

Intro to Web

Fall 2018

Tandon School of Engineering, NYU

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Today

- Intros
- Syllabus
- Browser Basics
- HTML + CSS Basics
- Homework 1 **Due next Tuesday**

Who is in here?

Mostly 2nd and 3rd year IDM students

Tell me more...?

Pair Interviews

Music, travel, passions...

The Catch?

No talking

Intro to Web - DM-UY 2193

Introduction to "font end" web development

HTML, CSS, JavaScript

In this course, students focus on client-side programming [...] to enable the production of a website of professional quality in design and production.

Goals

- Create and host a dynamic, responsive website
- Know how to get help when you need it
- Be able to build for many audiences
- Be able to start a web business in NY

Tech Used

- Editor (I don't care which one). I use IDEA.
- Chrome
- Git & Github
- CSS: Gulp & SASS (+ node & npm)
- Vanilla JS & Vue.js

Feedback

+1

Syllabus Highlights

Communication

[#2018-fall-students](https://nyuweb.slack.com)

hm90@nyu.edu

Office hours are after class or by appointment

Classes

TTh 8:30-10:20

Grading

40% Participation + Homework

30% Peer Facilitation

30% Final Project

No exams, no midterms, no final

PLEASE NOTE: 3 unexcused absences will result in your grade dropping 10%

Class Structure

- 30 min review / warm up
- 30 min new content
- 5 min break
- 35 min team activity / share out
- 10 min wrap

Syllabus Negotiation

Accommodations

Contact New York University's Moses Center for
Students with Disabilities at **1-212-998-4980** or
mosescsd@nyu.edu

You must be registered with CSD to receive accommodations, but come talk to me so
we can get you setup ASAP

Waitlisted?

I will look at the list later today and get back to you
in a few days.

Final Words

Do not cheat

Push your own learning

Teach what you know

Thoughts?
Comments?

Today

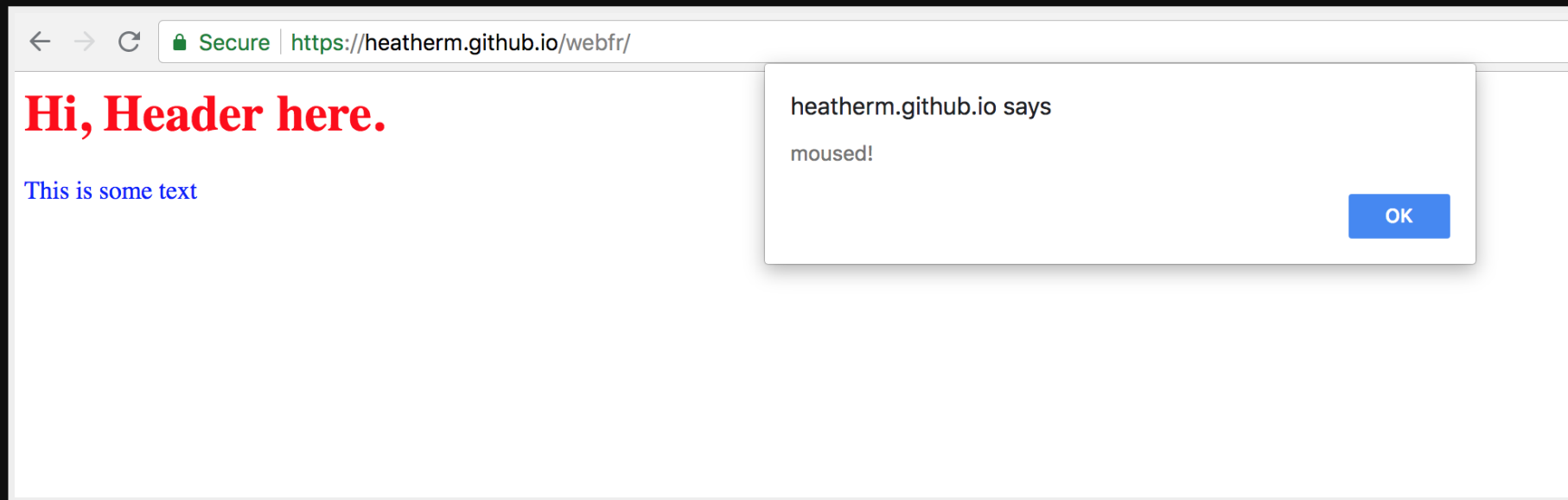
- ~~Intros~~
- ~~Syllabus~~
- Browser Basics
- HTML + CSS Basics
- Homework 1 **Due next Tuesday**

Let's create a website

Github Pages

- New Repo
- Add index.html
- Settings > Github Pages > set github source to master branch
- Click autogenerated link

What went into showing me this?

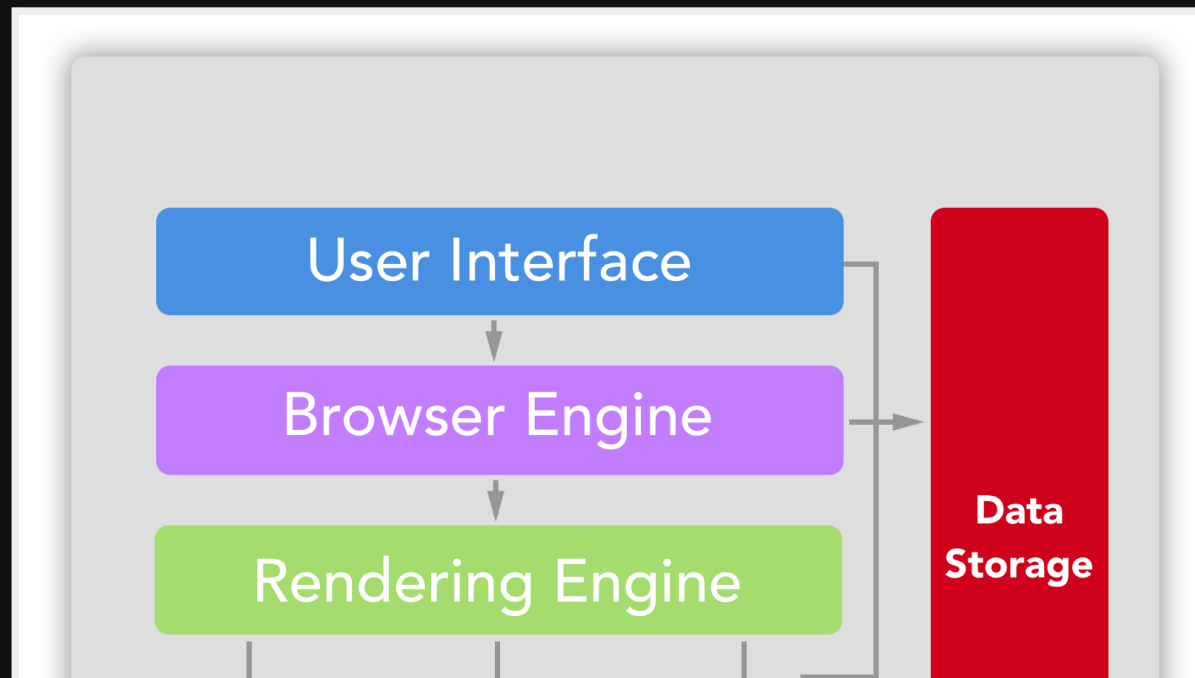


Chrome Browser to Github.io Server

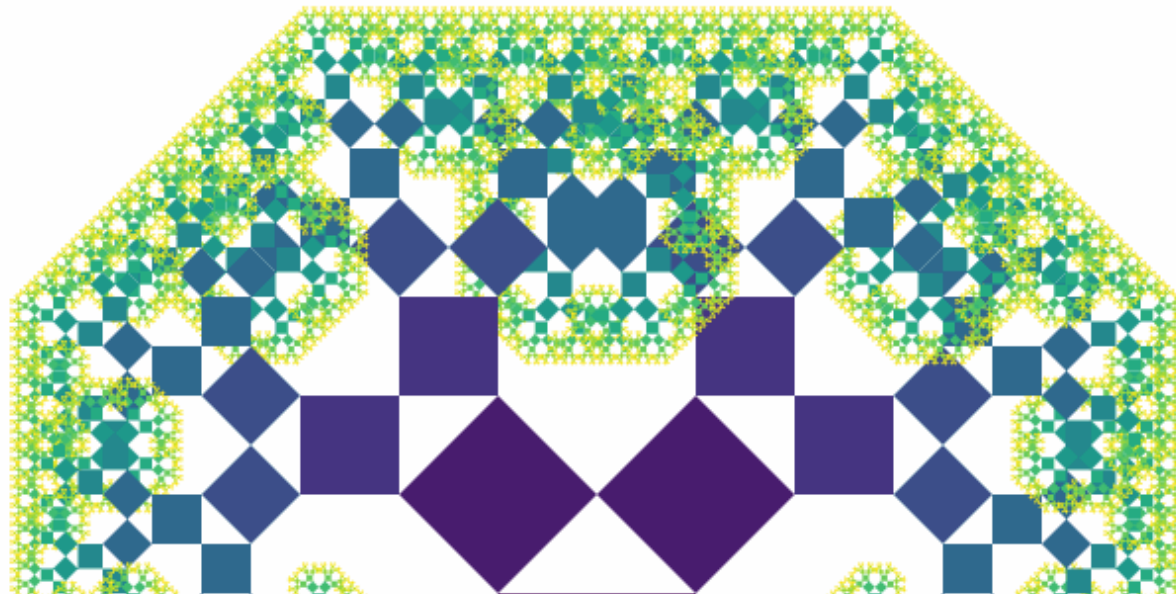
1. Browser Requests the index.html
2. Server Sends the index.html page to my browser
3. Browser reads and renders index.html



Read + Render



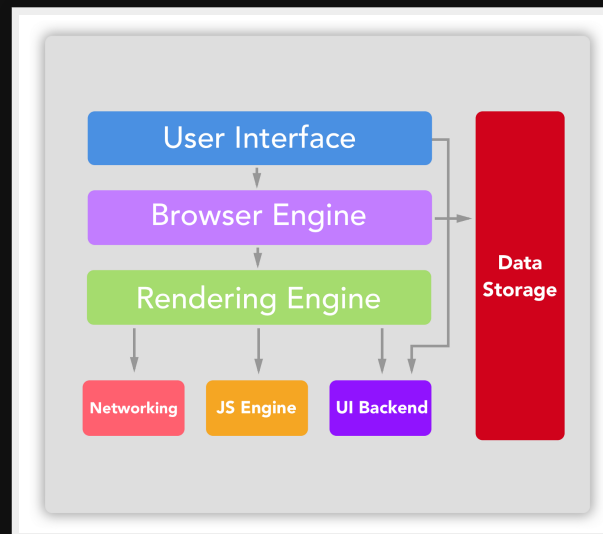
Neverending...



Rendering Engine

Reads + Renders

A render process, usually one per tab
8kB chunks from the networking layer



Render Steps

1. Load index.html
2. Parse HTML
3. Create "DOM" tree
4. Create render tree
5. Layout render tree
6. Paint

Parsing

We need a way to specify different parts of the page and how/where they get drawn.

Markup?

Enter your TIN in the appropriate box. ~~The TIN provided must match~~ the name given on Line 1 to avoid backup withholding. ~~For individuals~~, this is your social security number (SSN). However, for a resident alien, sole proprietor, or disregarded entity, see the Part I instructions on page 3. For other entities, it is your employer identification number (EIN). If you do not have a number, see *How to get a TIN* on page 3.

Note. If the account is in more than one name, see the chart on page 4 for guidelines on whose number to enter.

Part II Certification

Under penalties of perjury, I certify that:

1. The number shown on this form is my correct taxpayer identification number (or I am waiting for a number).
2. I am not subject to backup withholding because: (a) I am exempt from backup withholding, or (b) I have been notified by the Internal Revenue Service (IRS) that I am subject to backup withholding as a result of a failure to report all income, and I am no longer subject to backup withholding; and
3. I am a U.S. citizen or other U.S. person (defined below).

Markdown?

```
Heading  
=====
```

```
## Sub-heading
```

HTML

Hyper Text Markup Language

Denotes structural semantics for text such as
headers, paragraphs, lists, links, quotes

Header Tag: h1

lower case!

<h1>Hi, Header</h1>

Opening Tag

```
<h1>
```

<h1>Hi, Header

Close Tag

`<h1>Hi, Header``</h1>`

Closing tag has a forward slash

Tags

And open + close tag turns into a DOM element

****Not all elements require a start and end****

Tags can be nested

Tags can have attributes

Opening Tag Attributes

onmouseenter allows an element to specify scripts to be run

```
<h1 onmouseenter="alert()">
```

Class Attribute

Provides a way of classifying similar elements

```
<h1 class="header--green">  
<h3 class="header--green">
```

Attributes

Attributes available depend on the tag

Attributes can add or modify tag behavior

Style Tag

```
<style>
    h1 {color:red;}
    p  {color:blue;}
</style>
```

`<style>`

- Defines style information for an HTML document
- Uses CSS to define those styles

CSS

Controls the layout, colors and fonts

```
h1 {color:red; }
```

Makes all h1 elements red

Adding CSS

- Inline: style attribute
- Internal: style tag
- External: stylesheets

Inline example

style attribute

```
<!DOCTYPE html>
<html>
<head>
</head>
<body>
  <h1 style="color:red;">Hi, header</h1>
  <p>This is some text.</p>
</body>
</html>
```

Internal example

style tag

```
<!DOCTYPE html>
<html>
<head>
  <style>
    h1 {color:red;}
    p  {color:blue;}
  </style>
</head>
<body>
  <h1>Hi, header</h1>
  <p>This is some text.</p>
</body>
</html>
```

External example

style sheet

```
<!DOCTYPE html>
<html>

<head>
  <link rel="stylesheet" href="styles.css">
</head>
<body>
  <h1>Hi, header</h1>
  <p>This is some text.</p>
</body>
</html>
```

Cascade example

```
<!DOCTYPE html>
<html>
<head>
  <link rel="stylesheet" href="styles.css">
  <link rel="stylesheet" href="stylesonstyles.css">
</head>
<body>
  <h1>Hi, header</h1>
  <p>This is some text.</p>
</body>
</html>
```


Wrapup

1. Starter Github
2. Starter Tags
3. Starter CSS

Homework due Next Tuesday

1. Make a webpage using some tags and attributes we didn't discuss
2. Style your tags in an external css sheet
3. Push to github pages

For Thursday

1. Sign up for a free Github **account**
2. Get the free education **pack**
3. Get the free education **pack**