

CCPS530 Lab 6 – Technical Report

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7. Add screenshots of webpages to your report

Main Page (<http://localhost:80>)



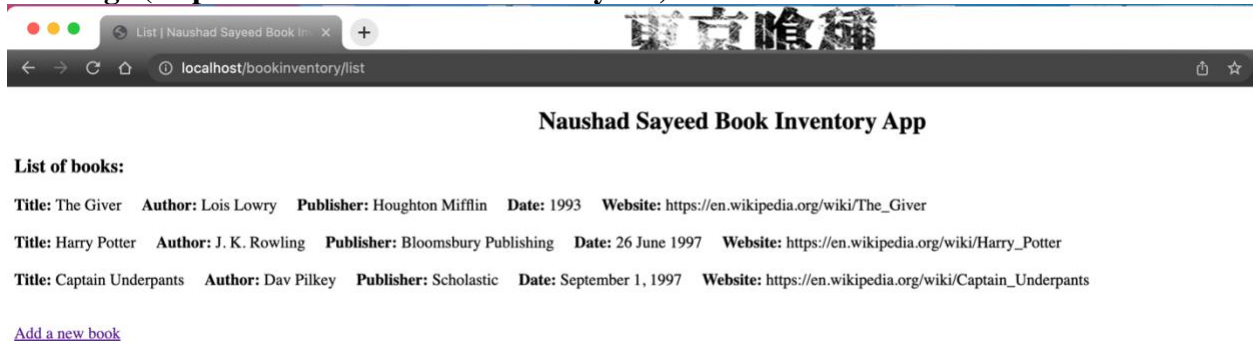
Main Page Validation – Code from “View Page Source” (<view-source:http://localhost/>) in Chrome

A screenshot of the 'Nu Html Checker' tool. The tool's interface is dark blue. It shows the HTML source code of the page being checked. The code is as follows:

```
<!DOCTYPE html><html lang="en-US"><head><meta charset="UTF-8"><title>Naushad Sayeed Book Inventory App</title></head><body><h1 style="text-align:center">Naushad Sayeed Book Inventory App</h1><h2 style="text-align:center"><a href="/bookinventory/list">Click here to view list!</a></h2></body></html>
```

The tool also shows a 'Check' button and a 'Message Filtering' section. A green bar at the bottom of the tool indicates 'Document checking completed. No errors or warnings to show.' Below this, the 'Source' section shows the same HTML code. At the bottom, it says 'Used the HTML parser. Total execution time 5 milliseconds.'

List Page (<http://localhost:80/bookinventory/list>)



List Page Validation – Code from “View Page Source” (view-source:http://localhost/bookinventory/list) in Chrome

Nu Html Checker

This tool is an ongoing experiment in better HTML checking, and its behavior remains subject to change

Showing results for contents of text-input area

Checker Input

Show source outline image report

Check by text input CSS

```
<!DOCTYPE html><html lang="en-US"><head><meta charset="UTF-8"><title>List | Naushad Sayeed Book Inventory</title></head><body><h2 style="text-align:center">Naushad Sayeed Book Inventory App</h2><h3>List of books:</h3><p><b>Title: </b>The Giver<b>;</b><b>Author: </b>Lois Lowry<b>;</b><b>Publisher: </b>Houghton Mifflin<b>;</b><b>Date: </b>1993<b>;</b><b>Website: </b>https://en.wikipedia.org/wiki/The_Giver<br><b>Title: </b>Harry Potter<b>;</b><b>Author: </b>J. K. Rowling<b>;</b><b>Publisher: </b>Bloomsbury Publishing<b>;</b><b>Date: </b>26 June 1997<b>;</b><b>Website: </b>https://en.wikipedia.org/wiki/Harry_Potter<br><b>Title: </b>Captain Underpants<b>;</b><b>Author: </b>Dav Pilkey<b>;</b><b>Publisher: </b>Scholastic<b>;</b><b>Date: </b>September 1, 1997<b>;</b><b>Website: </b>https://en.wikipedia.org/wiki/Captain_Underpants<br></p><p><a href="/bookinventory/add">Add a new book</a></body></html>
```

Use the Message Filtering button below to hide/show particular messages, and to see total counts of errors and warnings.

Document checking completed. No errors or warnings to show.

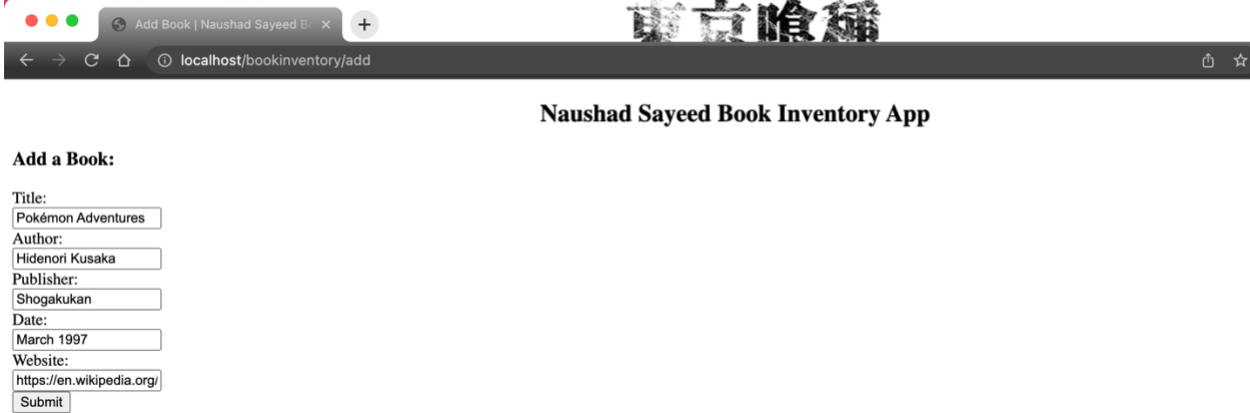
Source

```
1. "
2. <!DOCTYPE html><html lang="en-US"><head><meta charset="UTF-8"><title>List | Naushad Sayeed Book Inventory App</h2><h3>List of books:</h3><p><b>Title: </b>The Giver<b>;</b><b>Author: </b>Lois Lowry<b>;</b><b>Publisher: </b>Houghton Mifflin<b>;</b><b>Date: </b>1993<b>;</b><b>Website: </b>https://en.wikipedia.org/wiki/The_Giver<br><b>Title: </b>Harry Potter<b>;</b><b>Author: </b>J. K. Rowling<b>;</b><b>Publisher: </b>Bloomsbury Publishing<b>;</b><b>Date: </b>26 June 1997<b>;</b><b>Website: </b>https://en.wikipedia.org/wiki/Harry_Potter<br><b>Title: </b>Captain Underpants<b>;</b><b>Author: </b>Dav Pilkey<b>;</b><b>Publisher: </b>Scholastic<b>;</b><b>Date: </b>September 1, 1997<b>;</b><b>Website: </b>https://en.wikipedia.org/wiki/Captain_Underpants<br></p><p><a href="/bookinventory/add">Add a new book</a></body></html>
```

Used the HTML parser.

Total execution time 8 milliseconds.

Add Book Page (http://localhost:80/bookinventory/add)



Naushad Sayeed Book Inventory App

Add a Book:

Title:

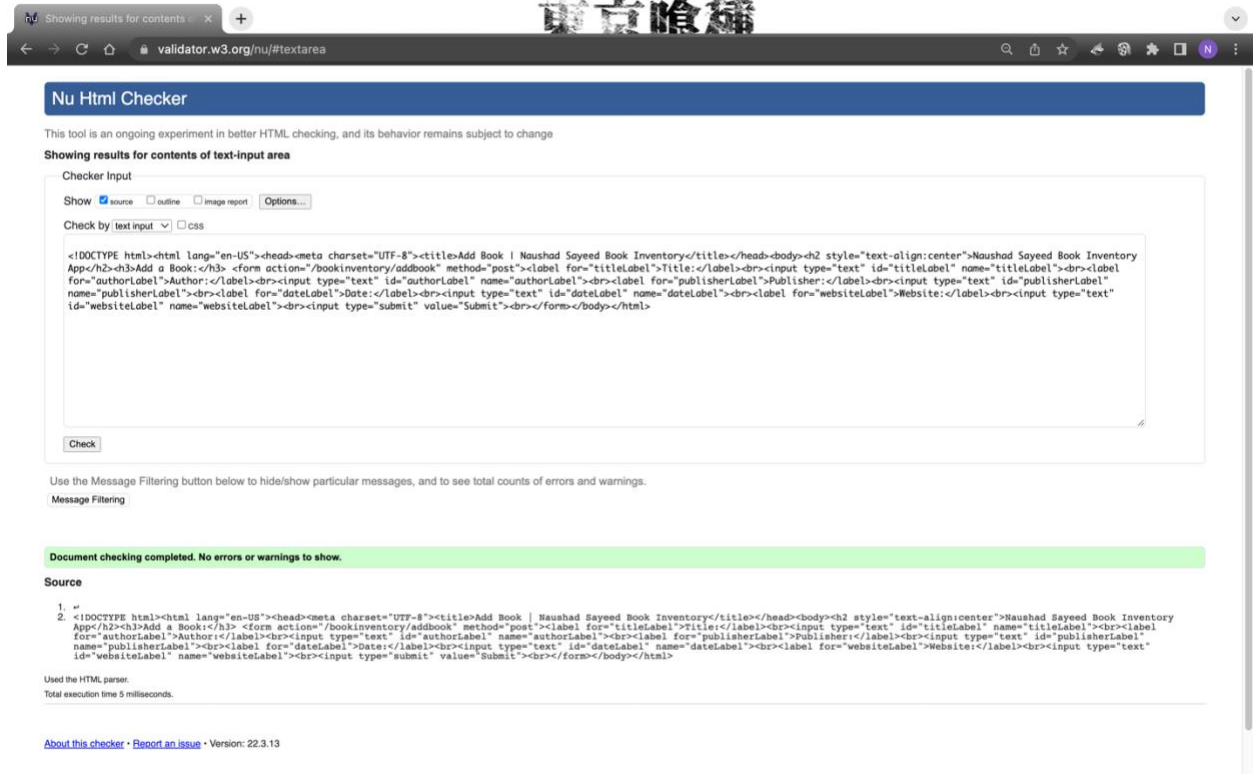
Author:

Publisher:

Date:

Website:

Add Book Page Validation – Code from “View Page Source” (view-source:http://localhost/bookinventory/add) in Chrome



The screenshot shows the Nu Html Checker interface in a browser. The address bar shows the URL `validator.w3.org/nu/#textarea`. The page title is "Nu Html Checker". Below the title, there is a section for "Checker Input" with a text area containing the following HTML code:

```
<!DOCTYPE html><html lang="en-US"><head><meta charset="UTF-8"><title>Add Book | Naushad Sayeed Book Inventory</title></head><body><h2 style="text-align:center">Naushad Sayeed Book Inventory App</h2><h3>Add a Book</h3> <form action="/bookinventory/addbook" method="post"><label for="titleLabel">Title:</label><br><input type="text" id="titleLabel" name="titleLabel"><br><label for="authorLabel">Author:</label><br><input type="text" id="authorLabel" name="authorLabel"><br><label for="publisherLabel">Publisher:</label><br><input type="text" id="publisherLabel" name="publisherLabel"><br><label for="dateLabel">Date:</label><br><input type="text" id="dateLabel" name="dateLabel"><br><label for="websiteLabel">Website:</label><br><input type="text" id="websiteLabel" name="websiteLabel"><br><input type="submit" value="Submit"></form></body></html>
```

Below the code area is a "Check" button. Underneath, there is a "Message Filtering" section with a green bar indicating "Document checking completed. No errors or warnings to show." The "Source" section shows the same HTML code as above. At the bottom, there is a footer with links for "About this checker", "Report an issue", and "Version: 22.3.13".

View Added Book Page (<http://localhost:80/bookinventory/addbook>) after adding the book.

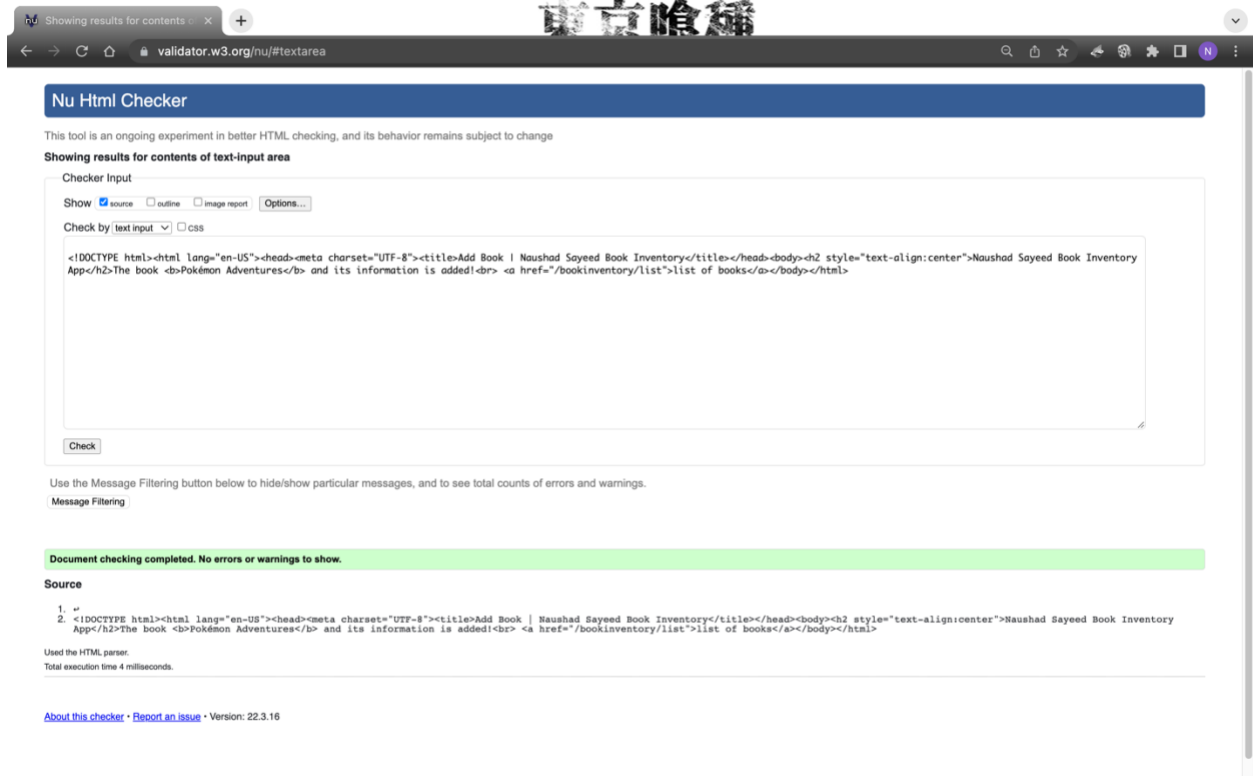


The screenshot shows a web browser window with the address bar displaying `localhost/bookinventory/addbook`. The page title is "Add Book | Naushad Sayeed B...". The page content is mostly obscured by a large, stylized watermark that reads "東京陰謀" (Tokyo Conspiracy).

Naushad Sayeed Book Inventory App

The book [Pokémon Adventures](#) and its information is added!
[list of books](#)

View Added Book Page Validation – Code from “View Page Source” (view-source:http://localhost/bookinventory/add) in Chrome

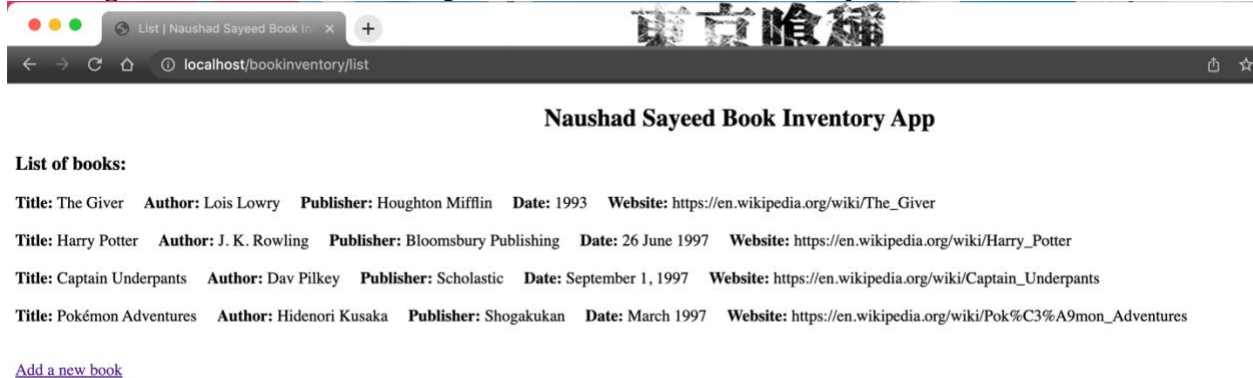


The screenshot shows the Nu Html Checker interface in a Chrome browser. The address bar shows the URL `validator.w3.org/nu/#textarea`. The page title is "Nu Html Checker". Below the title, there is a description: "This tool is an ongoing experiment in better HTML checking, and its behavior remains subject to change". The main section is "Showing results for contents of text-input area". Under "Checker Input", there are options to show "source" (checked), "outline", and "image report", and a "Check" button. The input area contains the following HTML code:

```
<!DOCTYPE html><html lang="en-US"><head><meta charset="UTF-8"><title>Add Book | Naushad Sayeed Book Inventory</title></head><body><h2 style="text-align:center">Naushad Sayeed Book Inventory App</h2><h3>The book <b>Pokémon Adventures</b> and its information is added!<br> <a href="/bookinventory/list">list of books</a></body></html>
```

Below the input area, there is a "Check" button. Underneath, there is a "Message Filtering" section. A green bar indicates "Document checking completed. No errors or warnings to show." Below this, the "Source" section shows the HTML code again, with line numbers 1 and 2. At the bottom, there is a link "About this checker · Report an issue · Version: 22.3.16".

List Page after Added Book (<http://localhost:80/bookinventory/list>)



The screenshot shows the Naushad Sayeed Book Inventory App list page in a Chrome browser. The address bar shows the URL `localhost/bookinventory/list`. The page title is "List | Naushad Sayeed Book Inventory App". The main heading is "Naushad Sayeed Book Inventory App". Below the heading, there is a section "List of books:". The list contains the following items:

- Title:** The Giver **Author:** Lois Lowry **Publisher:** Houghton Mifflin **Date:** 1993 **Website:** https://en.wikipedia.org/wiki/The_Giver
- Title:** Harry Potter **Author:** J. K. Rowling **Publisher:** Bloomsbury Publishing **Date:** 26 June 1997 **Website:** https://en.wikipedia.org/wiki/Harry_Potter
- Title:** Captain Underpants **Author:** Dav Pilkey **Publisher:** Scholastic **Date:** September 1, 1997 **Website:** https://en.wikipedia.org/wiki/Captain_Underpants
- Title:** Pokémon Adventures **Author:** Hidenori Kusaka **Publisher:** Shogakukan **Date:** March 1997 **Website:** https://en.wikipedia.org/wiki/Pok%C3%A9mon_Adventures

At the bottom, there is a link [Add a new book](#).

List Page Validation after Added Book – Code from “View Page Source” (view-source:http://localhost/bookinventory/list) in Chrome

Nu Html Checker

This tool is an ongoing experiment in better HTML checking, and its behavior remains subject to change

Showing results for contents of text-input area

Checker Input

Show source outline image report

Check by text input css

```
<!DOCTYPE html><html lang="en-US"><head><meta charset="UTF-8"><title>List | Naushad Sayeed Book Inventory</title></head><body><h2 style="text-align:center">Naushad Sayeed Book Inventory
App</h2><h3>List of books:</h3> <p><b>Title: </b>The Giver<b>
<b>Author: </b>Lois Lowry<b>
<b>Publisher: </b>Houghton
Mifflin<b>
<b>Date: </b>1993<b>
<b>Website: </b>https://en.wikipedia.org/wiki/The_Giver<br>
<b>Title: </b>Harry
Potter<b>
<b>Author: </b>J. K. Rowling<b>
<b>Publisher: </b>Bloomsbury Publishing<b>
<b>Date: </b>26 June
1997<b>
<b>Website: </b>https://en.wikipedia.org/wiki/Harry_Potter<br>
<b>Title: </b>Captain Underpants<b>
<b>Author: </b>Dav
Pilkey<b>
<b>Publisher: </b>Scholastic<b>
<b>Date: </b>September 1, 1997<b>
<b>Website:
</b>https://en.wikipedia.org/wiki/Captain_Underpants<br>
<b>Title: </b>Pokémon Adventures<b>
<b>Author: </b>Hidenori Kusaka<b>
<b>Publisher: </b>Shogakukan<b>
<b>Date: </b>March 1997<b>
<b>Website: </b>https://en.wikipedia.org/wiki/Pokémon_Adventures<br>
</p><a href="/bookinventory/add">Add a new book</a></body></html>
```

Use the Message Filtering button below to hide/show particular messages, and to see total counts of errors and warnings.

Message Filtering

Document checking completed. No errors or warnings to show.

Source

```
1. "
2. <!DOCTYPE html><html lang="en-US"><head><meta charset="UTF-8"><title>List | Naushad Sayeed Book Inventory</title></head><body><h2 style="text-align:center">Naushad Sayeed Book Inventory
App</h2><h3>List of books:</h3> <p><b>Title: </b>The Giver<b>
<b>Author: </b>Lois Lowry<b>
<b>Publisher: </b>Houghton
Mifflin<b>
<b>Date: </b>1993<b>
<b>Website: </b>https://en.wikipedia.org/wiki/The_Giver<br>
<b>Title: </b>Harry
Potter<b>
<b>Author: </b>J. K. Rowling<b>
<b>Publisher: </b>Bloomsbury Publishing<b>
<b>Date: </b>26 June
1997<b>
<b>Website: </b>https://en.wikipedia.org/wiki/Harry_Potter<br>
<b>Title: </b>Captain Underpants<b>
<b>Author: </b>Dav
Pilkey<b>
<b>Publisher: </b>Scholastic<b>
<b>Date: </b>September 1, 1997<b>
<b>Website:
</b>https://en.wikipedia.org/wiki/Captain_Underpants<br>
<b>Title: </b>Pokémon Adventures<b>
<b>Author: </b>Hidenori Kusaka<b>
<b>Publisher: </b>Shogakukan<b>
<b>Date: </b>March 1997<b>
<b>Website: </b>https://en.wikipedia.org/wiki/Pokémon_Adventures<br>
</p><a href="/bookinventory/add">Add a new book</a></body></html>
```

Used the HTML parser.

Total execution time 15 milliseconds.

Codes for the Webpages

Code for index.html

```
var express = require('express');
var app = express();

app.use(express.json() ); // to support JSON-encoded bodies
app.use(express.urlencoded({ // to support URL-encoded bodies
  extended: false
}));
```



```

books.push(new_json);
//Code below is where contents get printed out in HTML.
res.send('<!DOCTYPE html><html lang="en-US"><head><meta charset="UTF-8"><title>Add Book | Naushad
Sayeed Book Inventory</title></head><body><h2 style="text-align:center">Naushad Sayeed Book Inventory
App</h2>The book <b> + req.body.titleLabel+ '</b> and its information is added!<br> <a
href="/bookinventory/list">list of books</a></body></html>');
}
);

app.listen(80); //Port 80 is default port

```

Code for book.json

```

{
  "book1": {
    "title": "The Giver",
    "author": "Lois Lowry",
    "publisher": "Houghton Mifflin",
    "date": "1993",
    "website": "https://en.wikipedia.org/wiki/The_Giver"
  },
  "book2": {
    "title": "Harry Potter",
    "author": "J. K. Rowling",
    "publisher": "Bloomsbury Publishing",
    "date": "26 June 1997",
    "website": "https://en.wikipedia.org/wiki/Harry_Potter"
  },
  "book3": {
    "title": "Captain Underpants",
    "author": "Dav Pilkey",
    "publisher": "Scholastic",
    "date": "September 1, 1997",
    "website": "https://en.wikipedia.org/wiki/Captain_Underpants"
  }
}

```

8a. Write a technical report explaining your design choices and what you used to test the RESTful endpoints from number 4 and 5.

So, for my design choices, I just added the stuff for the required pages with bold texts for the categories and headings. I didn't add any CSS styles since it is not required, I just added what is needed.

For my RESTful endpoints from number 4 and 5, I used the browser (Google Chrome) to test out the pages for those. I used `app.get()` feature on the `app.js` files in order to include the endpoints from those numbers.

8b. How did you consume and parse JSON?

I used these 3 lines to consume and parse JSON:

```
const fs = require('fs');
let rawdata = fs.readFileSync('book.json');
let bookJSON = JSON.parse(rawdata);
```

I created a constant "fs" so I can use it in the "rawdata" variable to get the "book.json" file. Then I created another variable called "bookJSON" to parse the rawdata so that way I'm successfully able to get values from that and put it on the array. (For example, to get the title of "book1", I simply put `bookJSON["book1"]["title"]` which equals to that.)

8c. How long did you spend on this lab? Length of time includes readings and research and code experimentation. State time involved in readings and research as well as code experimentation sessions.

It took me 20 hours total to finish this code:

- 10 hours in readings and research such as going through some of your modules properly while taking notes so I could fully understand how things work.
- 5 hours of research on how to properly use JSON with express JS.
- 5 hours of code experimentation and then I finished everything.