storyboards?

On a walk through the park, Marco stumbles across a teddy bear fallen on the side of the path.

Realizing it must be lost, he uses his mobile phone to photograph it where he found it, and takes the bear home.

Once home, Marco uploads the photo to iFound®. The MapIt! function uses the GPS from the photo to record where the bear was found.

As soon as the iFound® match list is generated, Marco sees a photo of the very same bear he has just found. He immediately contacts the finder and they arrange a way to get the bear back to its owner.

The teddy bear is handed off to a very relieved mom.

When it is recorded that the bear has made it safely home, Marco receives a ‘thank you’ email from iFound®, offering him a choice of coupons for anything from ice cream to flowers. Marco’s choice provides useful information to corporate sponsors.
storyboards?

webpage examples

example 1
example 2
example 3
website help!
just ask

email: 2744ta
slack: mitproductdesign2018.slack.com
(check email for sign-up link)

office hours:
  Friday, 7-10 pm, 3-370
  Monday, 5-9 pm, 3-442
human use analysis?
last class
mini quiz
to draw a recognizable object from memory we must recall its ________, ________, and appropriate_______.

architecture
proportion
necessary
last class
mini quiz

since last class, I have practiced my ABCs on_____ of 5 days?

"aw, in the next 5 days I will practice 5 times!!"
web design 101.5
last time...

client
you!

server
MIT / Akamai

HTML
CSS
JS
last time...

http://web.mit.edu/2.744/studentSubmissions/web101/lcarter


http://web.mit.edu/2.744/studentSubmissions/web101/lcarter/page2.html
sketch then code
wireframes

visual guide to help prioritization of **content**, **functionalities** available, and intended **behaviors**

wireframing apps: **sketch** (mac), **balsamic** (online)
wireframes
demo
HTML basics
HTML structure

<lunch>
<hamburger>
<bun>
<lettuce></lettuce>
<tomato></tomato>
<cheese></cheese>
<patty></patty>
</bun>
</hamburger>
</lunch>

(2 spaces)
HTML tags

- paragraph
- headings
- link / anchor
- lists
- tables
- images, videos

view all the tags at: http://www.w3schools.com/tags/
HTML tags

tag structure

open tag  `<tag attr="value">`

content…

close tag  `</tag>`
HTML tags

tag structure

<a href="http://xkcd.com">Link to XKCD</a>
large chunk of text and suddenly <a href="http://xkcd.com">Link to XKCD</a>.

large chunk of text and suddenly link to xkcd.
HTML structure

- **Document Type**: `<!DOCTYPE html>`
- **Root of Document**: `<html>`
- **Information about Doc**: `<head>`
  - `<title>My First Page</title>`
- **Title of Page**: `<body>`
  - `<p>Hello World!</p>`
- **Document Body**: `</body>`
- **Paragraph Tag**: `</html>`
HTML tags

typography

- paragraph
- headings
- link / anchor
- lists
- tables
- images, videos

view all the tags at: http://www.w3schools.com/tags/
HTML tags

lists

<ul>
  <li>item 1</li>
  <li>item 2</li>
  <li>item 3</li>
</ul>

view all the tags at: http://www.w3schools.com/tags/
HTML tags

text formatting

<b> - bold
<em> - emphasis (italics)
<br> - (line) break

view all the tags at: http://www.w3schools.com/tags/
relative vs absolute path
relative vs absolute path

```html
<img src="images/chapter-3-icon.png"/>
```
relative vs absolute path

<img src="../images/chapter-3-icon.png"
relative vs absolute path
From Wireframe to HTML

demo

view all the tags at: http://www.w3schools.com/tags/
HTML tags
organization

<div> - section in document

<span> - section in document (text)

view all the tags at: http://www.w3schools.com/tags/
Here is a large chunk of text, along with an image. This is a mess.

<img src="img/1.png"/>

Here is a large chunk of text, along with an image. This is a mess.

view all the tags at: http://www.w3schools.com/tags/
Here is a large chunk of text, along with an image.

This is a less of a mess.

view all the tags at: http://www.w3schools.com/tags/
From **Wireframe** to **HTML**

*(but more organized this time)*

view all the tags at:  [http://www.w3schools.com/tags/](http://www.w3schools.com/tags/)
web design principles
visual hierarchy

organization and prioritization of content to communicate a message
visual hierarchy

implying importance by using size
visual hierarchy
implying importance by using
white space
Two Superpowers We Wish We Had

By Bill and Melinda Gates

If you could have one superpower, what would it be?

We were asked that question recently by high school students in Kentucky. Our answers must have sounded pretty lame to fans of superheroes like Supergirl and the Flash—we simply wished for more energy and time to help us keep up with all the moving pieces in our busy lives.
design for the screen

bostonglobe.com
design for the screen

wikipedia.org
design for the screen

medium.com
design for the screen

1997

today
design for the screen

responsive design
design for the screen

some content may be “below the fold”
design for the screen
adding style
CSS basics
rule syntax

selector {
  property: value;
  property: value;
  ...
}

CSS basics

rule syntax

selector {
    property: value;
    property: value;
    ...
}

<div> Hello world! </div>
CSS basics

rule syntax

div {
  color: #E742F4;
}

hello world

<div> Hello world! </div>
CSS basics
rule syntax

div {
  color: #E742F4;
}

<div> Hello world! </div>
CSS basics

rule syntax

div {
    color: #E742F4;
}

<div> Hello world! </div>

<div> Is this pink? </div>
CSS basics

rule syntax

.greeting {
  color: #E742F4;
}

<div class="greeting">
  Hello world!
</div>

<div>
  Is this pink?
</div>
# CSS basics
rule syntax

```css
#greeting {
  color: #E742F4;
}
```

```html
<div id="greeting"> Hello world! </div>
```

```html
<div> Is this pink? </div>
```
CSS basics

rule syntax

Typography
font-size
text-align
text-indent
font-weight
font-family
line-height
text-transform

Colors
color
background-color
background-image
border

Positioning
position
width, height
margin
padding
border

Rule syntax
CSS basics
rule syntax

**HTML element**

```html
dl
<div>

```

**CSS rule**

```css
div {
  font-size: 14px;
}
```

```html
dl
<div class="caption">
  (multiple elements)
</div>
```

```css
caption {
  color: gray;
}
```

```html
dl
<h1 id="headline">
  (unique elements)
</h1>
```

```css
#headline {
  font-size: 20px;
}
```
HTML element

```html
<div class="intro">
  <h1>…</h1>
</div>
```

CSS rule

```
.intro h1 {
  font-size:18px;
}
```

define style h1 inside every element with class="intro"
Adding style

references
http://htmldog.com/reference/cssproperties/
http://www.w3schools.com/cssref/
CSS basics
box model

- Margin
- Border
- Padding
- Content
CSS basics
box model

.quote {
  border: 1px solid #000000;
}

hello
CSS basics

box model

.quote {
  border: 1px solid #000000;
  padding: 15px;
}

hello
CSS basics

box model

.quote{
  border: 1px solid #000000;
  padding: 15px 0px 0px 0px;
  top  right bottom left
}

hello
CSS basics
box model

.quote {
  border: 1px solid #000000;
  padding-top: 15px;
}

hello
CSS basics

display properties

```html
<div class="cupboard">
  plates & bowls
</div>
<div class="cupboard">
  cups
</div>
```

```
cupboard {
  border: 1px solid black;
  display: block;
}
```
CSS basics

display properties

```html
<div class="cupboard">
  plates & bowls
</div>
<div class="cupboard">
  cups
</div>
```

```css
.cupboard {
  border: 1px solid black;
  display: inline;
}
```
CSS basics
display properties

```html
<div class="cupboard">
    plates & bowls
</div>
<div class="cupboard">
    cups
</div>
```

```
cupboard {
    border: 1px solid black;
    display: inline;
    width: 100px;
}
```
CSS basics

display properties

```html
<div class="cupboard">
  plates & bowls
</div>
<div class="cupboard">
  cups
</div>
```

```
cupboard {
  border: 1px solid black;
  display: inline-block;
  width: 100px;
}
```
Adding more style

references
http://htmldog.com/reference/cssproperties/
http://www.w3schools.com/cssref/
It's your turn!

http://web.mit.edu/2.744/studentSubmissions/web101/[your kerberos/mit username]

host: sftp://athena.dialup.mit.edu
username/password: your athena username/password

/afs/athena.mit.edu/course/2/2.744/studentSubmissions/web101
or mit/2.744/... etc
web design 101.5
website help!
just ask

e-mail: 2744ta
slack: mitproductdesign2018.slack.com
(check email for sign-up link)

office hours:
Friday, 7-10 pm, 3-370
Monday, 5-9 pm, 3-442
what’s next?

human-use analysis

Tuesday, Feb. 8  Thursday, March 8

user experience design/storyboard

Thursday, Feb. 22  Tuesday, March 6
pictures?

Nicolas
Kevin
Melody
Meghan
Ruben
Ali
Jennifer