

## CST 8284\_521 – Assignment 3 [5 points]

Due date: July 8, 2019

What to submit:

- PlotMyAddress.java
- Address.java
- Person.java
- InputAddresses.txt
- JSON library adopted (i.e. the jar file that has the classes you end up using; re. HybridActivity 3)

### Challenge

At this point, you know by now how to construct the Google Maps Geocoding API request (Hybrid Activity 2) and you have produced a file that has a list of full records that you can process. It is time to put them together.

You need to read the file generated through Assignment 1 (C:\CST8284\output\OutputAddresses.csv), split every record on the comma, and use every field to build the URL request.

In order to build your URL request, I want you to make use of classes from java.net package, like URL, HttpURLConnection, URLEncoder and any other one you find necessary.

Based on topics covered in chapter 16, please feel free to use your collection of choice. We will keep the assumption for now that there should not be any names collision; i.e. no two distinct addresses with the same set of first and last names.

Once you perform your requests on each address, you should receive the Latitude/Longitude (Lat/Long) set as part of the results returned. In order to figure out how to convert the results into a JSON object, you need to complete Hybrid Activity 3 which covers this part.

Once you have extracted the Lat/Long set, you would need to create a csv file called **LatLong.csv**, located at C:\CST8284\output, and save the following header and set of records in it:

Latitude,Longitude,Name,Icon,IconScale,IconAltitude

<Lat>,<Long>,<First name> <Last name> and\* <Spouse first name>\* <Spouse last name>\*,111,1,1

and\* <Spouse first name>\* <Spouse last name>\*: the “and” only exist if Spouse first and last name exist.

IconScale,IconAltitude: I will explain the usage of these values in class. Just hard code them to the values requested

Please note where the commas are placed now. You need the header to be the first line in this file, exactly as listed above, case sensitive and no spaces !

For the purpose of this assignment, it is fine to copy code from another source. You simply need to clearly indicate the section of code that is copied and the source where this code comes from.

As for submitting your code, as explained in class, you have couple of options:

1. Continue building using your solution of Assignment 1 by marking within class PlotMyAddress.java where you have started coding for Assignment 3
2. Take the solution posted for Assignment 1 and build upon it adopting it as your solution. Please mark where you started coding for assignment 2.