# **COMP 3100 – Web Programming**

# **Project - Iteration 2**

#### Winter 2021

This deliverable is due on the March 3<sup>rd</sup>, 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 second iteration is to evaluate your server-side code. In the first iteration, your team has submitted your project's overall idea and goals with some functionalities that your system would like to provide. Now it's time to code it!

Your team must use an MVC-like framework, as we have seen in the lectures. The project should have the 'models' with classes and objects that must be manipulated on the server-side. All create, read, update and delete (CRUD) functions for those objects must be created and documented at this stage. Following the MVC pattern, your project code must have the 'controller' folder that will manipulate your application's business logic. All projects must use a database, most of the teams will use MongoDB, but I approved some other options depending on the project's final goal. Finally, you must assemble an API using express to provide all your functionalities over HTTP requests. The last part of this deliverable is your server-side tests using Mocha.

Your project will be evaluated into two parts as follows:

## **Project document (50 marks)**

- 1. The team must provide a document that is an update of the former, documenting what was done to implement the server-side of the application. What functionalities were implemented? What were added that were not planned? What functionalities were removed? Such information should be provided in this document.
- 2. The document must have a section named Models where you document your models and what you can do with them (methods). Why are they necessary for your application?
- 3. The document must have a section named Routes and Controllers that should report the paths used in your API. What each one of them does? How to use them? (Short code-snippets on how to access these paths are welcome in your report)
- 4. You should show how you designed your Data Model collection(s)? Which pattern is it following (embedded or normalized)? Why you chose this particular pattern?
- 5. The document must have a section named Tests documenting the tests performed. Which tools were used? Which tests were performed? Why? How complete are your tests? Did they cover all success and failure cases?

### Project code (50 marks)

- 1. How much of the functionalities you declared in the first iteration are you covering? Is it complete to start assembling the client-side? Is there anything missing?
- 2. Your code should follow the structure detailed in the beginning of this document. Is it following the MVC pattern with the models, controllers and routes properly?
- 3. Is your data being saved properly in the database? How well designed is(are) your collection(s)?
- 4. Are your tests complete, with several success and failing cases? Are you testing your models and your full requests properly? Are they covering success and failing cases? Are you doing simple and complex use cases for testing?
- 5. How well-documented are your functions and codes? Are they easily readable?

<sup>\*</sup> The grading scheme will be provided later, once I find a fair distribution of the marks. This document was released on February 26<sup>th</sup>, 2021.