

CST7284 – Assignment 3

Due date: July 27, 2022

What to submit:

One zip file containing:

- DisplayMyAddressOnTheMap.java
- Address.java
- Person.java
- InputAddresses.txt

Challenge

This is the first in the series of building the project for the course. This project will be valuable enough that you should be able to mention it in your résumé or at least make point of it during any upcoming job interview. It consists of reading a set of real addresses in Greater Ottawa Area (GOA) and of plotting them on a map. To achieve this, we need to go through different stages and now we will be approaching the first one!

At this point, all we need to do is to read the addresses and split every one into appropriate fields.

Classes to create are:

- DisplayMyAddressOnTheMap
 - o This will be the main class and it would contain the main method
 - o It needs to use Address and Person classes
- Address
 - o This class will hold the details of an address
 - o Fields it will contain
 - Street number
 - Street name
 - Street type
 - Street orientation
 - City name
 - Province
 - o Of course, all these fields need to be private with appropriate getters/setters
 - o Postal code, although might exist in the InputAddresses.txt file, it can be ignored and is not required in the OutputAddresses.csv file
 - o Apartment/Unit number can exist as well in the InputAddresses.txt file but needs to be ignored too
- Person
 - o This class will hold the details of a person residing at an address
 - o Fields it will contain
 - First name
 - Last name
 - Spouse first name
 - Spouse last name
 - o Of course, all these fields need to be private with appropriate getters/setters

Input: A text-based file containing complete valid addresses in GOA area, along with name/s of persons living at each address. You need to create this and it will consist part of the marking

- Expected location of file is C:\CST7284\input
- Filename: InputAddresses.txt

Output: A text-based file with each line containing the following list of info, separated by commas

- Expected location of file is C:\CST7284\output
- Filename: OutputAddresses.csv

<First name>,<Last name>,<Spouse first name>*,<Spouse last name>*,<Street number>,<Street name>,<Street type>,<Street orientation>*,<City name>,<Province>**

*: optional fields

** : province should be in two-letter format; i.e. ON, QC...

Sample Input File content

John and Jane Doe
500 St Laurent Blvd
Ottawa, ON
K1K 4T6

David Smith
6537 Laurier Street West
Ottawa, ON

Andrew Lukas, Angela Lincoln
3-175 Woodroffe Ave
Nepean, ON
K2J 4Y7

...

As you can see, addresses can come in different format and with additional data not needed. All addresses are separated by a blank new line

Sample Output File content

John,Doe,Jane,Doe,500,St Laurent,Bld,,Ottawa,ON

David,Smith,,,6537,Laurier,Street,W,Ottawa,ON

Andrew,Lukas,Angela,Lincoln,175,Woodroffe,Ave,,Nepean,ON

...

We will revisit and apply updates to this stage, based on further programming concepts we will explore.