

# CS50 Week 7

Sam Green '17

[samuelgreen@college.harvard.edu](mailto:samuelgreen@college.harvard.edu)

646-457-2340

# Agenda: Transition to Web Programming

File Permissions & chmod

HTML & CSS

TCP/IP/HTTP

Problem Set 6

# File Permissions

Files in the file system are differently visible to different users.

Examine permissions: `ls -l`

Permission flags: d, r, w, x

# Permissions: detail

drwx-----

d

rwX

---

---



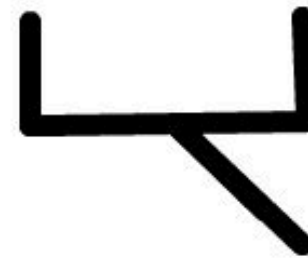
(Directory)



(User)



(Group)



(World)

# chmod

chmod is a unix utility for changing file permissions.

Chmod takes 2 args:

- (1) A change or a setting
- (2) A target (file, set of files, dir, set of dirs)

# chmod examples

chmod a+r file.txt

chmod 711 direcotry

chmod file.txt

chmod 600 file.php

# chmod examples

```
chmod a+r file.txt
```

```
chmod 711 direcotry
```

```
chmod file.txt
```

```
chmod 600 file.php
```

Takeaway: boring but important!

# HTML

Hypertext Markup Language

Once you know HTML syntax, you know HTML.

Every tag that gets opened must get closed.



# HTML Tips & Tricks

Use the W3 Validator (<http://validator.w3.org/>)

Reference these cheatsheets:

[html](#)

[css](#)

# Crash Course on CSS Selectors

Tag selectors are applied to all elements of a certain type (p, h1, span, etc.)

Class selectors are applied to all elements with that class

ID selectors are applied to the element with that id (bad practice to give more than 1 the same ID!)

# CSS: Select by Tag

```
p {  
    text-align: center;  
}
```

# CSS: Select by Class

```
<p class="ppg"></p>
```

```
.ppg {
```

```
    font-size: 100;
```

```
}
```

# CSS: Select by ID

```
<p id="name">Sam</p>
```

```
#name {  
    color: orange;  
}
```

# TCP/IP

TCP: Transmission Control Protocol, used to guarantee that every message that needs to get somewhere gets there.

IP: Addressing system.

Reference the lecture notes for the things you need to know.

# Problem Set 6

Lots to read!

String manipulation

File I/O