

Experiment 13

CSCI-230 Web Scripting

Fall 2024

Part I

Inside the **experiments** directory in your repository create a *subdirectory* named **e13**.

Inside the **e13** directory create 13.html, 13.css, and 13.js.

In **csci230/index.html** add a link to **csci230/experiments/e13/13.html**.

Part II

- Navigate your browser to <https://betterprogramming.pub/how-to-create-trusted-ssl-certificates-for-your-local-development-13fd5aad29c6>.
- Read up to Generating the Certificate.
- Open up GitBash or a terminal that runs a UNIX shell (NOT Powershell).
- Change the working directory to your home directory.

```
$ cd
```

- Make a directory named openssl-cert

```
$ mkdir openssl-cert
```

- Change your working directory to openssl-cert

```
$ cd openssl-cert
```

- Run the commands in the tutorial under the section titled Certificate Authority (CA) to create a private key and certificate file.
 - Note: If you're on a Windows machine and the first command in the tutorial does not work and says the subject is not in the correct form, replace **-subj "/C=US/CN=localhost"** with **-subj "//C=US\CN=localhost"**.
- Run the **pwd** command to get the full path to your openssl-cert directory. You will use this path in Part III of this assignment.

```
$ pwd
```

- Scroll down to the section titled Trusting the CA, find the section for your laptops operating system, and follow the instructions.

Part III

- Open VSC and click on the extensions icon on the left.
- Search for **Live Server**.
- Click on the gear wheel on the left under Live Server.
- In the drop-down menu, select **Settings**.
- Scroll down to find the **Live Server > Settings: Https**.

Set **enable** to **true**.

Set **cert** to the absolute path to your **ca.crt** file. Use the path shown when you issued the **pwd** command above. For windows machines omit **"/c"** in your path name.

Set **key** to the absolute path to your **ca.key** file. Use the path shown when you issued the **pwd** command above. For windows machines omit **"/c"** in your path name.

- Close the Setting file.

Part IV

In VSC, open the Explorer pane, and open an html file using Live Server. If all went well, your browser should open it without complaining. If not, see your Instructor or a classmate for help.

Part V

Turn location services on for your browser in your operating system settings.

On MacOS

Go to System Settings > Privacy & Security > Location Services and toggle the browser that Live Server opens.

On Windows

Search the internet. When a solution is found, email the professor.

Part VI

Allow your browser to receive Notification requests.

On MacOS

Go to System Settings > Notifications, scroll down to your browser (Safari) and select allow notifications.

In Safari's settings, choose Websites, then Notifications, and click the box next to 'Allow websites to ask for permission to send notifications.'

On Windows

Search the internet. When a solution is found, email the professor.

Part VII

In the lecture demonstration, we printed to the console information that the browser provides to web developers via its API.

Explore the API and display on the web page the information provided by the API. Use Frisbie's book and the MDN documentation to explore other properties of the API that are available. Display on the web page the values of the new properties that are found.

Label the information for readability. Stylize the page so that it is interesting to view.