIVE', 'score': 0.999722421169281},
 {'label': 'NEGATIVE', 'score': 0.9991129040718079},
 {'label': 'POSITIVE', 'score': 0.9993472695350647},
 {'label': 'POSITIVE', 'score': 0.9997342228889465},
```

```
{'label': 'POSITIVE', 'score': 0.998056173324585},
{'label': 'NEGATIVE', 'score': 0.9438178539276123},
{'label': 'NEGATIVE', 'score': 0.9994725584983826}]
```

Segundo modelo

```
specific_model = pipeline(model="finiteautomata/bertweet-base-
sentiment-analysis")
specific_model(data)
```

```
{"model_id":"ac1975a3b6eb41a180e62d0f50545dd8","version_major":2,"version_minor":0}

{"model_id":"25c0163ce7ea440ba79e713b0cd2fc02","version_major":2,"version_minor":0}

{"model_id":"5a07c1d3a038474bbc8f721eba2a7f13","version_major":2,"version_minor":0}

{"model_id":"2576facb08f246688a1542917a2d2354","version_major":2,"version_minor":0}

{"model_id":"11e82b198e8d40499cfbe9bdff76116f","version_major":2,"version_minor":0}

{"model_id":"6b5a7336c0644825b0fddbc7297fcd02","version_major":2,"version_minor":0}

{"model_id":"bfcdcdf7d5fa4ece93ab0550c0d74191","version_major":2,"version_minor":0}
```

```
emoji is not installed, thus not converting emoticons or emojis into
text. Install emoji: pip3 install emoji==0.6.0
```

```
[{'label': 'NEG', 'score': 0.9822311997413635},
 {'label': 'NEG', 'score': 0.9806600213050842},
 {'label': 'POS', 'score': 0.6322749257087708},
 {'label': 'POS', 'score': 0.9914143681526184},
 {'label': 'POS', 'score': 0.8960542678833008},
 {'label': 'POS', 'score': 0.6863202452659607},
 {'label': 'NEG', 'score': 0.922839343547821}]
```

Tercer modelo

```
specific_model = pipeline(model="cardiffnlp/twitter-roberta-base-
sentiment-latest")
specific_model(data)
```

```
{"model_id":"afeaacb07dbc4ed1aea414787ffc4694","version_major":2,"version_minor":0}
```

{"model_id":"693bbea7ee9942e2a1001270bd545f25","version_major":2,"version_minor":0}

Some weights of the model checkpoint at cardiffnlp/twitter-roberta-base-sentiment-latest were not used when initializing RobertaForSequenceClassification: ['roberta.pooler.dense.weight', 'roberta.pooler.dense.bias']
- This IS expected if you are initializing RobertaForSequenceClassification from the checkpoint of a model trained on another task or with another architecture (e.g. initializing a BertForSequenceClassification model from a BertForPreTraining model).
- This IS NOT expected if you are initializing RobertaForSequenceClassification from the checkpoint of a model that you expect to be exactly identical (initializing a BertForSequenceClassification model from a BertForSequenceClassification model).

{"model_id":"39dee0fe57294f7ca9243951adf3ac7c","version_major":2,"version_minor":0}

{"model_id":"f9fec7d7e7ea457488b1e3141693314e","version_major":2,"version_minor":0}

{"model_id":"00ff8fa434a8407bacaf7c741a279127","version_major":2,"version_minor":0}

```
[{'label': 'negative', 'score': 0.931638777256012},
 {'label': 'negative', 'score': 0.7866933345794678},
 {'label': 'neutral', 'score': 0.5362865924835205},
 {'label': 'positive', 'score': 0.9794692993164062},
 {'label': 'positive', 'score': 0.7676277160644531},
 {'label': 'neutral', 'score': 0.4544193148612976},
 {'label': 'negative', 'score': 0.7001491189002991}]
```