# Module 2: Lab 1, Java Script

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**Documentation:** Importing Required Modules:

The code starts by importing necessary Node.js modules such as http, url, fs, and replaceTemplate. This is a good practice as it organizes the code and makes it modular.

**Reading Data from Files:**

The code reads data from two files: data.json and templateCourse.html. It uses fs.readFileSync to read these files synchronously. This approach is suitable for small files and simple applications. However, it may not be efficient for larger files or in production environments where asynchronous file reading would be preferred.

**Parsing JSON Data:**

After reading data.json, the code parses it into a JavaScript object using JSON.parse. This is necessary to work with the data as an object in the application.

**Creating an HTTP Server:**

The code creates an HTTP server using http.createServer(). This server listens for incoming requests and responds accordingly.

**Request Handling:**

Inside the request handling function, the code uses the url.parse method to parse the request URL and extract query and pathname. It also checks if the id exists in the query.

The code then checks if the pathname is '/' or /courses and responds accordingly. This is where the HTML template is replaced with dynamic data.

**Template Replacement:**

The code uses the replaceTemplate function to replace placeholders in the HTML template with data from the course object. This is a good separation of concerns and promotes maintainability.

**Response Handling:**

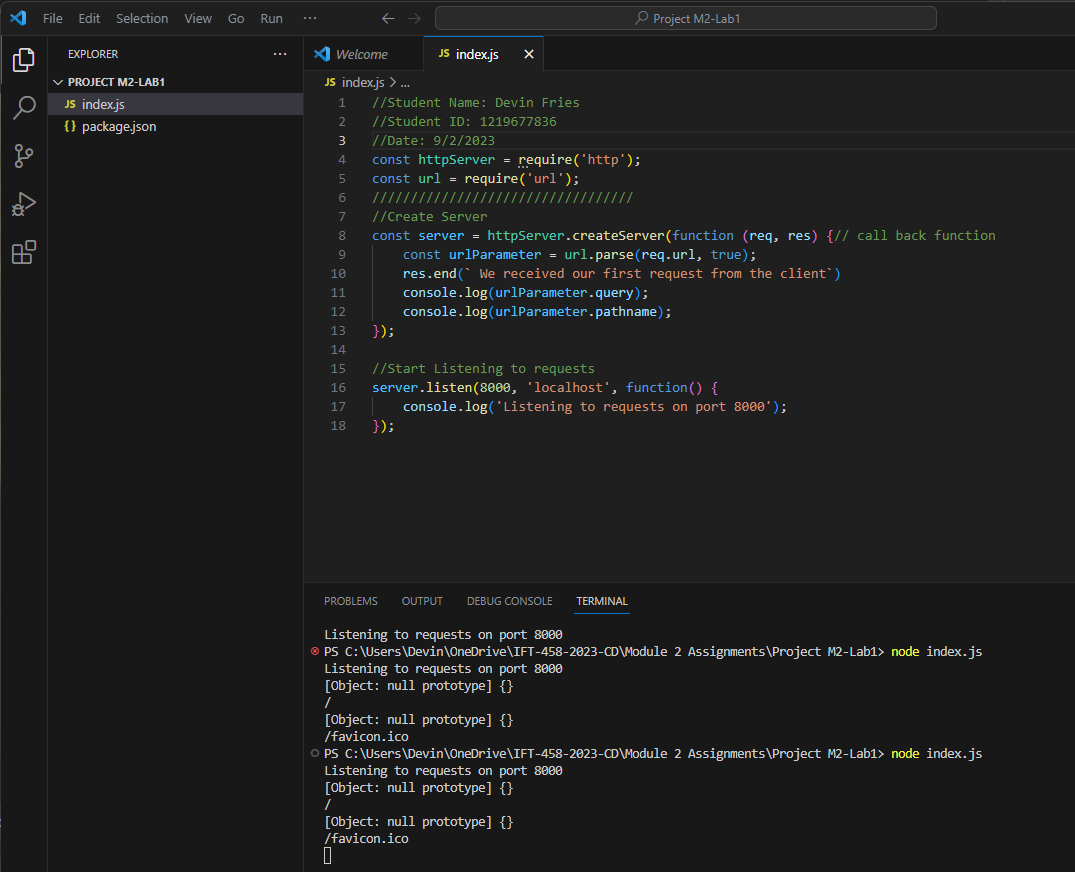
The server responds with the appropriate HTTP status codes (200 for success, 404 for not found) and content types.

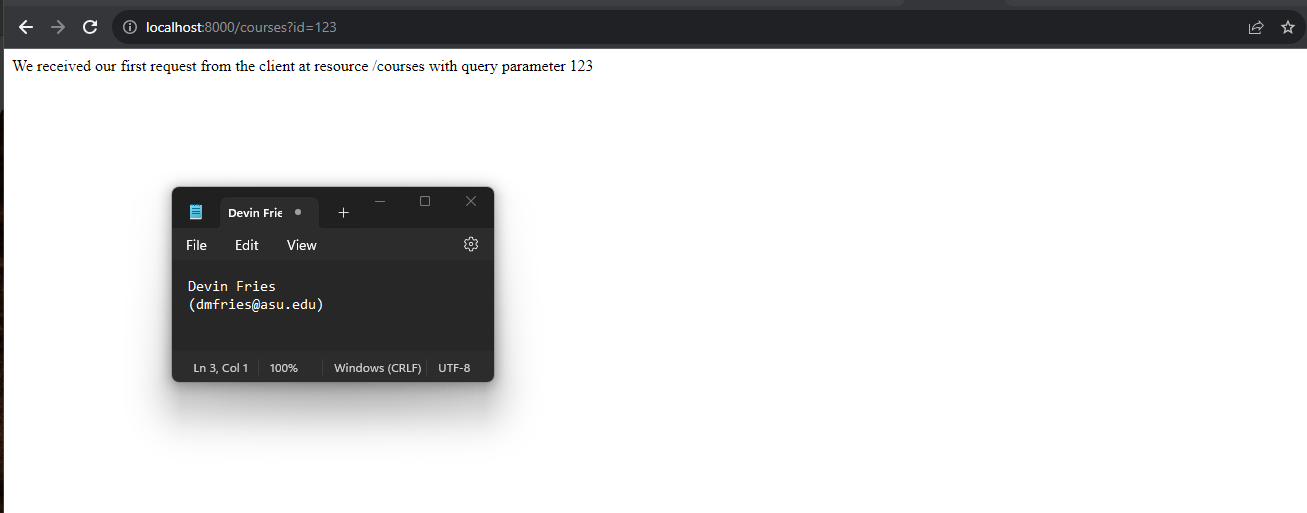
It sends the modified HTML template with the course data back to the client.

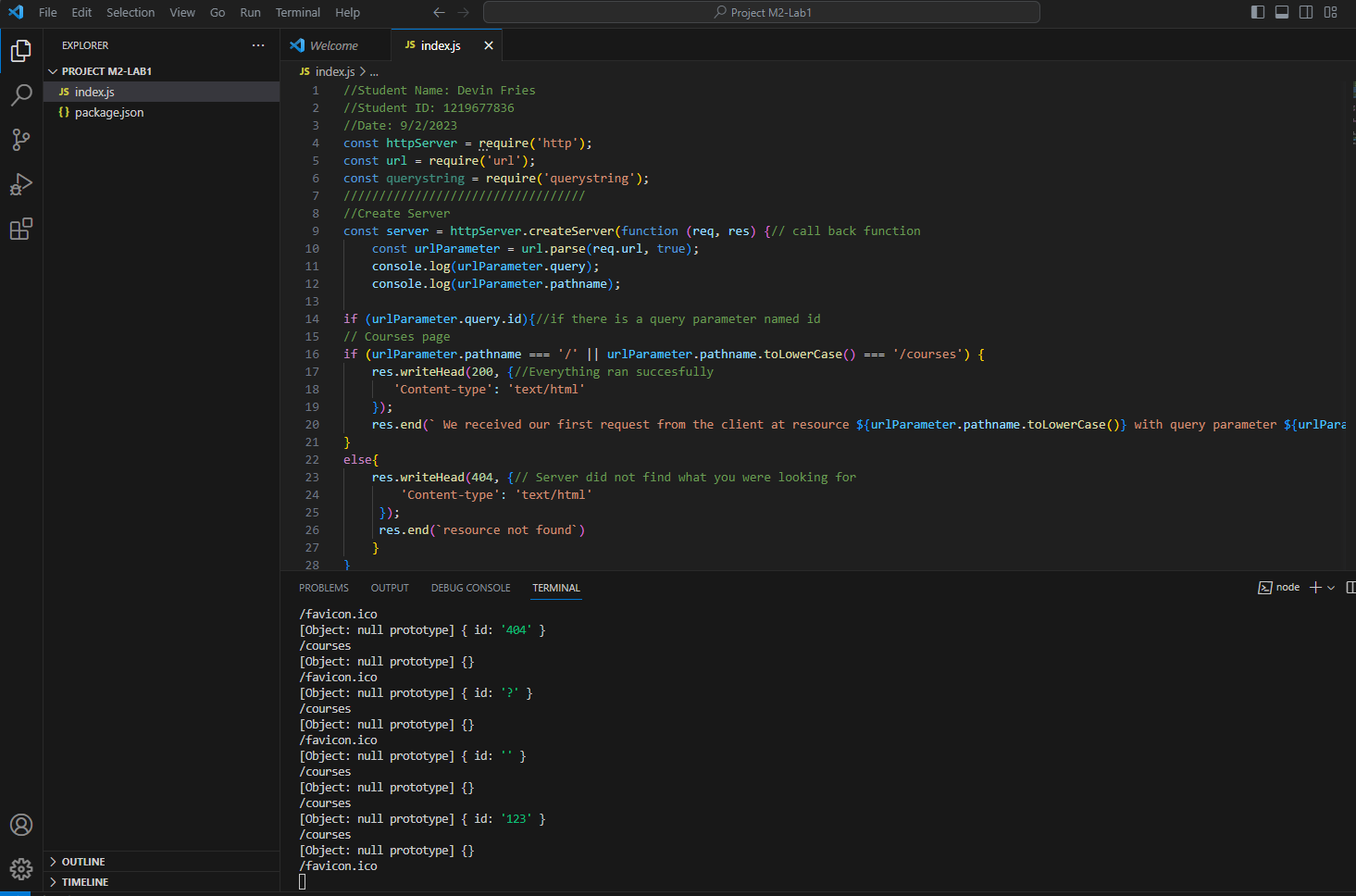
**Listening to Requests:**

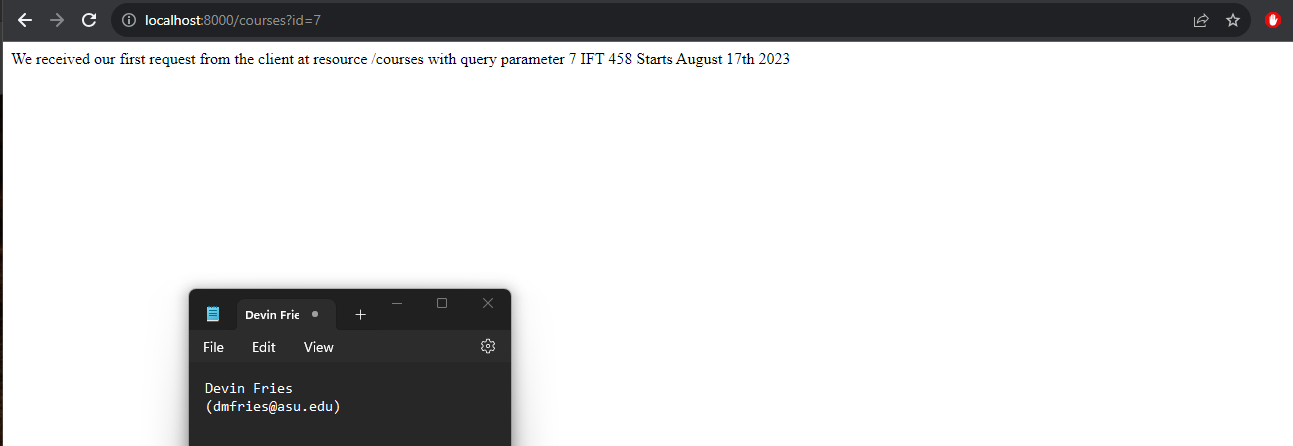
The server listens on port 8000 and logs a message when it starts. It's essential to choose a port that is not already in use.

**Problems:** The only problem I had with this code was forgetting to put semicolons on certain lines that needed it an getting errors, once I saw the error code, I went back and fixed it.

**Screenshots**: 





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