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Lab Report: 4

CIS 408: Internet Programming

Spring 2023

Lab Report:

Introduction: The purpose of this lab was to create a web page for a restaurant website that includes a clickable dropdown menu to display information about the restaurant and its menu items. The project requirements included extracting information from JSON and XML files, using JavaScript to toggle the visibility of the dropdown menus, and dynamically generating HTML content based on user selection.

Setup: The project was completed using the Visual Studio Code IDE and tested using Google Chrome. The HTML, CSS, and JavaScript files were created and stored in the same directory. The JSON and XML data files were retrieved from URLs provided in the project requirements and stored in the same directory.

Procedure:

1. HTML: The HTML file was created with a header, body, and two dropdown menus. The first dropdown menu contains options for displaying information about the restaurant such as the name, address, business hours, and services and features. The second dropdown menu contains options for displaying the restaurant's menu items for breakfast, brunch, lunch, and dinner. The selected information or menu items are displayed on the page in corresponding sections.
2. CSS: The CSS file was created to style the web page, including the dropdown menus, information display, and menu item display.
3. JavaScript: The JavaScript file was created to handle the functionality of the web page, including retrieving data from JSON and XML files, toggling the visibility of dropdown menus, and dynamically generating HTML content based on user selection.
4. Execution: The HTML file was executed in Google Chrome to test the functionality of the web page. The dropdown menus were clicked to display information or menu items, and the information or menu items were displayed in the corresponding sections of the web page. The hover effect on the dropdown options was also tested to ensure that the background color darkened on hover.
5. Sending Files to Server: To make the web page and JavaScript functionality work on the server, the files needed to be uploaded to the server. For this, we used the command line to send the files to the server using Secure Copy (SCP). The command used was "scp -r Project4 [keminn@eecs.spirit.eecs.csuohio.edu](mailto:keminn@eecs.spirit.eecs.csuohio.edu):~/public\_html". This command sends the entire Project4 directory to the public\_html directory on the server.

Reason for not Working on Local Host: The reason why the JavaScript functionality wouldn't work on a local host is due to the "same-origin policy" enforced by web browsers. This policy restricts web pages from making requests to a different domain than the one that served the web page. Therefore, the JSON and XML files cannot be loaded from a different domain than the web page itself. This is why the files needed to be hosted on a server for the JavaScript functionality to work.

Screenshots:

Screenshot 1: Main web page with dropdown menus

Screenshot 2: Dropdown menu displaying information options

Screenshot 3: Dropdown menu displaying menu options

Screenshot 4: Information section displaying the restaurant name

Screenshot 5: Information section displaying the restaurant address

Screenshot 6: Information section displaying the restaurant business hours

Screenshot 7: Information section displaying the restaurant services and features

Screenshot 8: Menu section displaying breakfast menu items

Screenshot 9: Menu section displaying brunch menu items

Screenshot 10: Menu section displaying lunch menu items

Screenshot 11: Menu section displaying dinner menu items