Lab Task 1 - Stacks
The Web Browser

Problem Description

In this task, the aim is to simulate a navigation flow from a set of web pages and the user's action as expressed by a text file that contains the pages visited and the operations of going back in the browser. Each line of the file will contain the page path and the number of seconds that the user spent on that page. Go back actions are represented by the characters "<=" (left arrow). Here is an example:

```
https://esi.uclm.es/index.php/2022/09/23/santa-tecla-2022/,15
https://esi.uclm.es/index.php/vida-en-la-esi/deportes-y-ocio/torneo-de-ajedrez-gigante/,12
<=
https://esi.uclm.es/index.php/vida-en-la-esi/deportes-y-ocio/torneo-abierto-ajedrez/,19
<=
...
```

A stack should be used to house the flow of pages and simulate the page that is displayed by the browser at each navigation step, writing it through the console. The program should calculate the average spent time on a page from the times on each page, which will be printed at the end. For this calculation, it will be assumed that the time assigned to each page is applied to each visit, whether it is the first or another as a result of the actions of going back.

Technical requirements

- Every class that will be generated should be in a different file, including the possible classes that define exceptions. Try to modularize the code properly.
- Each class/method in the program should include appropriate internal documentation to make it fully understandable. In “Campus Virtual” you can find information to write internal doc (see Lab section).
- In order to use anti-plagiarism and semantic similarity detection systems, source code files may not contain personal data about students such as name, email... Instead, the authors and the group will be identified in the comments of the code with the initials of the students and the assigned team code.

Additional Improvements

- Generation of a .jar file with all classes of the program
- Generation of a batch process file .bat that executes the program using the mentioned library as .jar file.

Running and delivery rules

- The project must be carried out by each of the work groups that have been previously formed in practical classes. It cannot be done individually.
- The delivery and evaluation will be made on the day previously indicated in the Campus Virtual. One of the members of the group will send a compressed .zip file with all the classes that compose the program and the participation template, which will be available in “Campus Virtual”.
- The delivered .zip must be named starting with the team code (A1-02_Stacks.zip).
- For the practice to be evaluated, the program must compile and run correctly.
- Remember that this activity is mandatory to pass the subject.