

Lab 6

Goal: To access your server on your PC from a tablet or your phone.

Test on PC

Run your simple python server:

From git bash or cmd, cd into one of your Lab directories and type:

```
python -m http.server 8000
```

Check the server is running by typing in the URL `http://127.0.0.1:8000/` into your PC browser.

NB: Whatever directory you run the python server on is what you'll see on the browser (so make sure there you are in a folder where you have a HTML file)

Change to your ip

In order to access the server externally, you will need to your ip address.

Find this by typing `ipconfig` from the command line.

Replace the loopback address (127.0.0.1) in the previous step with your ip address.

Check in your PC browser

Then, if you get, for example: 149.153.159.41, you would type `http://149.153.159.41:8000` into the browser and you might see your game exactly as when you typed in `127.0.0.1:8000`

If you didn't see the page in the previous step, it's probably because you went through a proxy, so you need to set no proxy for your own ip address.

In Firefox, do this by Options | Network | Settings | and then put your ip address into the box that says "No Proxy for"

In Chrome, Settings | Show Advanced Settings | Under Network, click "Change proxy settings"

Then LAN Settings, Make sure "Automatically detect settings" is UNchecked and "Use a proxy server.." is checked. Then Click Advanced and put your ip address into the box that says "Do not use a proxy server for addresses beginning with:"

Connect Tablet or phone with Internet

Connect to the eduroam network. (You will need to go to Settings|Wireless and authenticate using your username and password).

Now, if you type in your ip address in the phone/tablet browser, it should just time out (the firewall should stop you connecting).

Try to connect from the phone/tablet

Next on the phone/tablet browser, type in your ip as the url and 8000 as the port

So it will look like

`http://149.153.159.41:8000`

except with your ip address instead of the above one.

This should FAIL. (Cannot connect to server)

Configure the Windows firewall

To allow the server to be accessed only by the phone/tablet you have, configure your firewall.

- Go to the Control Panel, System and Security and launch "Windows Firewall"
- Go to "Advanced Settings"
- Select "Inbound Rules" in the left pane
- Select "New Rule" in the right pane
- In the New Inbound Rule Wizard, select "Custom" as Rule Type, then click on "Next"
- Click "Next" (on Program tab)
- Select "TCP" in Protocol type "Specific ports" in Local port and put "8000" in the box underneath local port, then click on "Next"
- Under "Which remote IP addresses does this rule apply to", click "these ip addresses", put in your phone/tablet current ip address.
- (Follow the relevant link to find your current ip address on [iOS](#) or [Android](#))
- Select "Allow the connection", then click on "Next"
- Select the network location where the rule should apply (select them all if you're not sure), then click on "Next"
- Finally give the rule a name and click "Finish"

Now you should be able to access your server from your phone/tablet.

