

COMP 9782 Programming Fundamentals

Lab-4-3 - JavaScript on the Browser hands-on exercises. (8% of the course mark)

Name:

Student Number:

The JavaScript on the Browser Lab is a hands-on workshop designed to provide participants with exercises that use JavaScript code to interact with and manipulate the Document Object Model (DOM) of a webpage. This enables dynamic behavior and interactivity on websites, allowing developers to respond to user actions, update content, and create interactive web applications. Async, Await and Fetch are used for practicing asynchronous JavaScript programming techniques.

Lab objectives:

1. Familiarize participants with Document object model (DOM) and event driven programming concepts.
2. Understand JSON data structure via usage of the JSON.parse() function
3. Gain proficiency in the following:
 - a. Utilization of third party API's to consume data.
 - b. Async and Await to demonstrate JavaScript Asynchronous Programming
 - c. Usage of Fetch API to consume data via HTTP calls.

Lab Prerequisite:

1. **Download** and **extract** the **Lab-4-3.zip** file from **D2L**.
2. **Navigate** to the **directory** where the **files** were **extracted**.
3. Enter the **developer name** as well as the **purpose** on each **HTML, CSS, and JavaScript** file used in this lab.

PasswordComplexity

1. Navigate to `./PasswordComplexity` and open **PasswordComplexity.html**.
2. Look for **HTML Task:** and follow the instructions listed.
3. Navigate to `./PasswordComplexity/assets/js` and open **PasswordComplexity.js**.
4. Look for **JavaScript Task:** and follow the instructions listed.

RandomUser

1. Navigate to `./RandomUser` and open **RandomUser.html**.
2. Look for **HTML Task:** and follow the instructions listed.
3. Navigate to `./RandomUser/assets/js` and open **RandomUser.js**.
4. Look for **JavaScript Task:** and follow the instructions listed.

Note: For reference the complete and working versions of **PasswordComplexity** and

RandomUser are posted on **GitHub**:

<https://github.com/roderickit-bernardo/Full-Stack-Files/tree/main/Programming-Fundamentals/Module-4/Files>