LABORATORY SESSION 2 Sentiment Analysis

Objective:

- Do a practical Sentiment Analysis classification in Python.
- Using example code
- · Modifying example code to improve it

Three proposals are offered from which you have to select one.

Upload your results (code & accurary) and a small explanation of your work to "PoliformaT / Espacio"

1. Fine Food Reviews from Amazon

There is a database of Fine Food Reviews in Kaggle.

https://www.kaggle.com/datasets/snap/amazon-fine-food-reviews

Download and put in your Google Drive for using Colab.

Starting example code

https://github.com/Storiesbyharshit/Natural-Language-Processing/blob/master/NLP-Tensorflow-Fine-Food-Dataset/amazon-fine-food-reviews.ipynb

Modify the loading lines to load from your Google Drive

Qualification is from 1 to 5

For simplifying in the example 1,2,3 is BAD and 4,5 is GOOD

First run the example and obtain results

Next try to improve the network topology, hyperparam, or other things to improve results

And much better if you add another class: BAD, MEDIUM, EXCELENT

2. Restaurant Reviews from Amazon

There is a database of Restaurant Reviews in Kaggle.

https://www.kaggle.com/datasets/d4rklucif3r/restaurant-reviews

or as a challenge use this other much larger (you may have to change example code)

https://www.kaggle.com/datasets/joebeachcapital/restaurant-reviews

or this other

https://www.kaggle.com/datasets/vigneshwarsofficial/reviews

Starting example code

https://github.com/Storiesbyharshit/Natural-Language-Processing/blob/master/NLP-Reviews-Classification/nlp-reviews-classification.ipynb

Modify the loading lines to load from your Google Drive

First run the example and obtain results

Next try to improve the network topology, hyperparam, or other things to improve results

And much better if you load other database proposed and add more than one class: BAD, MEDIUM, EXCELENT

3. Wine Reviews

There is a database of wine qualifications with points from 0 to 100.

https://www.kaggle.com/datasets/zynicide/wine-reviews

Download and put in your Google Drive for using Colab.

Starting example code

https://github.com/Storiesbyharshit/Natural-Language-Processing/blob/master/NLP-Wine-Reviews/Wine%20reviews.ipynb

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In the example more than 90 is good, less than 90 is bad.

First run the example and obtain results

Next try to improve the network topology, hyperparam, or other things to improve results

And much better if you add another class: Good, medium, bad