PROG 3017 Assignment 2 - PHASE 3

**FULL STACK DEVELOPMENT**

# Prerequisites

### Required Labs: Lab 2 (NodeJS) and Lab 3 (Express JS)

**Required Assignments: Assignment 1, Assignment 2-Phases 1 & 2**

# Summary

In Assignment 2-Phase 2, you added to your API by including authentication endpoints (login, register)

Before beginning the outlined requirements below, make sure that you have completed the following pre-requirements:

Have your API successfully authenticating users and returning a JWT in the response header as per Requirement 4 in Phase 2.

# Application Requirements (15 points)

1. **Create a Custom Middleware that Verifies the existence and validity of a JSON Web Token (JWT) (10 Points)**

In a new folder called *Middleware*, create a custom middleware function that you can import into your application and that will do the following:

* Checks for the existence of a JWT in the request header (You can label the header as you wish, *x-auth-token* is suggested). If the token is not present, respond with a 401 Unauthorized HTTP response and send a message stating that Access is Denied. Be sure to terminate the request at this point by sending the response within the middleware.
* Checks that the submitted JWT is valid. Use the *verify* function provided in the *jsonwebtoken* npm package to verify that the submitted token is a valid one. If it is deemed to be not valid, send a response similar to the one described in the previous bullet.
* Allows the request to continue on to the destination endpoint if the JWT is deemed to be valid.

1. **Apply the Middleware to all relevant API endpoints (5 Pts)**

The purpose of your custom middleware is to prevent access to certain endpoints. Apply the middleware to the routes that require it. (ie. Routes that modify data).

# Instructions

1. Don’t forget that a code review is a **necessary** part of this assignment. You will need to show your code to the instructor in class on the due date while going through an evaluation of the site’s functionality. You will need to explain how the code works and complete the code review part of the rubric. You will need to do this to at least a developing level (see the Note in the rubric below).
2. ***Late submissions will be subject to the late penalties laid out in the course outline.***