# **COMP 4669**

## Advanced Web Applications with PHP

Assignment 2

### **Assignment 2**

This assignment will test everything covered in lessons 7 - 10, assumes knowledge of lesson 1 - 6, including

- Object Oriented PHP
- PHP Frameworks
- PHP Libraries
- MVC pattern
  - o JSON Middleware Presentation
  - o Separation of concerns
  - o Model Hydration
  - o Database Interaction table joins, pagination and query building

### **RESTful JSON Application**

This assignment will serve as a headless, RESTful back end application, serving JSON middleware, to power a Single Page Application (SPA) built by a front end Engineer.

A fully working version can be found here <a href="http://comp4669.garytong.ca">http://comp4669.garytong.ca</a>. If done right, yours will work identical.

#### You are to

- Reverse engineer the Ajax requests the SPA makes to the back end service.
  - Use browser developer tools to see the URLs and parameters.
  - It is safe to assume only GET requests with query parameters are made.
- Reverse engineer the payloads from the server responses.

#### General guidelines

- Start with the starter kit that your instructor will provide you.
- Do not decompile the SPA it's easier not to!
- Inside data/ there is a sql.txt file. Use this as seed data; it is for a MySQL database.
  - It is also the seed data you will be marked against.
- Your back end application must serve the exact JSON payload.
- Keep in mind input validation, Model, Single Responsibility Principle.

#### Common "gotchas"

- Some pictures do not have authors, they should still show.
- Some pictures do not have comments, they should still show.
- Return 8 pictures at a time.

### **Submission**

There is no need to submit your vendor/ directory or the composer.phar file. You must submit your composer.json and composer.lock files, and the rest of your source code.

Compress and submit your files to the D2L dropbox (<a href="http://learn.bcit.ca">http://learn.bcit.ca</a>)