

## CSC310 – Final Project

For the final project you can implement one of three different projects:

1. **Team Project:** APP - max team size 3
2. **Individual Project:** APP
3. **Individual Project:** Data Analysis and Modeling

Details of what each project needs to include in order to get full credit:

### Project 1 - Team Project: APP

Team data science app building project. Team sizes of maximum three people are allowed. Your project should include the following:

- A description of the kind of app you built - perhaps include a screenshot or two of the GUI
- The kind of data you apply your app to with some basic summary statistics
  - see lecture notes
- A list of the responsibilities of each of the team members
- A list of milestones
- A brief report on your implementation and some of the challenges you faced.
  - Perhaps have a screenshot or two of your app running.
- The basic technology you used for your project
- A zip file with your source code and data or a URL to your app.

### Project 2 - Individual Project: APP

Data science app building project. Your project should include the following:

- A description of the kind of app you built - perhaps include a screenshot or two of the GUI
- The kind of data you apply your app to with some basic summary statistics
  - see lecture notes
- A list of milestones
- A brief report on your implementation and some of the challenges you faced.
  - Perhaps have a screenshot or two of your app running.
- The basic technology you used for your project
- A zip file with your source code and data or a URL to your app.

### Project 3 - Individual Project: Data Analysis and Modeling

Individual data analysis project. Your project should include the following:

- Your final project report needs to follow the outline(s) given in notebook 21-report-writing on the course github site. It has to include the following:
  - The data set name and some basic characteristics of the data set
    - how many rows, how many columns, is there a target label, are the variables mostly numeric or categorical – use the *describe* function
    - Basic summary statistics in the form of histograms and bargraphs
  - An outline of the proposed analysis.
    - What question(s) are you trying to answer with your analysis.
    - What kind of ML models of the data are you building? Your final project has to include at least one kind of ML model, e.g., classification, regression or

clustering model and you have to tune the model and report the best possible model. For classification/regression models you will need to also report the 95% confidence interval.

- Your analysis and report need to be done in a Jupyter/Colab notebook. You will need to follow notebook conventions in order to receive full credit: code in code cells, text in formatted markdown cells.