



UTHM

Universiti Tun Hussein Onn Malaysia

UNIVERSITI TUN HUSSEIN ONN MALAYSIA

FACULTY OF COMPUTER SCIENCE AND INFORMATION TECHNOLOGY

(FSKTM)

SEMESTER I 2024/2025

WEB DEVELOPMENT

BIC 21203

SECTION 04

LAB ASSIGNMENT 04B

TITLE

CLIENT-SIDE SCRIPTING (JSON and jQuery)

LECTURER

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| | |
|-----------------|--|
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Instruction: Answer all questions. Write your answer and screenshot the output in Microsoft Word. Push all codes to your GitHub repository and include your GitHub repository link.

Submit through Author in PDF format.

1. Consider the following collection of books:

| | Book 1 | Book 2 |
|------------------------|---------------------|------------------------|
| title | The Great Gatsby | To Kill a Mockingbird |
| author | F. Scott Fitzgerald | Harper Lee |
| publicationYear | 1925 | 1960 |
| genres | Fiction, Classics | Fiction, Coming-of-Age |

Create a JSON representation (.json file) of this collection. You may refer to the following GitHub repository https://github.com/ariffinmzin/webdev_week_9_2023/blob/main/students.json as a reference.

```
{ } books.json > ...
1  [
2      {
3          "title": "The Great Gatsby",
4          "author": "F. Scott Fitzgerald",
5          "publicationYear": 1925,
6          "genres": ["Fiction", "Classics"]
7      },
8      {
9          "title": "To Kill a Mockingbird",
10         "author": "Harper Lee",
11         "publicationYear": 1960,
12         "genres": ["Fiction", "Coming-of-Age"]
13     }
14 ]
```

2. Based on the JSON you have written in Question (1), write an HTML file to display the following details.

- (a) The title of the first book.
- (b) The author of the second book.
- (c) The genres of all books.

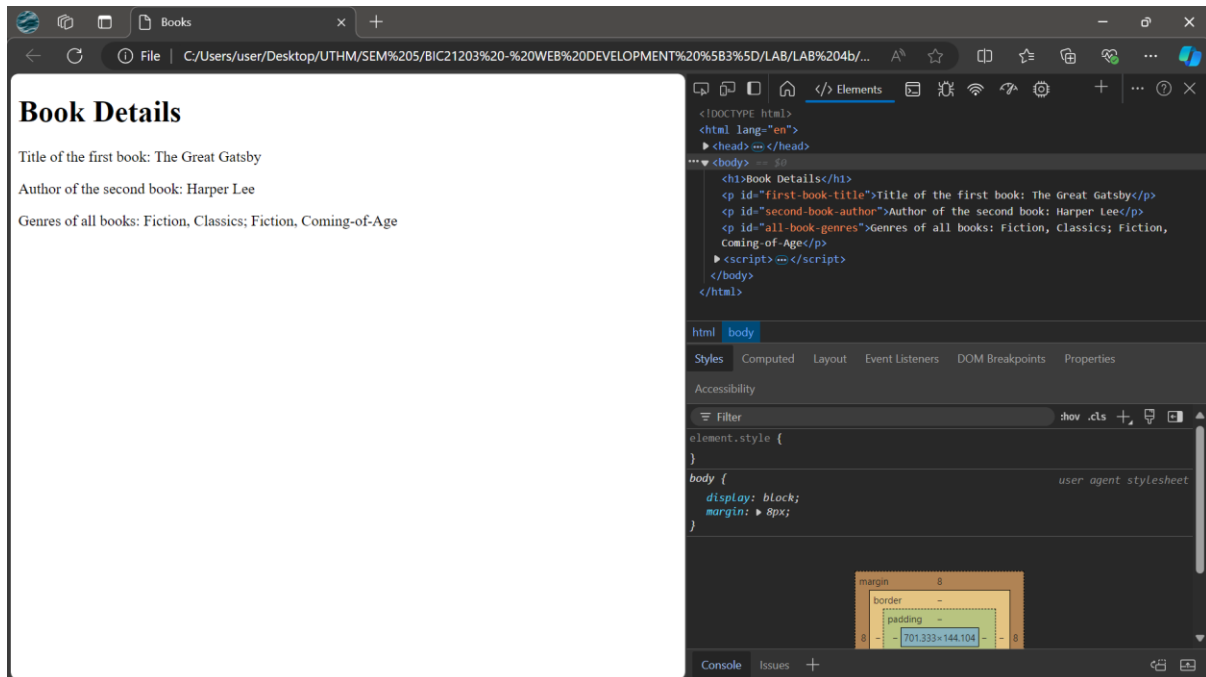
You can display the details through `Inspect - Console` on your browser. You may refer to the following GitHub repository https://github.com/ariffinmzin/webdev_week_9_2023/blob/main/students.html as a reference.

```
<> books.html > ...
1  <!DOCTYPE html>
2  <html lang="en">
3  <head>
4      <meta charset="UTF-8">
5      <meta name="viewport" content="width=device-width, initial-scale=1.0">
6      <title>Books</title>
7      <script src="https://code.jquery.com/jquery-3.7.1.min.js"></script>
8  </head>
9  <body>
10     <h1>Book Details</h1>
11     <p id="first-book-title"></p>
12     <p id="second-book-author"></p>
13     <p id="all-book-genres"></p>
14
15     <script>
16         $(document).ready(function () {
17             const books = [
18                 {
19                     "title": "The Great Gatsby",
20                     "author": "F. Scott Fitzgerald",
21                     "publicationYear": 1925,
22                     "genres": ["Fiction", "Classics"]
23                 },
```

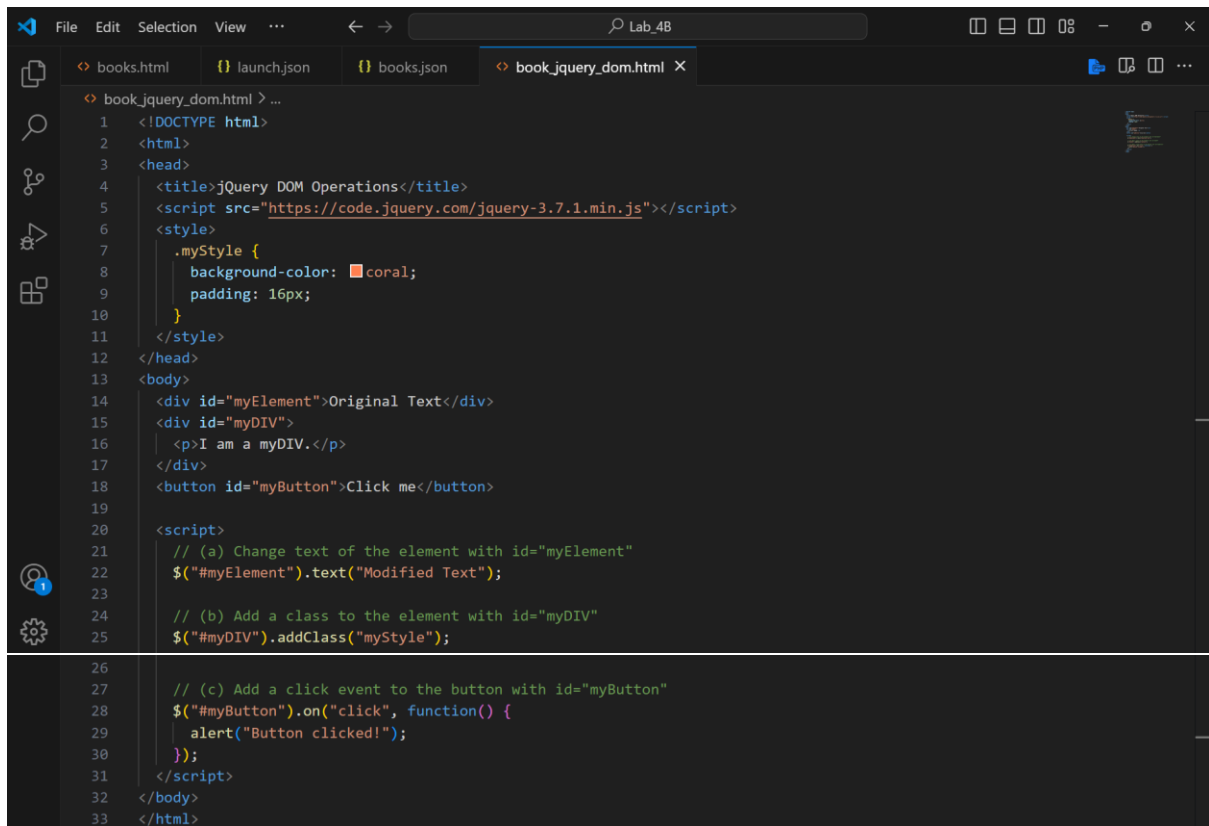
```

24     {
25         "title": "To Kill a Mockingbird",
26         "author": "Harper Lee",
27         "publicationYear": 1960,
28         "genres": ["Fiction", "Coming-of-Age"]
29     }
30 ];
31
32 // (a) Display the title of the first book
33 $("#first-book-title").text("Title of the first book: " + books[0].title);
34
35 // (b) Display the author of the second book
36 $("#second-book-author").text("Author of the second book: " + books[1].author);
37
38 // (c) Display the genres of all books
39 const allGenres = books.map(book => book.genres.join(", ")).join("; ");
40 $("#all-book-genres").text("Genres of all books: " + allGenres);
41 });
42 </script>
43 </body>
44 </html>

```



3. Rewrite the HTML code below with the jQuery statements that are equivalent to the JavaScript DOM statements in a, b, and c.



```
1 <!DOCTYPE html>
2 <html>
3 <head>
4   <title>jQuery DOM Operations</title>
5   <script src="https://code.jquery.com/jquery-3.7.1.min.js"></script>
6   <style>
7     .myStyle {
8       background-color: coral;
9       padding: 16px;
10    }
11  </style>
12 </head>
13 <body>
14   <div id="myElement">Original Text</div>
15   <div id="myDIV">
16     <p>I am a myDIV.</p>
17   </div>
18   <button id="myButton">Click me</button>
19
20   <script>
21     // (a) Change text of the element with id="myElement"
22     $("#myElement").text("Modified Text");
23
24     // (b) Add a class to the element with id="myDIV"
25     $("#myDIV").addClass("myStyle");
26
27     // (c) Add a click event to the button with id="myButton"
28     $("#myButton").on("click", function() {
29       alert("Button clicked!");
30     });
31   </script>
32 </body>
33 </html>
```

GITHUB LINK:

https://github.com/wanai220118/Lab_4B