

# CST8209 – Lab 5 - Objects & Arrays

#### Objective

In this evaluation you will apply what you learnt about JavaScript variable, loops, functions, objects and arrays. Hint: Use the Lab5 Example and video to guide you through the steps below.

#### Requirements

- 1. Download the zipped file folder Lab5.zip
- 2. Extract the files and save to your computer preferably to your course workspace folder
- 3. Open the Lab5 folder in your code editor (Atom)
- 4. You should find the following files in the Lab5 project folder:
  - a) /index.html
  - b) /scripts/script.js

#### Section A – Create Book class

- 1. Create a class "Book" with a constructor that takes: title, author and genre properties
- 2. Create a class method named displayBookInfo() for the Book class in file script.js, this method will return formatted html in this form:(ps see last page)

### **Section B – Function to input a new Book info**(5 points)

- 1. Create a function named addBook() in file script.js
- 2. The addBook() function will prompt the user to enter a new book information
- 3. The addBook() function will return a Book object
- Create variables to prompt and set values for title, author and genre
  (objects already created in script.js are only sample data for the book class that you need to create)

### Section C – Populate array of Books

- 1. Prompt the user to enter at least 3 books by calling addBook() see above for details
- 2. Add each new book object to bookArray[]
- 3. You will need to loop either with a specific number of times or indefinitely with a mechanism to exit the loop (say prompt the user if he want to exit)





## Section D - Display all books in html

1. Display on the html page:

"You have **n** books, please see details below:", where n is the length of the bookArray calculated dynamically.

- 2. Loop over the bookArray[] displaying the book info by calling displayBookInfo()
- 3. The output should look similar to this:

### **Book Info:**

You have 3 books, please see details below:

**Title:** William Shakespeare **Author:** The Tempest **Genre:** Historical Fiction

Title: Stephen King Author: The Shining Genre: Horror

Title: Anne Frank

Author: The Diary of Anne Frank

Genre: Non-Fiction

# **Submit Your Work**

- Save all your work.
- Rename the Lab5 folder to Lab5\_first\_last, then compress it to Lab5\_first\_last.zip Example Lab5\_John\_Doe.zip
- Upload the zipped file to BrightSpace

### Marking Scheme Rubric

This lab has a maximum mark of 3, awarded according to the following rubric.

Criteria	Mark
Superior capability. Lab submitted meets or exceeds expected standards	3
Satisfactory capability, acceptable product/result	2
Marginal capability, substandard product/result	1
No capability, unacceptable product/result. Work not submitted	0

Note that 40% of your final grade comes from the grades you obtained from your labs and assignments.