## CSC 223, Fall 2019, Final Project

Purpose: Exploratory Data Analysis

Due: 11:59pm, Wednesday, May 6, 2020

## Get the assignment code

These instructions assume that your course git repository is set up. Change into your course repository directory and enter the following commands.

```
git fetch assignments
git checkout assignments/master -- final_project
git add final_project
git commit -a
```

This will copy the final\_project directory into your working directory, start tracking the files in the final\_project directory, and commit those files to your local git repository.

## Assignment Description

The goal of this assignment is to find a topic that interests you and find data related to the topic. You are to present some interesting aspect of the data using descriptive text and data visualizations. The following specifications should be considered for this assignment:

- The main file should be an IPython notebook named final\_project.ipynb
- The source of dataset(s) should be cited.
- The dataset(s) should be included with the submission (if possible).

The following are some general guidelines for the data investigation:

- Choose and describe a data set that includes both quantitative and categorical data.
- Visualize some quantitative variable(s) of the data in a way that summarizes the data effectively and write a short observational description.
- Visualize some categorical variable(s) of the data in a way that summarizes the data effectively and write a short observational description.
- Summarize some aspect of the data in a table that involves grouping or pivoting and write a short observational description.
- Describe the dataset(s) in an introductory section.
- Write a section at the end with concluding remarks.

Note that you can deviate from these guidelines depending on nature of your data investigation. Any deviation from the guidelines must be approved by me before your project submission.

For this project, you can earn up to a 5% bonus towards your final course grade by exceeding the basic criteria listed above. The bonus points will be awarded at my discretion depending on the quality of the enhancements. If you choose to implement additional features, add a file named README.txt to your submission containing the details of the additional features.

## Turning in the Assignment

To turn in the assignment execute the following git commands:

```
git add <file>
git commit -a
git push origin master
```

where **<file>** is any file that is needed to execute your final project code. Failure to add any required files will result in a failing grade for the the final project. Note: the most recent commit before the due date will be considered your official submission.