Operating systems 2
Projects' General Guidelines

- Any Teams who plagiarize (copy/paste) will be subject to penalties including drop course.
- All projects must have organized documentation:
  - project description.
  - what you have actually did.
  - team members role.
  - code documentation.
- The team could have 5 - 7 members (no exceptions).
- All projects should be implemented in JAVA and should include GUI

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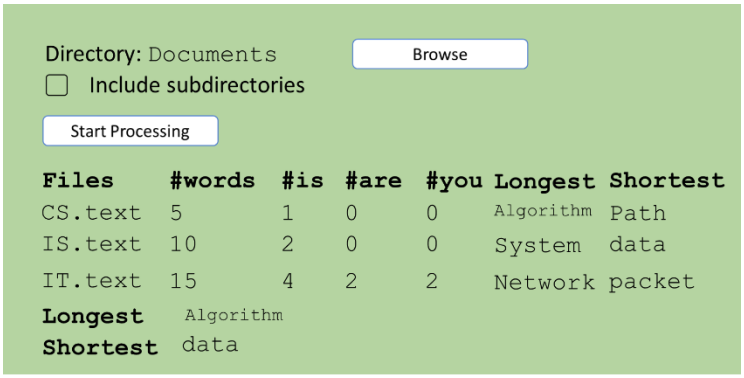
Project #2: Word statistics

Write a program that reads all text files form a specific directory and return word statistics (number of words per file/directory, longest word, shortest word, number of “is”, “are” and “you”).

- The program should have a simple GUI
- The input of the program is a directory
  - It should then search for all text files that reside in that directory
  - There should be an option to check for text files in subdirectories
- While the program is processing text files, it should display them (file names) and the up-to-date statistics. (Statistics should be updated in run-time)

Problem Modeling

- Mian thread identify text files in directory and its subdirectory (one or two level) and show them in GUI
- Each thread explores one or more text files
  - No. of threads is based on the number of processors (core)
- Each thread should send updates to GUI



GUI

- Input
  - Directory path (or selection via browse button)
  - Checkbox for including subdirectories
- Output
  - In table form:
    - #words
    - #is
    - #are
    - #you
    - Longest word per file
    - Shortest word per file
    - Longest word per directory
    - Shortest word per directory

- Note that updates should be in real time.