Cégep de la Gaspésie et des Îles

CAMPUS DE MONTRÉAL
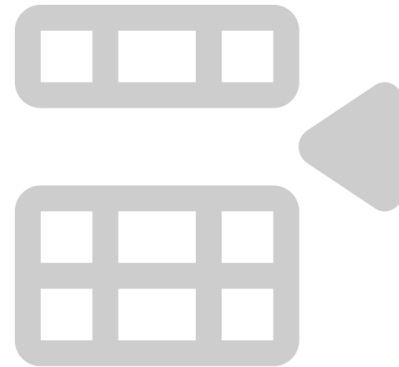
Course: 420-ENM-MT
Teacher: Jonathan Cyr
Date: October 2nd,2018

CLASS 11 – PROJECT – 01

THE ARRAY OF NAMES

Project requirements

- ✓ This project assesses your ability to manipulate the following concepts:
    - o Array of string
    - o Sub programs (methods) with parameters
    - o Implement algorithms to move elements in an array

- ✓ You need to respect the following constraints:
    - o Declare an array of String[] of **10 elements**. (name: **nameList**)
    - o Your software needs a **main menu** with the following characteristics:
        - ▪ It must be formatted exactly like the print screen included
        - ▪ Display the following menu options
            - • 1. Display the list
            - • 2. Insert element at a specific index
            - • 3. Swap two elements (user enters two indexes)
            - • Quit the program
    - o Respect the following constraints
        - ▪ Do not implement user input validation (let's assume the user will never enter a bad element number from a menu or an option)
        - ▪ Your program must be divided into multiple sub-programs (methods)
            - • main: Main loop to display the menu
            - • menuPrint: prints the main menu to the console
            - • vectorPrint: prints the content of the array to the console
            - • optionDisplay: implements option 1 of the menu
            - • optionInsert: implements option 2 of the menu
            - • optionSwap: implements option 3 of the menu
        - ▪ Always return to main menu once an item execution is finished
- ✓ Zip your Java project folder, and upload it on LEA <u>before</u> the beginning of next class.
- ✓ The due date for this project is: Tuesday, October 9th 2018.

How the program should interact with the user:

```
    MAIN MENU
    STUDENT ID:   9758749
    STUDENT NAME: Jonathan Cyr

    1.  Display the list
    2.  Insert an element
    3.  Swap two elements
    4.  Quit

    Your choice?   __
```

1 Main menu of the software

```
    LIST CONTENT:
    1.  Jonathan
    2.  Roxanne
    3.  Jasmine
    4.  Sophianne
    5.
    6.
    7.
    8.
    9.
    10.

    Press ENTER to continue __
```

2 Option 1 of the main menu

```
    INSERT AN ELEMENT
    1.  Jonathan
    2.  Roxanne
    3.  Jasmine
    4.  Sophianne
    5.
    6.
    7.
    8.
    9.
    10.

    Where to insert element?   __
    Enter the name:  _____
```

3 Option 2 of the main menu

```
    SWAP TWO ELEMENTS:
    1.  Jonathan
    2.  Roxanne
    3.  Jasmine
    4.  Sophianne
    5.
    6.
    7.
    8.
    9.
    10.

    From element? __
    To element? __
```

4 Option 3 of the main menu