# this is week 8

## fall 2013

playlist50
Everything Has Changed (Taylor Swift)
Burn (Ellie Goulding)
Let Her Go (Passenger)

# agenda

resources

chmod

html

css

php

sql

# resources

lecture notes & source code

cs50.net/shorts

study.cs50.net

man

Google

cs50.net/discuss

ohs

me!

# pset7

`// html`

http://lesliefranke.com/files/reference/htmlcheatsheet.html

http://validator.w3.org/

`// css`

http://www.lesliefranke.com/files/reference/csscheatsheet.html

`// php`

http://php.net/manual/en/langref.php

`// sql`

phpMyAdmin's SQL tab

http://sayat.me/cs50

# chmod

check yourself before you wreck yourself

# chmod

## change mode

- changes the permissions of a file or directory

# chmod

r: read a file or list a directory's contents

w: write to a file or a directory

x: execute a file or move into a directory

# chmod

(~): mkdir includes

(~): chmod a+x includes

(~): chmod 711 includes

| user | | | group | | | others | | |
|---|---|---|---|---|---|---|---|---|
| r | w | x | - | - | x | - | - | x |
| 1 | 1 | 1 | 0 | 0 | 1 | 0 | 0 | 1 |
| 7 | | | 1 | | | 1 | | |

# html

the world is your oyster

# html

## hypertext markup language

- structures content

- provides metadata

# html

`<a href="https://www.cs50.net/">CS50</a>`

- tags tell the browser what to do with each element

# html

`<a href="https://www.cs50.net">CS50</a>`

- attributes modify or give specificity to a tag

- attributes are in key-value pairs

# structure

```
<!DOCTYPE html>

<html>

    <head>

        <title>ohai</title>

    </head>

    <body>

        <p>hello, world!</p>

    </body>

</html>
```

# CSS

fashion forward

# CSS

cascading stylesheets

- formats content

# elements

to style a specific element, give it an id

`<img id="logo" src="logo.gif" />`

to style group of elements, give them a class

`<h1 class="top">My Home Page</h1>`

# styling

1) style attribute

```
<p style="text-align: center;">
```

2) internal stylesheet

```
<style> p { text-align: center; } </style>
```

3) external stylesheet

```
// in the HTML file
<link href="style.css" rel="stylesheet" />
// in the CSS file
p { text-align: center; }
```

# your turn: cs50.net

In Chrome, head to https://www.cs50.net/ and click on Tools -> Developer Tools. Using the "Elements" window, make some functional and aesthetic edits to the site.

# php

behind the scenes

# php

php hypertext processor

- executes code server-side

- plays nicely with html

# php

similar to C...for the most part

// differences

- variables are loosely-typed

- variables begin with $

- php code is interpreted, not
compiled

# get vs. post

| get | post |
|---|---|
| in php: $_GET | in php: $_POST |
| info displayed in URL | info not displayed in URL |
| no privacy | marginal privacy |
| http://www.youtube.com/watch?v=GI6CfKcMhjY | // same URL whether or not you're logged in<br>https://www.cs50.net/ |

# sql

http://xkcd.com/327/

# sql

<u>s</u>tructured <u>q</u>uery <u>l</u>anguage

- allows you to interact with a database

- plays nicely with php

# database

database: a collection of tables

table: a collection of rows

row: has certain values for each field

fields

| id | username | cash |
|----|----------|------|
|    |          |      |
|    |          |      |
|    |          |      |

rows

# queries

```
// insert a new record into a table

INSERT INTO <table> (<column 1>, <column 2>)

VALUES (<value1>, <value 2>)

INSERT INTO users (username, cash) VALUES
('milo', 10,000)

// delete a record from a table

DELETE FROM <table> WHERE <column> = <value>

DELETE FROM users WHERE username = 'milo'
```

# queries

// retrieve a record from a table

SELECT \<column> FROM \<table> WHERE \<other column> = \<value>

SELECT username FROM users WHERE id = 1

// modify an existing record

UPDATE \<table> SET \<column> = \<value> WHERE \<other column> = \<value>

UPDATE users SET cash = 5,000 WHERE id = 1

# pset7

When will you be inserting records? Deleting? Selecting? Updating?