# COMP 3100 – Web Programming

## Project - Iteration 1

### Winter 2021

**This deliverable is due on the February 5th, 2021 at 11:59 PM Newfoundland time. No late submissions will be marked. No submissions done outside D2L will be marked (e.g., email). Please organize yourself with your team to submit the document on time.**

The main goal of the final project of COMP 3100 is to make sure that you can build a real-life application using all content seen in this course. The project is divided into three iterations to provide constructive feedback during the course and make sure that flaws identified in your project can be handled before your final assessment. Your final project has an open subject. This means that you can assemble an application that is more suited to your teams' interest.

Although the topic is open, your project must follow several guidelines that I will list throughout this document. First, it is recommended that you find a dataset with some real data. If you choose a topic that you don't have data on, you will need to create scripts to create your data artificially. Having a dataset with real data is encouraged because you might want to use it in your personal portfolio if you develop an exciting tool. Some public dataset libraries include, but are not limited to, the ones listed in google public datasets (https://cloud.google.com/public-datasets), community list catalogs such as this one https://github.com/awesomedata/awesome-public-datasets#datachallenges or if you want to develop something with Canadian public datasets you may want to try this one https://open.canada.ca/en/open-data.

Your first deliverable is going to be a **report** with a **maximum 4 pages**. You should use Times New Roman font with size 12, single spacing and page number. The cover page, which is counted as a separate page, should include your project title, the team names, number (this will be assigned to your team by the instructor), and student ids. Your report should contain three sections: **(a) introduction, (b) proposal,** and **(c) functionalities**. References can be added if needed, and this can be added on the last page (the total number of pages is 6 pages at maximum). Figures with an overview are also encouraged at this stage to formalize anything about your project.

The introduction section must describe the dataset and your teams' motivation to use it. It also has to describe in general lines what is the type of system you want to build (e.g., a dashboard, data visualization, data exploration, etc).

In the proposal section, the team should describe your application's overall idea, stating a clear goal and what you want to achieve. You may also want to describe if you're going to merge your primary dataset with data provided by third-party APIs (e.g., Twitter, Google maps, Foursquare, weather forecast systems, etc). Accessing third-party APIs is content of week 3, but you might want to consider it at this stage. Answering why you should integrate more than one dataset is essential in this section. Creativity is an element that will be heavily considered in the evaluation of your project, so considering combining your primary dataset with others may lead you to an exciting and novel project. Creativity can also be achieved by handling and/or presenting your data to the user.

Finally, in the last section (functionalities), you should list and describe a decent number of operations that your system should perform. At this stage, you should describe your functionalities in general lines, without giving details of your server or client-side project. These will be assessed in another phase of your project. There is no fixed number of operations to be listed, and the instructional staff will evaluate a degree of trade-off between a number of operations and their complexity. If you provide 4 very complex functionalities for a challenging system, it may be marked with a full score compared to another project providing 20 simple functionalities and received full marks. It is up to your team to decide which path you want to follow or even stay in the middle.

At this stage, the instructional staff wants to evaluate your idea and the feasibility of implementing your tool. We will be providing feedback for you to adequately prepare your project for the course's topics and avoid a single evaluation without giving you the opportunity to fix any problems your team might face during this term while implementing the project.