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| **LAB211 Assignment** | **Type:** | **Short Assignment** |
| **Code:** | **J1.S.P0076** |
| **LOC:** | **100** |
| **Slot(s):** | **2** |

**Title**

Building module csv file format

**Background**

NA

**Program Specifications**

Customer provides a CSV file include fields: ID, Name, Email, Phone, Address.

* ”Name” field requires each word separated bya whitespace and the first character of word is uppercase.
* “Address” field requires each work separated by a whitespace.

However, the CSV file had 2 errors in “Name” and “Address” fields.

Example:

Name: Nguyen van a correct format must be Nguyen Van A

Address: Cau Giay - Ha Noi - Viet Nam Correct format must be: Cau Giay - Ha Noi - Viet Nam

1. Develop a program to Standardize CSV file with menus:import CSV
2. Format Address
3. Format Name
4. Export CSV.
5. Exit

* When the user chooses 1:
  + Require the user input the path of the csv file.
  + Check this file exists or not.
* When the user chooses 2 :
  + Remove redundant whitespace of address fields.
* When the user chooses 3:
  + Remove redundant whitespace of address fields and change the first character of words to uppercase.
* When the user chooses 4:
  + Require to enter a file name and then export a file with format follow the format which user chose.
* When the user chooses 5: Finish the program.

***Function details:***

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

* User runs the program. The program prompts users to select an option.
* User select an option, perform **Function** **2**.

**Function 2:** Perform function based on the selected option..

* Option 1: Import CSV
* Enter file’s path.
* Check file exist or not.
* Option 2: Check Address format
* Remove redundant whitespace of address fields.
* Option 3: Check Name format.
* Remove redundant whitespace and change the first character of words to upper cases character.
* Option 4: Export CSV
* Enter file name.
* Export a file with format follow the format which user chose.
* Option 5: Exit the program.

### *Expectation of User interface:*

--------- Format Address -------Format: Done

2

1

--------- Import CSV -------

Enter Path:d:\import.csv

Import: Done

======= Format CSV Program =======

1. Import CSV

2. Format Address

3. Format Name

4. Export CSV

5. Exit

Please choice one option:

--------- Format Name -------Format: Done

3

--------- Export CSV ------

Enter Path:d:export.csv

Export: Done

4

5

**Guidelines**

**Student must implement methods**

importCSV

formatAddress

formatName

exportCSV

**in startup code.**

Use String manipulation.

File csv’s format following:

ID, Name, Email, Phone, Address

1, Nguyen van a, [anv@gmail.com](mailto:anv@gmail.com), 098889999, Cau Giay - Ha Noi - Viet Nam

**Function 1:** Import csv file.

* Implement function : void importCSV(String path) throws Exception
  + Input:
    - Path: File path.
  + The value output:
    - Set to the global variable dataCSV in class.
    - The list Exception.

**Function 2:** Format Address Colum.

* Implement function: void formatAddress(String dataCSV) throws Exception
  + Input:
    - dataCSV: data in file csv.
  + Output values:
    - Set to global variable dataCSV in class.
    - The list Exception.

**Function 3:** Format Name Colum.

* Implement function: String formatName(String dataCSV) throws Exception
  + Input:
    - dataCSV: data in file csv.
  + Output values:
    - Set to global variable dataCSV in class.
    - The list Exception.

**Function 4:** Export CSV.

* Implement function: void exportCSV(String path) throws Exception
  + Input:
* Path: new file’s path.
* File’s information is gotten from global dataCSV in class.
  + Output values: The Exceptions list.