But first...

My Take on Web Development
There is always some tool that makes your life easier.
Hypertext Markup Language

The language your web browser uses to describe the content and structure on web pages.
But first...

My Take on HTML
HTML = Nested Boxes
HTML = Nested Boxes™
Q: How do you annoy a web developer?

Permanent link to this comic: http://xkcd.com/1144/
Image URL (for hotlink/embedding): http://imgs.xkcd.com/comics/tags.png
Q: How do you annoy a web developer?

Permanent link to this comic: http://xkcd.com/1144/
Image URL (for hotlink/embedding): http://imgs.xkcd.com/comics/tags.png
Q: How do you annoy a web developer?
Q: How do you annoy a web developer?

Permanent link to this comic: http://xkcd.com/1144/
Image URL (for hotlinking/embedding): http://imgs.xkcd.com/comics/tags.png
Q: How do you annoy a web developer?

Permanent link to this comic: http://xkcd.com/1144/
Image URL (for hotlinking/embedding): http://imgs.xkcd.com/comics/tags.png
Q: How do you annoy a web developer?
Q: How do you annoy a web developer?

Permanent link to this comic: http://xkcd.com/1144/
Image URL (for hotlinking/embedding): http://imgs.xkcd.com/comics/tags.png
<!DOCTYPE html>
<html>
    <head>
        <title>Title!</title>
    </head>
    <body>
        <h1>Heading!</h1>
        <p>Paragraph!</p>
    </body>
</html>
<!DOCTYPE html>
<html>
<head>
  <title>Title!</title>
</head>
<body>
  <h1>Heading!</h1>
  <p>Paragraph!</p>
</body>
</html>
hello.html

```html
<!DOCTYPE html>
<html>
  <head>
    <title>Title!</title>
  </head>
  <body>
    <h1>Heading!</h1>
    <p>Paragraph!</p>
  </body>
</html>
```
HTML Tags

<html>

Opening tag

content goes here

Closing tag

</html>
<!DOCTYPE html>
<html>
<head>
<title>Title!</title>
</head>
<body>
<h1>Heading!</h1>
<p>Paragraph!</p>
</body>
</html>
HTML Tags

`<a>`

`<b>`

`</b>`

`</a>`
<!DOCTYPE html>
<html>
<head>
  <title>Title!</title>
</head>
<body>
  <h1>Heading!</h1>
  <p>Paragraph!</p>
</body>
</html>
<!DOCTYPE html>
<html>
<head>
    <title>Title!</title>
</head>
<body>
    <h1>Heading!</h1>
    <p>Paragraph!</p>
</body>
</html>
<!DOCTYPE html>
<html>
  <head>
    <title>Title!</title>
  </head>
  <body>
    <h1>Heading!</h1>
    <p>Paragraph!</p>
  </body>
</html>
<!DOCTYPE html>
<html>
  <head>
    <title>Title!</title>
  </head>
  <body>
    <h1>Heading!</h1>
    <p>Paragraph!</p>
  </body>
</html>
<!DOCTYPE html>
<html>
<head>
    <title>Title!</title>
</head>
<body>
    <h1>Heading!</h1>
    <p>Paragraph!</p>
</body>
</html>
<!DOCTYPE html>
<html>
<head>
  <title>Title!</title>
</head>
<body>
  <h1>Heading!</h1>
  <p>Paragraph!</p>
</body>
</html>
<!DOCTYPE html>
<html>
<head>
  <title>Title!</title>
</head>
<body>
  <h1>Heading!</h1>
  <p>Paragraph!</p>
</body>
</html>
Basic HTML Elements

* <html> Root of HTML Document
* <head> Info about Document
* <body> Document Body
* <h1>, <h2>, <h3>, … Header tags
* <p> Paragraph tags
Basic HTML Elements

`<html>` Root of HTML Document
`<head>` Info about Document
`<body>` Document Body
`<h1>`, `<h2>`, `<h3>`, ... Header tags
`<p>` Paragraph tags
Inserting Links

<a>Link</a> to 6.148!
HTML Attributes

Opening tag

attribute value

content goes here

Closing tag
Inserting Links

<a href="http://6148.io">Link to 6.148!</a>
Inserting Links

<a href="home.html">Link to home!</a>
Inserting Images

<img>
Inserting Images

<img src="pusheen.gif"></img>
Inserting Images

<img src="pusheen.gif">
Inserting Images

\[\text{<img src="pusheen.gif">}\]

app/
hello.html
pusheen.gif
Inserting Images

```html
<img src="pusheen.gif">
<img src="images/pusheen.gif">
```

```
app/
hello.html
images/
pusheen.gif
```
Lists

<ol> Ordered List (1, 2, 3…)
<ul> Unordered List (bullets)
<li> List Item
<!DOCTYPE html>
<html>
  <head>
    <title>Title!</title>
  </head>
  <body>
    <ul>
      <li></li>
    </ul>
  </body>
</html>
<!DOCTYPE html>
<html>
<head>
  <title>Title!</title>
</head>
<body>
<ul>
  <li>Item 1</li>
</ul>
</body>
</html>
<!DOCTYPE html>
<html>
  <head>
    <title>Title!</title>
  </head>
  <body>
    <ul>
      <li>Item 1</li>
      <li>Item 2</li>
    </ul>
  </body>
</html>
<div>
Block Section in Document
</div>

<span>
Inline Section in Document
</span>
<!DOCTYPE html>
<html>
<head>
<title>Title!</title>
</head>
<body>
<h1>Heading!</h1>
<p>Paragraph!</p>
</body>
</html>
<!DOCTYPE html>
<html>
  <head>
    <title>Title!</title>
  </head>
  <body>
    <div>
      <h1>Heading!</h1>
      <p>Paragraph!</p>
    </div>
  </body>
</html>
<!DOCTYPE html>
<html>
<head>
  <title>Title!</title>
</head>
<body>
<div>
  <h1>Heading!</h1>
  <p>Paragraph!</p>
</div>
</body>
</html>
the real way to learn Web Dev

Step 1: Google!
the real way to learn Web Dev

Step 2: Learn.

The `span` tag is like the `div` tag. It has no meaning at all and is mostly used for styling by using an id or class. The difference between the two is that `div` is a block element, it's on a separate line. `span` however is an inline element, meaning that it can be on a line with other elements. Jan 4, 2013

What does the span tag do? | Codecademy
https://www.codecademy.com/en/forum_questions/502ad0ea558dfe0002026d69
the real way to learn Web Dev
Hypertext Markup Language

The language your web browser uses to describe the content and structure on web pages
Cascading Style Sheets

The rules that tell your web browser how stuff looks
But first…

My Take on CSS
CSS = A list of descriptions
Connect with friends and the world around you on Facebook.

See photos and updates from friends in News Feed.

Share what’s new in your life on your Timeline.

Find more of what you’re looking for with Facebook Search.

Sign Up
It’s free and always will be.

First name

Last name

Email or mobile number

Re-enter email or mobile number

New password

Birthday

Month

Day

Year

Why do I need to provide my birthday?

Female

Male

By clicking Sign Up, you agree to our Terms and that you have read our Data Policy, including our Cookie Use.

Sign Up

Create a Page for a celebrity, band or business.
Connect with friends and the world around you on Facebook.

See photos and updates from friends in News Feed.

Share what's new in your life on your Timeline.

Find more of what you're looking for with Facebook Search.

Sign Up

It's free and always will be.

First name

Last name

Email or mobile number

Re-enter email or mobile number

New password

Birthday
p {
  color: red;
  font-family: Arial;
  font-size: 24pt;
}
selector

p {
  color: red;
  font-family: Arial;
  font-size: 24pt;
}

p {
  color: red;
  font-family: Arial;
  font-size: 24pt;
}
p {
  color: red;
  font-family: Arial;
  font-size: 24pt;
}
<!DOCTYPE html>
<html>
<head>
    <title>Title!</title>
</head>
<body>
    <h1>Heading!</h1>
    <p>Paragraph!</p>
</body>
</html>
<h1>Heading!</h1>
<p>Paragraph!</p>
hello.html

<h1>Heading!</h1>
<p>Paragraph!</p>
<p>Info</p>
hello.html

```html
<h1>Heading!</h1>
<p>Paragraph!</p>
<p>Info</p>
```

style.css

```css
p {
  color: red;
  font-family: Arial;
  font-size: 24pt;
}
```
**Hello.html**

```html
<h1>Heading!</h1>
<p>Paragraph!</p>
<p class="info">Info</p>
```

**Style.css**

```
p {
    color: red;
    font-family: Arial;
    font-size: 24pt;
}
```
hello.html

```html
<h1>Heading!</h1>
<p>Paragraph!</p>
<p class="info">Info</p>
```

style.css

```
.info {
  color: red;
  font-family: Arial;
  font-size: 24pt;
}
```
hello.html

<h1>Heading!</h1>
<p>Paragraph!</p>
<p id="unique">Info</p>

style.css

#unique {
  color: red;
  font-family: Arial;
  font-size: 24pt;
}
Class vs ID

**Class**
Can use the same class on multiple elements
Can use multiple classes on the same element

**ID**
Each element can have only one ID
Each page can have only one element with that ID
Class

Can use the same class on multiple elements
Can use multiple classes on the same element

.idname { ... }

ID

Each element can have only one ID
Each page can have only one element with that ID

.classname { ... }
Combining HTML & CSS
<!DOCTYPE html>
<html>
<head>
<title>Title!</title>
</head>
<body>
<h1>Heading!</h1>
<p>Paragraph!</p>
</body>
</html>
<!DOCTYPE html>
<html>
  <head>
    <title>Title!</title>
    <link rel="stylesheet" type="text/css" href="style.css">
  </head>
  <body>
    <h1>Heading!</h1>
    <p>Paragraph!</p>
  </body>
</html>
In Conclusion:

HTML = nested boxes!
CSS = a list of descriptions

A description in the CSS affects a box in the HTML
HTML/CSS Workshop

Making your Catbook profile!
Catbook

The purrfect social media website
Git the workshop code!

go.6148.io/html-css-workshop

If you know how to Git, clone the repository.

If you don’t know how to Git, download as zip.
Exercise 1: Kitten Started

Open profile1.html in chrome to see what it looks like.

Change the name, description, and status to your choice.

You have to save the file and refresh the webpage to see changes.
Exercise 1: Kitten Started

Change to “Favorite Types of Cats” and instead of the <h3> below, create an unordered list of your favorite cats!
Exercise 1: Kitten Started

Change to “Favorite Types of Cats” and instead of the `<h3>` below, create an unordered list of your favorite cats!
CSS Time!!

Open styles1.css.

Guess what it will do...

Add the following the link tag:

```html
<body>
  <link rel="stylesheet" href="css/style1.css">
  <h1>Catbook</h1>
  <div id="profile-container">
```
CSS Time!!

Catbook

Rupayan Neogy

About Me
I am an avid cat-lover. I have 9 different cats: Aberforth, Bellinda, Carmen, Darsh, Evelyn, Francis II, Gottfried, Hamilton, and Irma.

My Status
Today was a great day! I made a home-made sushi banquet for me and my family of cats ^_^

My Favorite Type of Cat
- Russian Blue
- Siamese
- American Bobtail
Try the following:

Make all <h1> elements blue.

Make everything in the div with the ID “profile-container” have centered text.
CSS Time!!

```css
h1 {
  color: blue;
}

#profile-container {
  text-align: center;
}
```
Exercise 2: Feline Good

Open up profile2.html and style2.css

Take a look at profile2 in a browser.
Exercise 2: Feline Good

Let’s walk through the CSS changes.

(switch to sublime now)
CSS Box Model

MARGIN

BORDER

PADDING

CONTENT
Exercise 2: Feline Good

Make a class called “text-center” in style2.css

The class should make any element that has the class have centered text.

Add the class to the div with id “profile-container”

(this should center everything in the div)
Exercise 3: A little Further

Let’s talk about border-radius!

```css
.card {
  border-style: solid;
  border-width: 1px;
  padding: 10px;
  /* ADDED IN STEP 3 */
  border-radius: 5px;
}
```

Today was a great day! I made a home-made sushi banquet for me and my family of cats ^_^
Exercise 3: A little Further

Make your profile picture round!

You can either add an ID to the `<img>` and apply CSS to the ID, or you can create a class representing rounded edges, and add the class to the `<img>`
Exercise 3: A little Further

Make your profile picture round!

```html
<!DOCTYPE html>
<html>
<head>
  <title>Profile Page</title>
</head>
<body>
  <link rel="stylesheet" href="css/style3.css">
  <h1>Profile Page</h1>
  <div class="profile-container">
    <img src="https://i.pinimg.com/736x/98/e0/7d/98e07decc7c1ca58236995de3567e46a---cat-shirts-kitties-cutest.jpg" style="border-radius: 50px;">
    <div id="name-container">
      <h1 id="name">Rupayan Neogy</h1>
    </div>
    <hr>
    <h4>About Me</h4>
    <div id="profile-description">I am an avid cat-lover. I have 9 different cats: Aberforth, Belinda, Carmen, Darsh, Evelyn, Francis II, Gottfried, Hamilton, and Irma.</div>
    <hr>
    <h4>My Status</h4>
</div>
</body>
</html>
```
Exercise 4: Stay Pawsitive

What about a perfect circular image?

See profile4.html and style4.css
Exercise 4: Stay Pawsitive

The internet is your friend!
Exercise 4: Stay Pawsitive

The internet is your friend!

Use the internet to add something cool to your app
(make sure to use only HTML and CSS, no JS)

CSS-Tricks.com, stack-overflow, etc.

(if you can’t think of something, try element:hover or css animations)
CSS Meowster!

Congrats! You now know a tiny bit about the vast sea that is CSS!
Advanced Topics

Position, float, z-index
Advanced Topics

Position, float, z-index
Advanced Topics

Position, float, z-index
Advanced Topics

Flexbox

- start
- end
- center
- justify
- distribute
Advanced Topics

Media Queries

```css
@media (min-width: 900px) {
  p {
    color: red;
  }
}
```
Advanced Topics

CSS frameworks/libraries (Bootstrap, Foundation, Semantic UI)
Bootstrap

A Quick Introduction to CSS Frameworks

Premade CSS (and other fun components)!
A lack of professionalism

Catbook

Rupayan Neogy

About Me

I am an avid cat-lover. I have 9 different cats: Aberforth, Belinda, Carmen, Darsh, Evelyn, Francis II, Gottfried, Hamilton, and Irma.

My Status

Today was a great day! I made a home-made sushi banquet for me and my family of cats ^_^

My Favorite Type of Cat

Russian Blue
A level of professionalism
There is always some tool that makes your life easier.
Issues with CSS

• Simple at its core, incredible amount of depth
• Easily accumulates to extremely large files.
• Hard to make mobile friendly/responsive
• Very easy to not do well.
What is Bootstrap?

Remember "\text-center"?

\text-center {
    text-align: center;
}

}
What is Bootstrap?

• A collection of **CSS Classes** that add **prebuilt styles** to your webpage.

• Includes color theming, structural tools, and out-of-the-box components.

• Completely responsive (mobile friendly)

• (Also has JS-based components)
getbootstrap.com/docs

the documentation is your friend
Bootstrap Time!!

Open BS/profileBS.html
Be scared by how many classes there are in the HTML now.

Open BS/styleBS.css
Be amazed by how little CSS there is
Bootstrap Time!!

The most important line:

```html
<body>
  <link rel="stylesheet" href="https://maxcdn.bootstrapcdn.com/bootstrap/4.0.0-beta.3/css/bootstrap.min.css" integrity="sha384-Zug+QiDoJ0rZ5t41ssLdxGhVrurbmBWopoEl+M6BdEfwnCJZtKxi1KgxUyJq13dy" crossorigin="anonymous">
  <link rel="stylesheet" href="styleBS.css">
</body>
```
How to use Bootstrap

1. Open Documentation
2. Look for something that you like
3. Copy the code tutorial, modify for your own purposes
4. Smile at how easy that was
How to use Bootstrap

Just dive in!
There is always some tool that makes your life easier.