# Criterion B - Solution/Design Overview

Given the user input isn't extensive, the input tables are quite simple, and with that, the usability of the program is effective as there is minor confusion regarding what is required of the user.

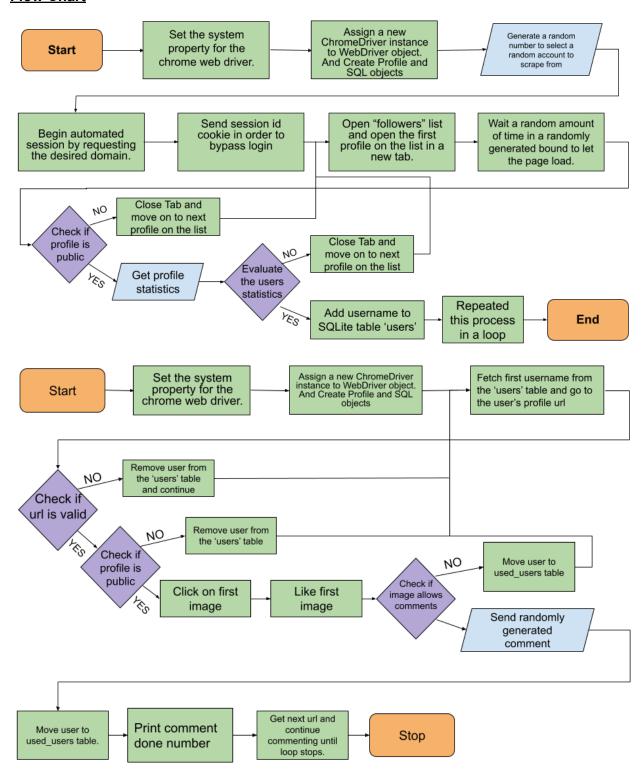
### **Input Table:**

| Input               | DataType | Normal Range  | Example                                       |
|---------------------|----------|---|---|
| Profile<br>Username | String   | Not left blank;<br>otherwise a standard<br>working Instagram<br>username.                           | instagram                                     |
| Comment             | String   | Not left blank;<br>otherwise a general<br>comment of the users<br>choice to comment<br>on profiles. | Hi! This picture is so awesome! Keep it up (: |
| Run Daily           | boolean  | True or false, taken as a checkbox selection.   | true  |
| Scraping Scans      | int      | Must be a round number which is greater than 0.   | 100   |

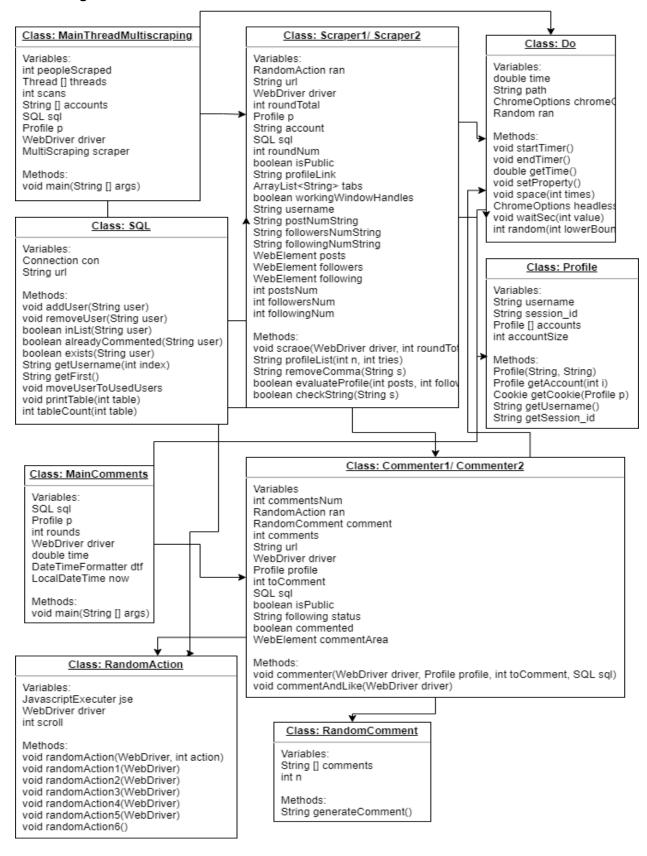
## **Output Table:**

| Output                                  | DataType | Normal Range                         | Example   |
|---|----------|--------------------------------------|---|
| If a certain page is open on Chrome     | boolean  | True or False                        | true  |
| Returns the sessionid of a web session. | String   | A series of random number and digits | AJi4QfFnQugtAOin47Qxu<br>L4hcGhTBdylFQ1e8lDdU<br>uCS_gASRtKgGfL3hSejol<br>nCMaiVoAi1V-0 |
| Comments running                        | boolean  | True or False                        | true  |

#### **Flow Chart**



#### **Class Diagram**



#### **Testing Plan**

- The automation programs with Selenium WebDriver will be written without any GUI in order to simply have it run before it is added to the main IGVA project with GUI. The reason for this is so that it could easily be adjusted to avoid action blocks on Instagram which disable a user from liking, commenting and following people on the platform.
- The simple GUI interface in Netbeans will be created, then, the necessary checks to ensure the right values are imputed and that, for example, an int will not be read as a String.
- After the GUI inputs are working properly, the SQLite database can be integrated into the program. The steps for doing this will require using an SQL class that will be created to handle the communication between the database and the program. Additionally, the imputed data should be added correctly to the database, so, after this is complete, the program will be ready for the other "backend" functions of Selenium WebDriver.
- The program will be given to a fellow classmate in order to test for instances where the wrong data types are imputed or the program is not used as intended. I will then be able to make necessary changes based on the classmates ability to 'break' the program.