6.148

Kickoff and Theme Reveal

IAP 2017
WELCOME
wat is 6.148?
Crash Course on WebDev

A taste of 6-3

wat is 6.148?

A first experience in creating something

a very LONG Hackathon

Get food, learn web dev and win $$$
We take you end-to-end
We take you end-to-end
We take you end-to-end
Course Staff!

Monde Duinkharjav
Class of 2018

David Wong
Class of 2016

Hunter Gatewood
Class of 2016

Eric Chen
Class of 2016

Yolanda Zhou
Class of 2019

Aaron Sipser
Class of 2019

Aashish Welling
Class of 2020

Nickolai Zeldovich
Faculty Sponsor
SPONSORS
Platinum

Microsoft

Meteor

nextjump

Kensho
Basic
Theme...
6.148

What is a Website?

IAP 2017
What is a Web Application

Strictly speaking...

Websites are defined by content and information.

Web applications are defined by interactions with the user; typically action driven.
DID YOU HAVE ANY NEW YEAR'S RESOLUTIONS?

GONNA FINALLY FINISH DEALING WITH THOSE EMAILS FROM 2008.

AS MY EMAIL BACKLOG APPROACHES 10 YEARS, I'M
DID YOU HAVE ANY NEW YEARS RESOLUTIONS?
GONNA FINALLY FINISH DEALING WITH THOSE EMAILS FROM 2008.

AS MY EMAIL BACKLOG APPROACHES 10 YEARS, I'M
Website?  Web App?
What is a Web Application

Strictly speaking...

Websites are defined by content and information

Web applications are defined by interactions with the user; typically action driven

Honestly, the naming is not really important -- the last example already blurs the line
Point is...

We want to design interactivity in the applications we make
But how do we make such apps?
view

But how do we make such apps?
Accessing a Website
Accessing a Website

Client (you)
Accessing a Website

Client (you)

Server (xkcd)
Accessing a Website

Client (you)

Request: GET xkcd.com

Server (xkcd)
Accessing a Website

Request: GET xkcd.com
Response: Webpage files

Client (you)
Program used to view a website

Server (xkcd)
Stores and serves a website
Accessing a Website

Request: GET xkcd.com

Response: Webpage files

Client (you)
Chrome Program used to view a website

Server (xkcd)
Stores and serves a website
Webpage files
<div class="text-box">
<p>So text. Much HTML. Wow.</p>
</div>
Webpage files

HTML

```html
<div class="text-box">
<p>So text. Much HTML. Wow.</p>
</div>
```

CSS

```css
.text-box {
  font-family: "Comic Sans";
  color: pink;
  transform: rotate(20deg);
}
```
Webpage files

HTML

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<div class="text-box">
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CSS

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JS

```javascript
var doge = "moar text";
console.log(doge);
```
Webpage files

**HTML**

```html
<div class="text-box">
  <p>So text. Much HTML. Wow.</p>
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**CSS**

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}
```

**JS**

```
var doge = "moar text";
console.log(doge);
```
wow
so 6.148
much demo
very website

wow
so 6.148
much demo
very website

such view
very imgur
But how do we make such apps?
But how do we make such apps?
Upcoming Lectures

Tuesday: Building a webpage -- HTML, CSS, JS

Wednesday: Sending a webpage -- Node.js, AJAX

Thursday: Scaling the server -- MongoDB, Templating
Theme...
What about class logistics tho...
Course Policies
Competition, Credit, both?

Credit

Competition
Competition, Credit, both?

Credit
6 units of credit

Competition
Chance for Cash and Glory
Competition, Credit, both?

Credit

6 units of credit

Complete Milestones

Competition

Chance for Cash and Glory

Complete Milestones
Competition, Credit, both?

Credit
6 units of credit
Complete Milestones
Submit Site by End of IAP

Competition
Chance for Cash and Glory
Complete Milestones
Submit Site that fits the theme by MILESTONE 3
Competition Eligibility

go.6148.io/rules -- post a private Piazza post for any questions!

Do it before Milestone 0 this Wednesday
Main vs Casual Divisions

Main

Casual
Main vs Casual Divisions

Main
Larger prize pool

Casual
Smaller prize pool
Main vs Casual Divisions

**Main**
- Larger prize pool
- Harder Competition

**Casual**
- Smaller prize pool
- More casual experience
Main vs Casual Divisions

Main
- Larger prize pool
- Harder Competition
- High expectations

Casual
- Smaller prize pool
- More casual experience
- Lower expectations
Main vs Casual Divisions

Main
Larger prize pool
Harder Competition
High expectations
Have prior experience OR
Work your butt off

Casual
Smaller prize pool
More casual experience
Lower expectations
Little prior experience AND
Want a chill IAP
Main vs Casual Divisions

Main

Work your butt off

Casual

Want a chill IAP
Note regarding Division

No teams with > 1 Course 6-2 or 6-3 juniors, seniors, grad students allowed in Casual Division

Indication of Division will be required by Milestone 1 (form will be sent out)

go.6148.io/rules -- post a private Piazza post for any questions!
Course Overview
Schedule

Week 1
intro, setup, lectures, M0: Ideation and M1: Pitches
Schedule

Week 1  intro, setup, lectures, M0: Ideation and M1: Pitches
Week 2  advanced topics, guest lectures, hackathon!
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Week 1  intro, setup, lectures, M0: Ideation and M1: Pitches
Week 2  advanced topics, guest lectures, hackathon!
Week 3  code, code, code, M2: MVP
Schedule

Week 1  intro, setup, lectures, M0: Ideation and M1: Pitches
Week 2  advanced topics, guest lectures, hackathon!
Week 3  code, code, code, M2: MVP
Week 4  CODE, CODE, CODE
         M3: final submission, judging, awards!
Schedule

Week 1: intro, setup, lectures, M0: Ideation and M1: Pitches

Week 2: advanced topics, guest lectures, hackathon!

Week 3: code, code, code, M2: MVP

Week 4: CODE, CODE, CODE
M3: final submission, judging, awards!
sleep!
Schedule

Week 1  intro, setup, lectures, M0: Ideation and M1: Pitches
Week 2  advanced topics, guest lectures, hackathon!
Week 3  code, code, code, M2: MVP
Week 4  CODE, CODE, CODE
        M3: final submission, judging, awards!
        sleep!

go.6148.io/courseschedule
Milestones!

Ideation MILESTONE 0
Milestones!

Ideation

MILESTONE 0

Project Pitches

MILESTONE 1
# Milestones!

<table>
<thead>
<tr>
<th>Milestone</th>
<th>Milestone Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ideation</td>
<td>MILESTONE 0</td>
</tr>
<tr>
<td>Project Pitches</td>
<td>MILESTONE 1</td>
</tr>
<tr>
<td>Minimum Viable Product</td>
<td>MILESTONE 2</td>
</tr>
</tbody>
</table>
Milestones!

Ideation MILESTONE 0
Project Pitches MILESTONE 1
Minimum Viable Product MILESTONE 2
Final Website! MILESTONE 3
You must do...

Dynamic website supported by a back-end
You must do...

Dynamic website supported by a back-end

Personalized experience based on user accounts
You must do...

Dynamic website supported by a back-end
Personalized experience based on user accounts
Minimum security requirements fulfilled
You must do...

Dynamic website supported by a back-end

Personalized experience based on user accounts

Minimum security requirements fulfilled

Original design and implementation
You must do...

Dynamic website supported by a back-end

Personalized experience based on user accounts

Minimum security requirements fulfilled

Original design and implementation

Use Git on a 6.148 Github repo
You CANNOT do...

Use anything like Drupal, Wordpress or Squarespace
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Use anything like Drupal, Wordpress or Squarespace

Use a previous project (or a significant portion of a previous project)
You CANNOT do...

Use anything like Drupal, Wordpress or Squarespace

Use a previous project (or a significant portion of a previous project)

Outsource your development. Have minions.
You CANNOT do...

Use anything like Drupal, Wordpress or Squarespace

Use a previous project (or a significant portion of a previous project)

Outsource your development. Have minions.

Evil
You CANNOT do...

Use anything like Drupal, Wordpress or Squarespace

Use a previous project (or a significant portion of a previous project)

Outsource your development. Have minions.

Evil

[go.6148.io/rules](http://go.6148.io/rules) -- post a private Piazza post for any questions
Judging

Functionality  technical components of your core features
Usability     ease-of-use of the website
Aesthetics    look-and-feel of the website
Concept Execution applicability of the solution to the problem

go.6148.io/judging
Where do we get help from?
Learning Resources

PIAZZA

The Course Website  6148.io

Resources Compilation  go.6148.io/resources

Office Hours

“Hackathon” during Week 2
Hackathon

Extended Office Hours

Try to get as much shit done as possible

We’ll have snacks and staff
THEME
2015 Theme  Around the World
2016 Theme  Remember the Future
2017 Theme...
To give you some context...
To give you some context...

- I swear he’s a real person
To give you some context...

- I swear he’s a real person
- He taught for 6.148
To give you some context...

- I swear he’s a real person
- He taught for 6.148
- My twin brother
To give you some context...

- I swear he’s a real person
- He taught for 6.148
- My twin brother
- Has a thick Russian accent (he lived there for a while)
To give you some context...

- I swear he’s a real person
- He taught for 6.148
- My twin brother
- Has a thick Russian accent (he lived there for a while)
- HE’S MISSING

Monde Duinkharjav
Brother
BEYOND THE HORIZON
Think about the Theme!
After Lunch

Ideation and Wireframing Lecture