LAB211 Assignment

Title

The program handles files.

Background

N/A

Program Specifications

Student is required to write a program allowing users to:

1) Read the text file on the computer disk, that contains a simple list of people with name, address, and his/her salary separated by character "**;**" (semi-colon). Each line contains the information of one person;

Ask the user to enter the path to a text file, and the minimum salary. The program should read the list of people in the file and display to persons, who have a salary greater or equal the inputted number. If the salary of some person is in wrong format (not a number, not inputted) to set it to default value zero.

Display list of found persons on the screen in the format of columns (see UI requirements)

2) Read the text file on the computer storage and find all single words from its content, each word counted only once. Write all found words into new text file.
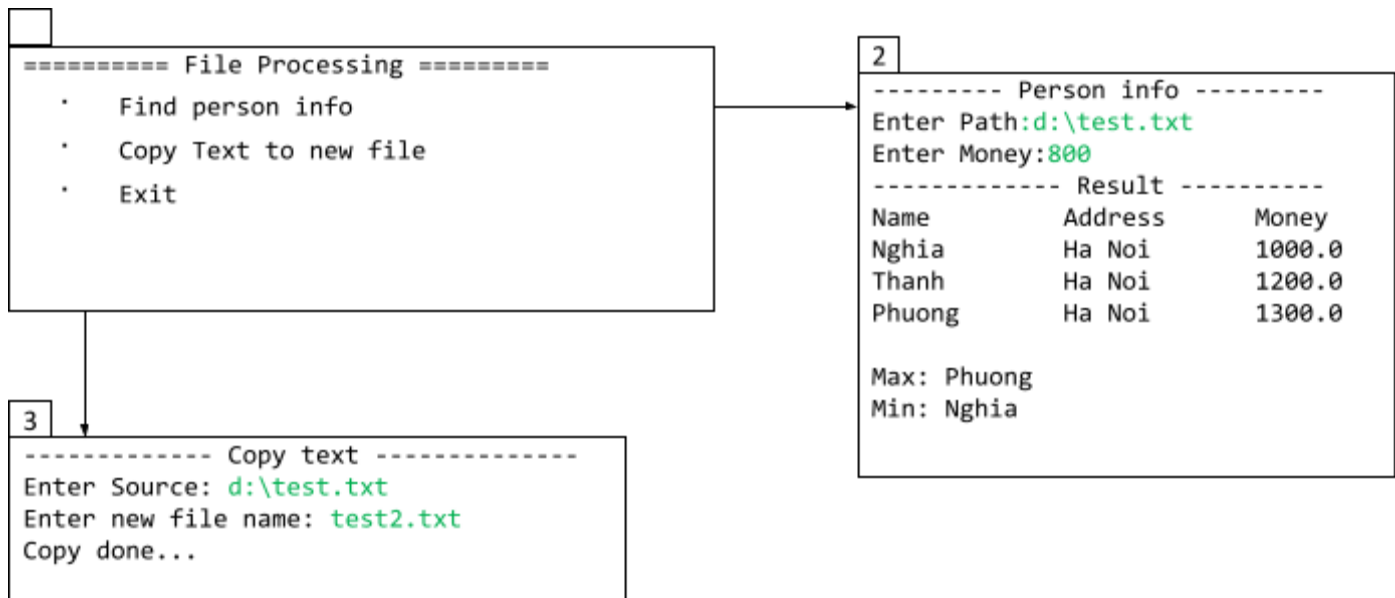
Function details:

Function 1: Display a menu and ask users to select an option.

- Users run the program. The program prompts users to select an option.
- Users select an option, perform **Function 2**.

Function 2: Perform function based on the selected option.

- Option 1: Find person info
  - Request to Enter fullpath of the text file and minimum salary to search.
  - Test data is valid with the following conditions:
    - The amount not less than 0, wrong format, it defaults to 0.
    - The characters in the text file separated by ;
  - Display and classified those with larger amounts of money entered.
  - Display people with the least amount and the most
  - Back to the main screen.
- Option 2: Copy text to new file
  - Request to enter into txt file path
  - Write all single words into new file
  - Back to the main screen.
- Option 3: Exit program.

Expectation of User interface:

```
========== File Processing =========
    ·   Find person info
    ·   Copy Text to new file
    ·   Exit
```

```
2
--------- Person info ---------
Enter Path:d:\test.txt
Enter Money:800
------------- Result ----------
Name            Address         Money
Nghia           Ha Noi          1000.0
Thanh           Ha Noi          1200.0
Phuong          Ha Noi          1300.0

Max: Phuong
Min: Nghia
```

```
3
------------- Copy text --------------
Enter Source: d:\test.txt
Enter new file name: test2.txt
Copy done...
```

Guidelines

Student must implement methods
- getPerson

- **copyWordOneTimes**

in startup code.

Suggest:
Use the class:
java.io.BufferedReade,java.io.BufferedWriter,java.io.File, java.io.FileReader, java.io.FileWriter, java.io.IOException, java.util.ArrayList, java.util.List;
 To word with file.Use the class:

java.util.Collections;
java.util.Comparator;
 To sort the list.Function 1: Displays information of the amount entered.
   o   Must set the funtion: public List< Person > getPerson(String path, double money) throws Exception

   ● Input:

        path: File path.

        money: amount of money

   ● Output:

        List of the person.

        Person who have the most money on the last list

Person who have the least money on the head of list

Exception("Path doesn't exist").

Exception("Can't read file").

Function 2: Copy and eliminate duplicate word in a file to   another file.
- o   Must set the function: public static boolean copyWordOneTimes (String source, String destination) throws Exception.

  - ● Input:

    source: source path.

    destination: the destination path.

  - ●

    Output:copy status.

    Exception("Path doesn't exist").

    Exception("Can't read file").

    Exception("Can't write file").