

section 1

HTML/CSS Basics

Forrest Huang

CS160 Summer 2019 Week 1

intro

Forrest Huang

// He/His/Him

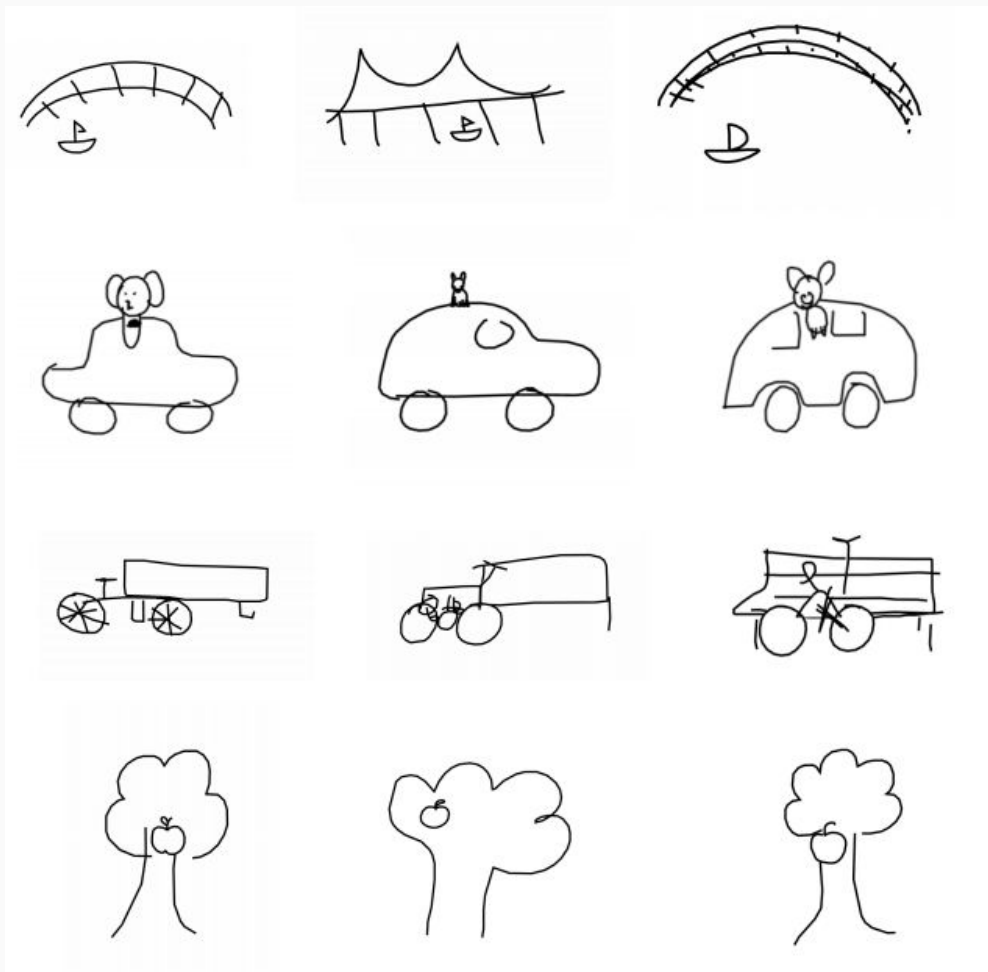
// 2nd Year Ph.D. HCI + ML

Teach Computers to Draw

// Office Hours:

0900-1100 Tu

310 Jacobs (Before Class)



agenda

for today

// Sections and Logistics

// Web Programming/Languages

// HTML 101

// CSS 101

// Chrome Dev Tools

// Survey

what is section?

It **is** a place to learn and experience practical tools which will help you in your projects, and help you reinforce and build upon ideas covered in classes.

First 2 weeks: Fundamentals

tips from past students

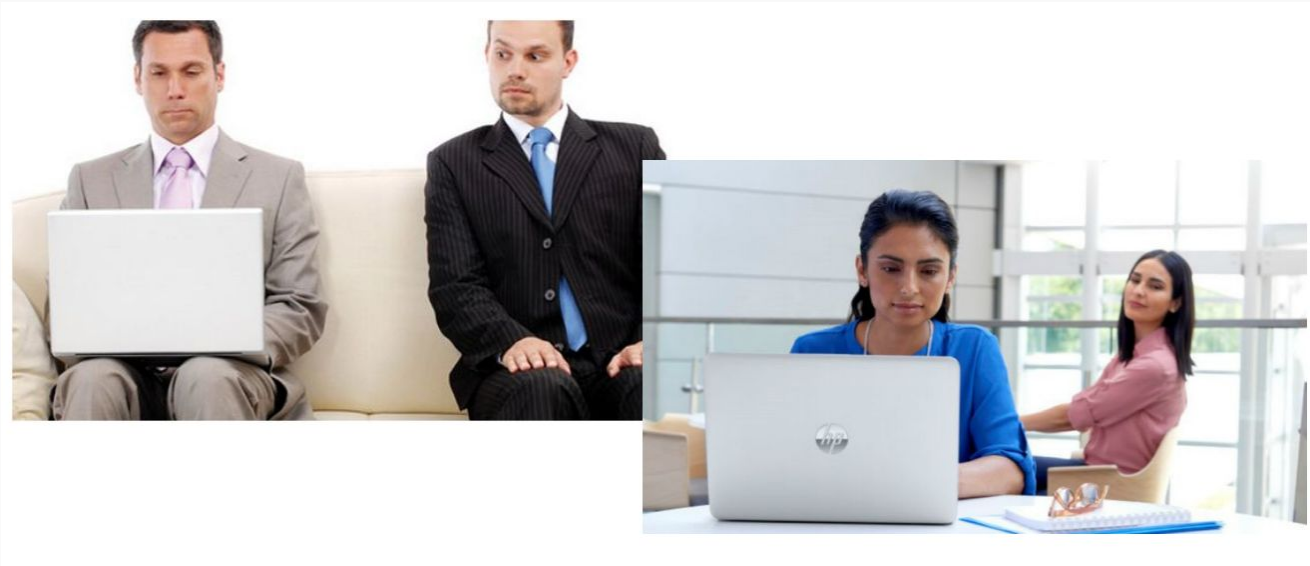
Summer classes require a lot of work

Many assignment in this class don't have “right” answers

ground rules: laptops



ground rules: laptops



feel free to stay, but please **sit in the back**

ground rules: speed

If you finish an exercise early, feel free to help others

web programming/languages

FRONTEND



USER

BACK END



what is the answer to life the universe and everything



All Books Images Videos News More Settings Tools

About 111,000,000 results (0.64 seconds)

↶ The answer to life the universe and everything = 42

Rad	Deg	x!	()	%	AC
Inv	sin	ln	7	8	9	÷
π	cos	log	4	5	6	x
e	tan	√	1	2	3	-
Ans	EXP	xʸ	0	.	=	+

More info

Videos



the answer to life, universe and everything

riktw
YouTube - May 9, 2008



Answer To The Ultimate Question - The Hitchhiker's Guide To The ...

BBC Studios
YouTube - Feb 9, 2017



The answer to life, the universe and everything | Deep Thought | The ...

Miss Poste *argw27
YouTube - Oct 25, 2017

[42 \(number\) - Wikipedia](#)

[https://en.wikipedia.org/wiki/42_\(number\)](https://en.wikipedia.org/wiki/42_(number))

FRONT END

HTML

CSS

JS



BACK END

JAVA

SQL

RUBY

PHP



FRONT END

HTML

CSS

JS

Focused on formatting and presenting front-end UI-elements

Turing-Complete! <https://tinyurl.com/rule110>

BACK END

JAVA

SQL

RUBY

PHP

HTML: Hypertext Markup Language

if you feel confident in HTML/CSS already

Try and get as close to a static version of

`https://www.youtube.com`

HTML: Basic Framework

```
<!DOCTYPE html>
<html>
  <head>
    <title>Page Title</title>
    <!-- Imports, like CSS -->
  </head>

  <body>
    <!-- Visible Content -->
    <p>My first paragraph.</p>
  </body>
</html>
```

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HTML: Vocab Demo

<https://tinyurl.com/cs160-sum-html>

HTML: Recap

// HTML tags start with <> and end with </>

// HTML tags specify the type (p, h1) and optionally attributes (href = “ ”)

// divs and spans are the two main types of containers

// Whitespace is (mostly) ignored

HTML: Gotchas

// Whitespace

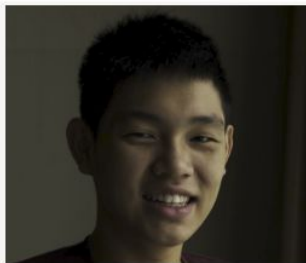
 - Linebreak

 - **Non-breaking** whitespace

Exercise

// Open <https://tinyurl.com/cs160-sum-html>, Create a fork

// Build the following start to a fun-fact page, **for your neighbors!** (in pairs)



<-- This is a picture of me!

Forrest Huang

Here are some fun facts about me:

- I love rutabagas.
- My favourite tennis player is Roger Federer.

Styling

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Styling

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```
<li id="rutabaga" style="color: green;">I love rutabagas.</li>
```

CSS: Cascade Style Sheets

HTML: IDs and Classes

ID: Value is unique to that specific element on that page (also used for relative linking)

Class: Value can be shared with elements

```
<li id="rutabaga" class="fun-fact">I love rutabagas.</li>  
<li id="roger" class="fun-fact">My favourite tennis player is Roger  
  Federer.</li>
```

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```

CSS: Including

HTML:

```
<head>  
  <link rel="stylesheet" type="text/css" href="mystyle.css"/>  
</head>
```

mystyle.css:

```
.fun-fact {  
  color: green;  
}
```

Here are some fun facts about me:

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CSS: Including

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</html>
```

CSS: Selectors

.class: `.fun-fact`

#id: `#rutabaga`

Element: `span`

First Nested Second: `ul li`

```
.fun-fact {  
    color: green;  
}
```

Here are some fun facts about me:

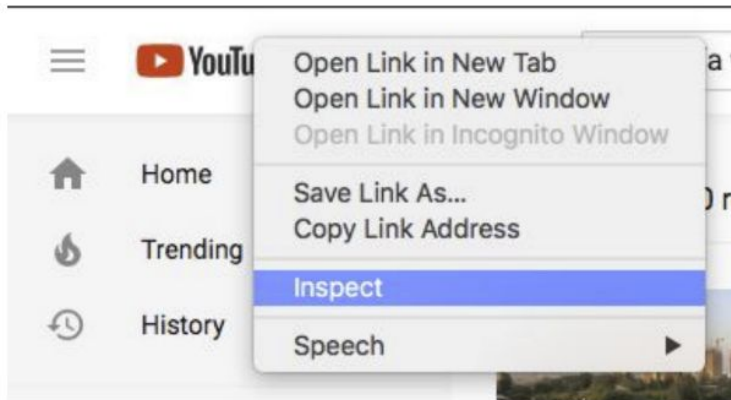
- I love rutabagas.
- My favourite tennis player is Roger Federer.

CSS: Demo

<https://tinyurl.com/cs160-sum-css>

Chrome Developer Tools

Chrome Developer Tools



A screenshot of the Chrome Developer Tools interface. The left pane shows the HTML structure of a page, with a selected element containing a 24x24 pixel image. The right pane shows the "Styles" panel with a visual representation of the element's box model (margin, border, padding) and a list of styles, including "align-items: center" and "color: rgba(1...".

```
<!doctype html>
<html invert style="font-size: 10px;font-family:
Roboto, Arial, sans-serif; background-color: #fafafa;">
  <head>_</head>
  <body dir="ltr">
    <script>_</script>
    <!-- end of chunk -->
    <script>if (window.ytcsi) {window.ytcsi.tick("ai",
null, '');}</script>
    <ytd-app guide-persistent-and-visible>
      <ytd-activity-manager class="style-scope ytd-
app"><ytd-activity-manager>
        <ytd-auth-manager class="style-scope ytd-app">
          </ytd-auth-manager>
        <ytd-app-context class="style-scope ytd-app">_...
      </ytd-app-context>
      <ytd-gfeedback-manager class="style-scope ytd-
app"><ytd-gfeedback-manager>
```

Styles Computed Event Listeners >>

position 0
margin -
border -
padding -
0 0 0 0
24 x 24
0

Filter

align-items center
color rgba(1

Demo

<https://tinyurl.com/chromedt-demo>

Personal Website Follow-Up

For more detailed instructions on how you could make a personal website:
<https://tinyurl.com/personalw-medium>

agenda

for today

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survey

survey

<https://tinyurl.com/cs160-su19-sec1>

mark your attendance!

rutabaga

thanks!