## CPSC 408 – Assignment 3 Spring 2019

Due: April 17, 2019 11:59pm

## **Overview:**

Now that you are familiar with designing a normalized database schema, your assignment is to create a normalized database schema (at least 5 tables), a data generation tool and finally an application to import the data.

Develop the following Applications/Database.

- 1. Create and design a normalized database schema. This database should consist of least 5 tables in 3NF.
- 2. Once you have completed your database schema, develop a utility/tool that generates data (not normalized, flat file) and exports it to a csv text file. This data that will be used to populate the tables in your normalized database. Your data generation tool should take as a command line parameter the file name to be created and the number tuples to be generated.
  - a. There are plenty of data generation libraries available, but a popular one is Faker for php. This will require a concerted effort, if you don't know php, but there are others similar to Faker for python and Java. Having said that, it is up to you how you will generate your data.
- 3. Last but not least, develop an application that imports your unstructured data form your csv text file into your normalized database.

## **Deliverables:**

Submit your commented source code README etc. to your GitHub repository and provide the link in Blackboard. The README should include any special instructions for running.

## **Grading:**

Your program will be evaluated for correctness and elegance. Make sure you code includes methods and good naming conventions. Use all the good practice methods you have learned throughout the semester.