**CS3210 Linux Application Write-up**

**Project Description:**

For my Linux application I plan to create a command line application called ***tss-live*** (Twitter Stream Scraper Live). This application will utilize Twitter Streaming API and run a textual analysis on user defined keywords (hashtag or word) given a general location. Each matching Tweet will be added to a SQLite database organized by keywords. Once a keyword reaches a user defined threshold (occurrence and timeline) the command line app will call my Amazon SNS instance and send the user a text message alert.

**Use Case:**

* User-1 opens a bash shell and types ***tss-live****.* If this is the first time executing the program, they will be prompted to enter their phone number and a username. After successful phone number input, the user will receive a text message confirmation. Upon confirmation of text message delivery, they will be prompted to enter a keyword, time period, and trending level. They will be given an option to enter additional parameters or start the Twitter Stream scraping. Once started, the application will kick off the ***tss-live*** process, and the user can stop it at any time by entering “*s*”. Once stopped, the user is given the option to export data to a file.
* User-1 has defined valid keywords, a date range, and a data threshold, they will be alerted via text when their threshold has been met.

**Why:**

1. A user wants to be alerted when Donald Trump makes a sexist comment
   1. The user would enter the keywords – Trump, sexist, California (super Democratic state ☺), 1 hour, medium.
2. A user wants to be alerted when pumpkin spice lattes are super popular
   1. The user would enter the keywords - #pumpkinspicelatte, #starbucks, #sorroritygirl, Arizona, 6 hours, high.

**Feature Breakdown:**

* Command line parsing
* User interface (stdin/stdout)
* File I/O to save matching results to a database and ***tss\_live\_profile***
* TCP/IP networking to utilize the Twitter Stream API and Amazon SNS for text message alerts