# Coursework

Instructor: Fouzi Harrag

# Required

- 1. Implement a simple IR tool that includes
- Preprocessing of text
  - Tokenization
  - Stopping
  - Stemming
  - Positional inverted index
- Search execution module that allows:
  - Boolean search
  - Phrase search
  - Proximity search
  - Ranked IR (TFIDF)

# CW1 depends on

- Lectures:
  - Lecture 4: Preprocessing
  - Lecture 5: Indexing
  - Lecture 7: Ranked IR
- Labs:
  - Lab 1: Preprocessing
  - Lab 2: Indexing and Query execution
  - Lab 3: Ranked IR
- Note: By implementing Lab 3, you should have CW1 almost ready

## **Deliverables**

- Code ready to run:
  - Preferred: Python
  - Allowed: Java
  - Other languages are fine, but please ask for approval first
- Report (2-4 pages):
  - Includes: modules implemented and role of each
  - Why you selected to do each step in this way?
- Search Results file:
  - Files containing the search results of provided queries

#### **Assessment**

- To be considered:
  - Search results (automatic marking)
  - Quality of report and explanation for code

- Not highly considered:
  - Speed of the system (unless unreasonably slow!)
  - Quality of code

### Allowed/not allowed

- Allowed:
  - Use libraries for Porter stemming
  - Use ready code for optimization
  - Discuss some functions with your friends
  - Use Moodle Forum to ask question on implementation
- Not Allowed:
  - · Copying code from each other!
  - Share results by any mean!

#### **Timeline**

05 Jan 2021

Initial announcement of CW1Full details of CW1 to be released

Sunday, 15 Feb 2021, 11:59:59pm
Submission deadline

## **Advices**

- Lab 2 + Lab 3 = CW 1
- Implement carefully
- Write efficient & clean code
- Change preprocessing& observe change!
- Test & test & test
- Keep your system as a project to add on as we go in the course