

# Université Abdelmalek Essaadi Faculté ses Sciences et techniques de Tanger Département Génie Informatique



Master: AISD NLP Pr. ELAACHAk LOTFI

### Lab 1

**Objective:** The main purpose behind this lab is to get familiar with Scraping and NLP Pipeline.

### Work to do:

- 1. Use libraries like Scrapy and Beautiful Soup to do scraping from server Arabic web sources concerning a specific domaine.
- 2. Store the raw data on a NoSql database "MongoDB".
- 3. Establishment of NLP Pipeline (Text Cleaning, Tokenization, Stop words, Discretization, Normalization).
- 4. Do the Stemming and Lemmatization, then compare the tow mechanisms.
- 5. Apply Parts of Speech technics based on both Rule based and Machine learning approaches.
- 5. Apply NER Methods.

## **Notes:**

- At the end each student must give a brief synthesis about what he has learn during the proposed lab.
- Push the work in the Github repository and write a brief report in Github readme file.

### **Tools:**

Google colab or Kaggle, gitlab/github, spacy, NLTK.