This document describes how to access a remote server from the Firefox browser. The application of this for our project is loading the HTML files on an ncsu-dev-\* computer so that we can use the front-end interface. These instructions are based on this page: <https://linuxize.com/post/how-to-setup-ssh-socks-tunnel-for-private-browsing/>

1. Open a terminal, and run the following command:

ssh -N -D 9090 ncsu-dev-<n>

Where <n> is the number of your dev computer. This will open a SOCKS tunnel to the dev computer on port 9090

1. Leave that terminal running, and open another one. This time, ssh into the same computer as you normally would:

ssh ncsu-dev-<n>

1. Navigate to the directory containing the HTML pages you want to access, and run:

python -m http.server 8000

This will start a server at address 0.0.0.0 and port 8000, where the root is your current directory (the one with all the HTML pages)

1. Open Firefox, navigate to Options, scroll all the way down to Network Settings, click Settings…
2. Select the radio button that says “Manual proxy configuration”
3. For SOCKS Host, enter 127.0.0.1, and enter 9090 for its port.
4. Make sure SOCKS v5 is selected
5. Click OK
6. Type <http://0.0.0.0:8000/> into the address bar, and you should see the list of available pages

Video of me doing it on ncsu-dev-2:

<https://drive.google.com/open?id=1z0Lo0Is0bamrLSiPMh59k7uo9BIsstS3>

**Notes about back-end support in Flask**

* If you try to connect to the Flask app as is, and the app uses authentication with cookies, you will get CORS errors
* To fix this, you will need to support credentials in both the back-end and front-end
* In the back-end, install the flask\_cors Python library:
  + pip install flask\_cors
* Next, go to where you initialize the Flask app, import CORS from flask\_cors, and add the following line of code underneath where you initialize the app object:
  + CORS(app, supports\_credentials=True)
* In the front-end, you need to set the defaults.withCredentials field of the $http object. Before you make the http request, add the following line of code:
  + $http.defaults.withCredentials = true;