

## Lab 2

### COMP 3015: Web Application Development

#### Your mission:

- Start with the **lab-2-starter-kit.zip** project on D2L, under week 2 content.
- Make the **Book** model serializable into a JSON format.
  - This means that the Book class will implement the [JsonSerializable interface](#), and provide an implementation for all methods that this interface defines. In this case, there is only one: **jsonSerialize**. Refer to the slides for an example implementation of the method, or use the official PHP docs.
- Finish implementing the BookRepository class. Methods **saveBook**, **getBookByISBN**, **getBookByTitle**, **deleteBookByISBN** and **updateBook** need to be implemented.

This exercise is meant to help you gain familiarity with OOP in PHP, file I/O and serializing and deserializing objects to a JSON format (using [JsonSerializable](#), [json\\_encode](#), [json\\_decode](#)).

#### Requirements:

- Books must be stored in a file on disk, in a JSON format.
- You must have the Book model implement the JsonSerializable interface.

#### Advice:

- Make sure to use Xdebug when you run into issues, and ask for help when you need it!

#### Submission:

- Make sure you update main.php to test your newly implemented functions.
- Push your project to your GitHub repository and submit the link on D2L.
- Due in week 3.

#### Evaluation:

- Functionality / 10
  - Book class correctly implements JsonSerializable / 2
  - saveBook method / 2
  - getBookByISBN method / 1
  - getBookByTitle method / 1
  - deleteBookByISBN method / 2
  - updateBook method / 2