COMP 3100 – Web Programming

Project - Iteration 1 (P1)

Winter 2022

This deliverable is due on the February 4th, 2022 at 10:00 PM Newfoundland time. No submissions done outside D2L will be marked (e.g., email). Please organize yourself with your team to submit the document on time. Grade deductions for late submissions will be applied, check the syllabus for the detailed grade decrease.

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 of 4 pages**. You should use Times New Roman font with size 12, single spacing and visible page numbers. 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 D2L), 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.

a) 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).

b) 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.

c) 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. Regarding the number of objects you will manipulate in your project, the minimal is 2 (i.e., if designing a retailer website, for example, entities client and purchases might be your manipulated objects). These will be assessed in another phase of your project. The minimal number of

functionalities to be listed is 10 and can include CRUD (Create, Read, Update and Delete) methods.

At this stage, your idea and the feasibility of implementing your tool will be evaluated. Feedback for you will be provided 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.

Your grade will be determined as follows:

Criteria	Level 4	Level 3	Level 2	Level 1	Score
Report format	10 points Followed all the guidelines	8 points Followed most of the guidelines	6 points Followed some parts of the guidelines	2 points Followed none of the guidelines	MAX 10
Introduction	25 points Dataset description and motivation are clear	18 points Dataset description and motivation are presented, with minor points to be clarified	12 points Dataset description and motivation are presented, but major points are not clear (need further clarification)	5 points There was none or poor description of the dataset and the motivation is too vague	MAX 25
Overall idea	20 points Overall idea is clear, stating a clear goal and what you want to achieve	15 points Overall idea is presented, but there are things that need to be clarified	10 points Overall idea lacks clarity and there are elements that need to be considered	5 points Overall idea is not clear with many elements to be addressed	MAX 20
Creativity	20 points The project will provide datasets integrated or rich data visualizations	15 points The project will provide (minor or no) datasets integrated or rich data visualizations	10 points The project will implement only simple functionalities with simple visualizations	5 points The project lacks creativity	MAX 20
Functionalities	25 points The number of functionalities is reached minimum and its descriptions are clear	20 points The number of functionalities reached minimum and its descriptions are fair	15 points The number of functionalities is low and its descriptions lack clarity	5 points The number of functionalities were not reached and are barely described	MAX 25