**HW04a – “SSW-567-A”**

**Description/Summary of the homework**

Description: This assignment will require that you write code to interface with an external REST-based APIs. For this assignment imagine that you have been asked to develop a function that will interface with GitHub in order to extract and present useful information to your user. The function will communicate using the RESTful services APIs provided by GitHub. The GitHub APIs will allow you to query for information about users, repositories, etc... which can be retrieved using the function, and then be displayed in the application.

Thoughts when writing the code:

* I felt the assignment to be pretty helpful as it teaches us the concept on how to access a public API and retrieve and analyse the data from it that is returned in a JSON format. Also the part wherein we had to get the commits from within each repository was a tricky part as we had to make use of a for-loop to fetch the data within.
* Another useful thing that I felt was good about this assignment is the fact that we had to write test-cases as I feel a developer is a person who not only writes code but also knows how to test the code effectively.
* This is the part that I felt was necessary to make it easy to test the program as only when the main source-code executes properly without any errors can we actually successfully implement the test cases.

Challenges faced:

* I felt that one of the primary challenges in this assignment was the fact that we could make only a limited number of API requests to GitHub and upon reaching a certain limit we are denied access to it and certain test cases fail. Fortunately I was able to pass the same before I exceeded the limit.
* This stops us from testing and executing the code for a certain period of time and this in-turn results in a loss of time and leaves us baffles on as to if our code executes successfully or not.