

Fall 2017: <https://ar589.github.io>

Interactive Design

- Introduction
- Getting Setup
- Intro to HTML
- Intro to CSS

Goals for This Semester

- ❖ Develop an understanding of a modern interactive design process.
- ❖ Put your work on the web.
- ❖ Use code + a web browser as your design tool.

“I’m sorry, did he say code?”

—You, probably.

A Brief Overview
of
This Semester

Assignments

Assignment No. 1

Art-Directed Article

Assignment No. 2

Weather App Interface

Assignment No. 3

Portfolio Website

Ongoing

Weekly Challenges

Expectations

- ❖ Attendance is required.*
- ❖ Come to class ready to talk about your work.
- ❖ All work must be submitted via GitHub.
- ❖ *Your must write your own code.*
Use of unsanctioned code in assignments or weekly challenges will earn a failing grade.

Resources

Website

<https://ar589.github.io>

Slack

<https://ar589.slack.com/signup>

Email

dperrera@bu.edu

Getting Set Up

Tools of the Trade

- ❖ Web Browser
- ❖ Code Editor
- ❖ Terminal
- ❖ Git / GitHub

Web Browser

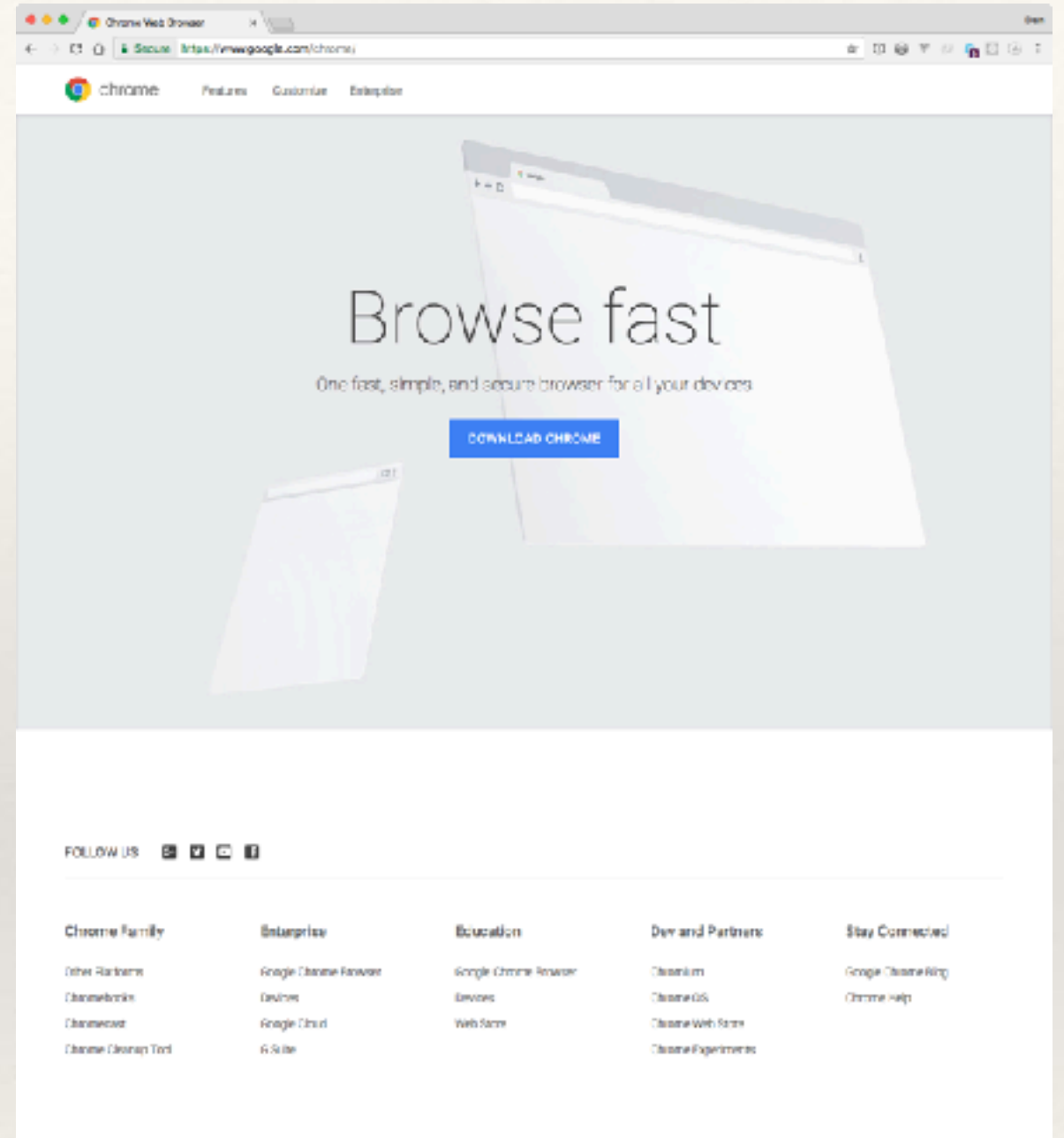
Google Chrome

Most popular browser in the world

Excellent developer tools

Cutting-edge Browser features

<https://google.com/chrome>



Code Editor

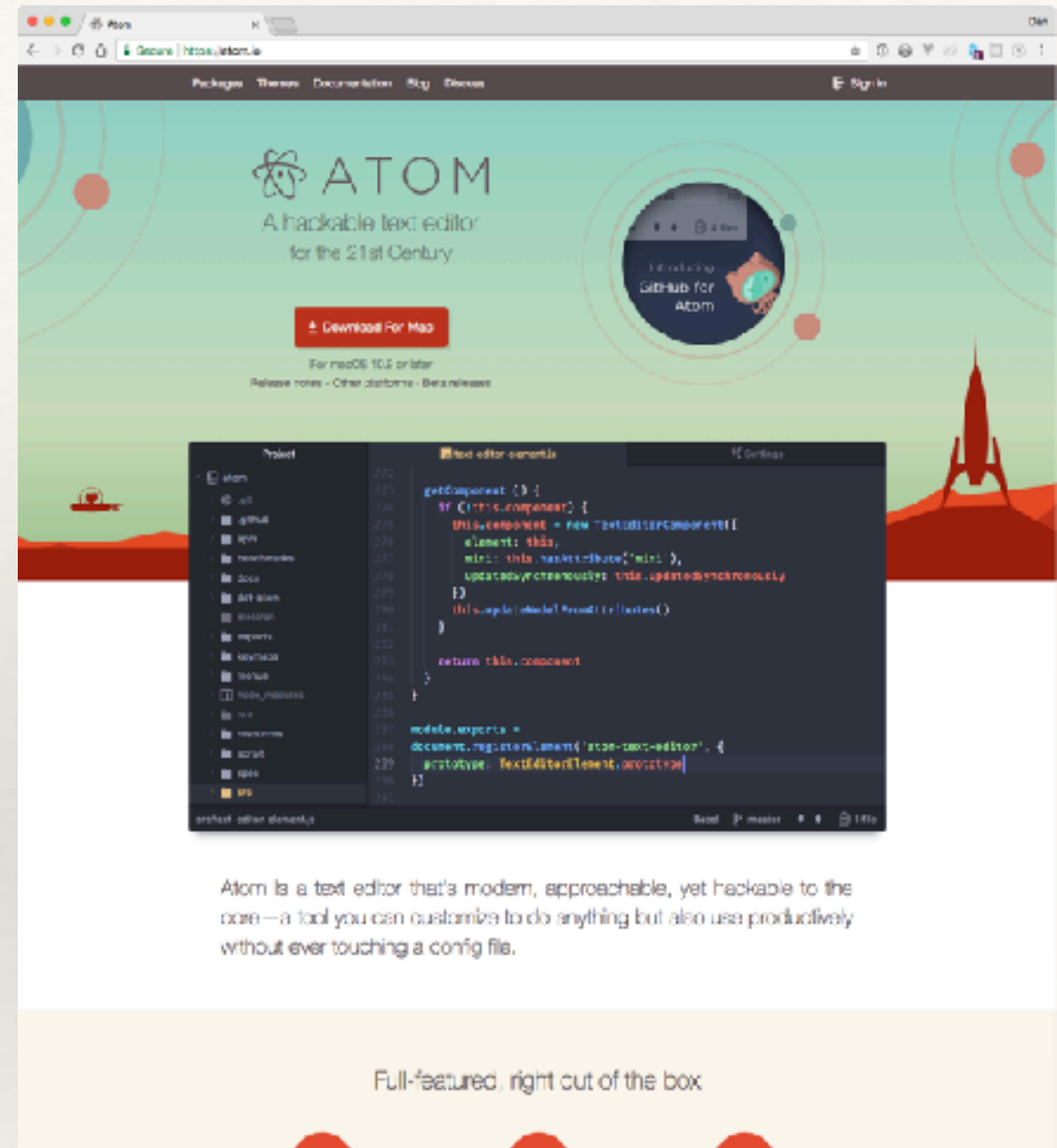
Atom

Open Source

Extendable

Minimal

<https://atom.io>



Terminal

Terminal.app

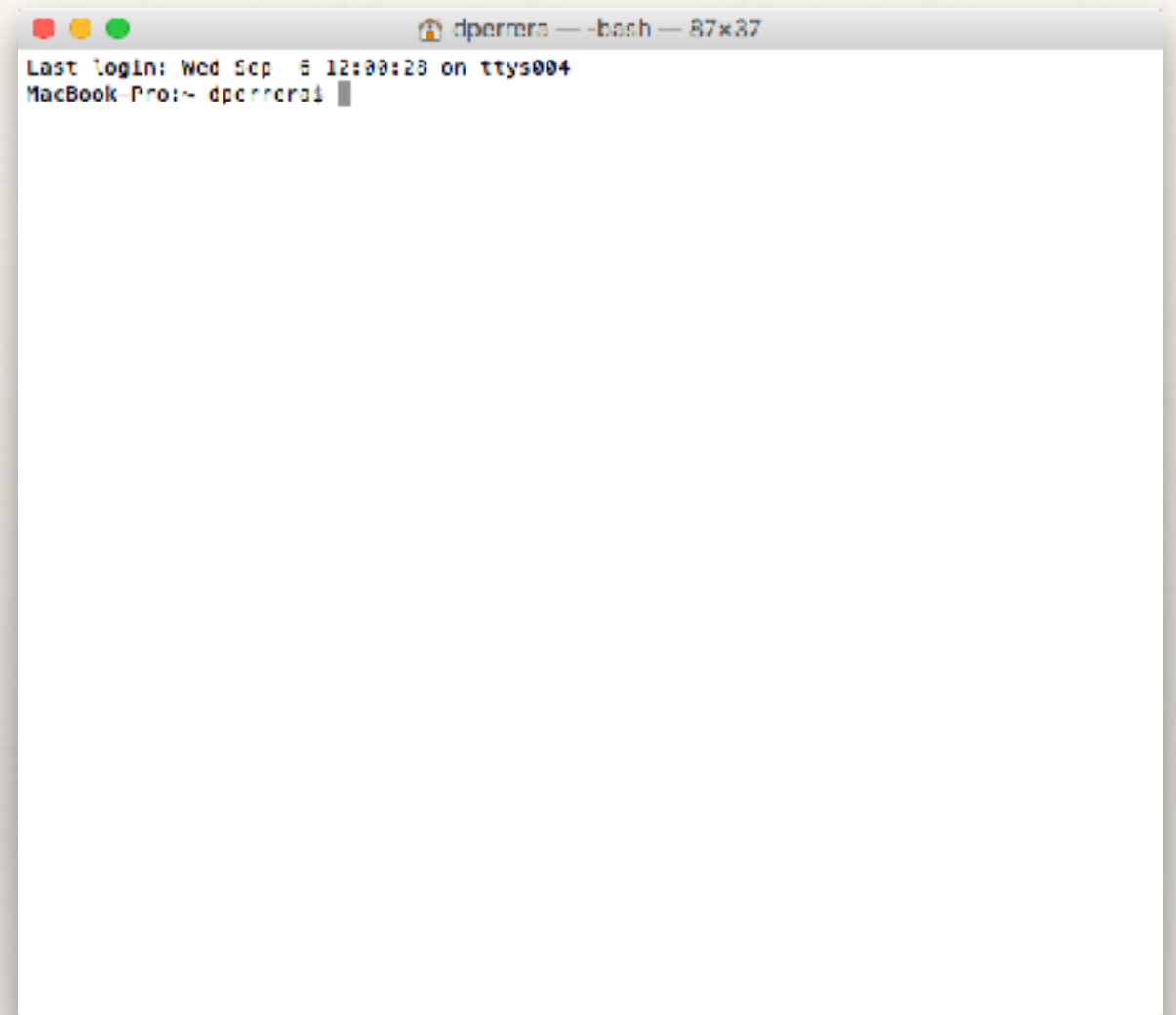
Bundled with OS X

A fast interface for our computers

Turn our computer into a server

Version control with git

/Applications/Utilities/Terminal.app



Git

GitHub

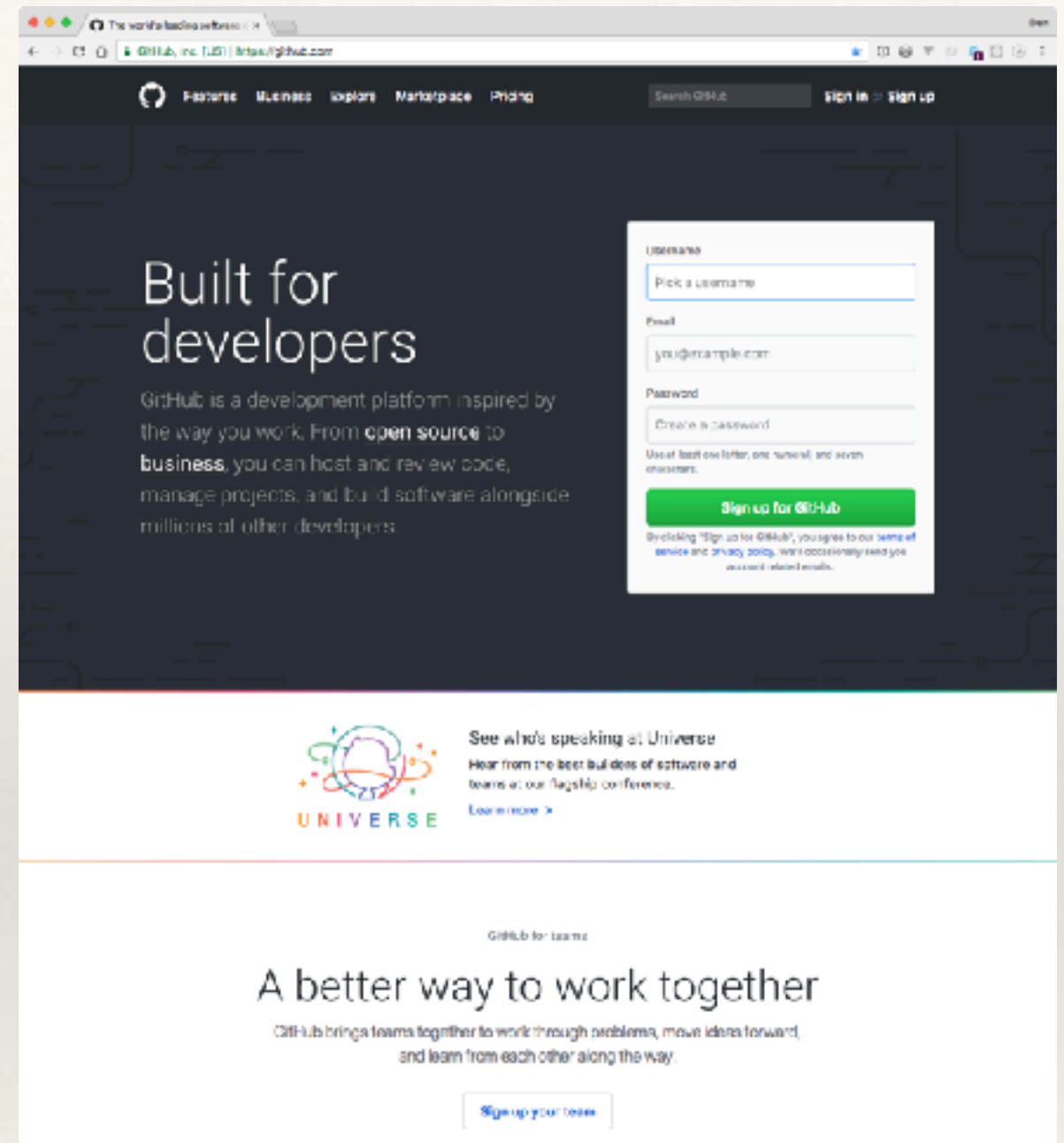
Most popular version control system

Free for public repos

Great for collaboration

Great for submitting your work

<https://github.com>



Intro to HTML

What is HTML?

- ❖ “Hyper Text Markup Language”
- ❖ Text outline for your web page
- ❖ Structure is described with “elements”
- ❖ Files end in “.html”

HTML Elements



Open Atom and Chrome

- ❖ In Atom, make a new file called 'index.html' and save it to your desktop.
- ❖ Drag the index.html file into Chrome.

Headings

- ❖ There are six levels of headings
- ❖ `<h1>` – `<h6>`
- ❖ You will usually only use four

Headings

<h1>Dogs</h1>

<h2>Breeds</h2>

<h3>Poodles</h3>

<h4>Standard Poodle</h4>

<h4>Miniature Poodle</h4>

<h4>Toy Poodle</h4>

Paragraphs

<p>Hello world! </p>

Lists

- ❖ Ordered ``
- ❖ Unordered ``
- ❖ List Items ``

Unordered Lists

```
<ul>
```

```
  <li>Flour</li>
```

```
  <li>Water</li>
```

```
  <li>Salt</li>
```

```
</ul>
```

Ordered Lists

```
<ol>
```

```
  <li>Measure ingredients.</li>
```

```
  <li>Mix together.</li>
```

```
  <li>Bake for 1 hour.</li>
```

```
</ol>
```

Links

Attribute

`BU`

Images

Attributes

|-----|

Block vs. Inline Elements

- ❖ Block elements start on a new line.
- ❖ Inline elements go with the flow of the content.

Block Elements

- ❖ Headings
- ❖ Paragraphs
- ❖ Lists / List Items

Inline Elements

- ❖ Links
- ❖ Images

Comments

`<!-- This doesn't render -->`

A Basic HTML Page

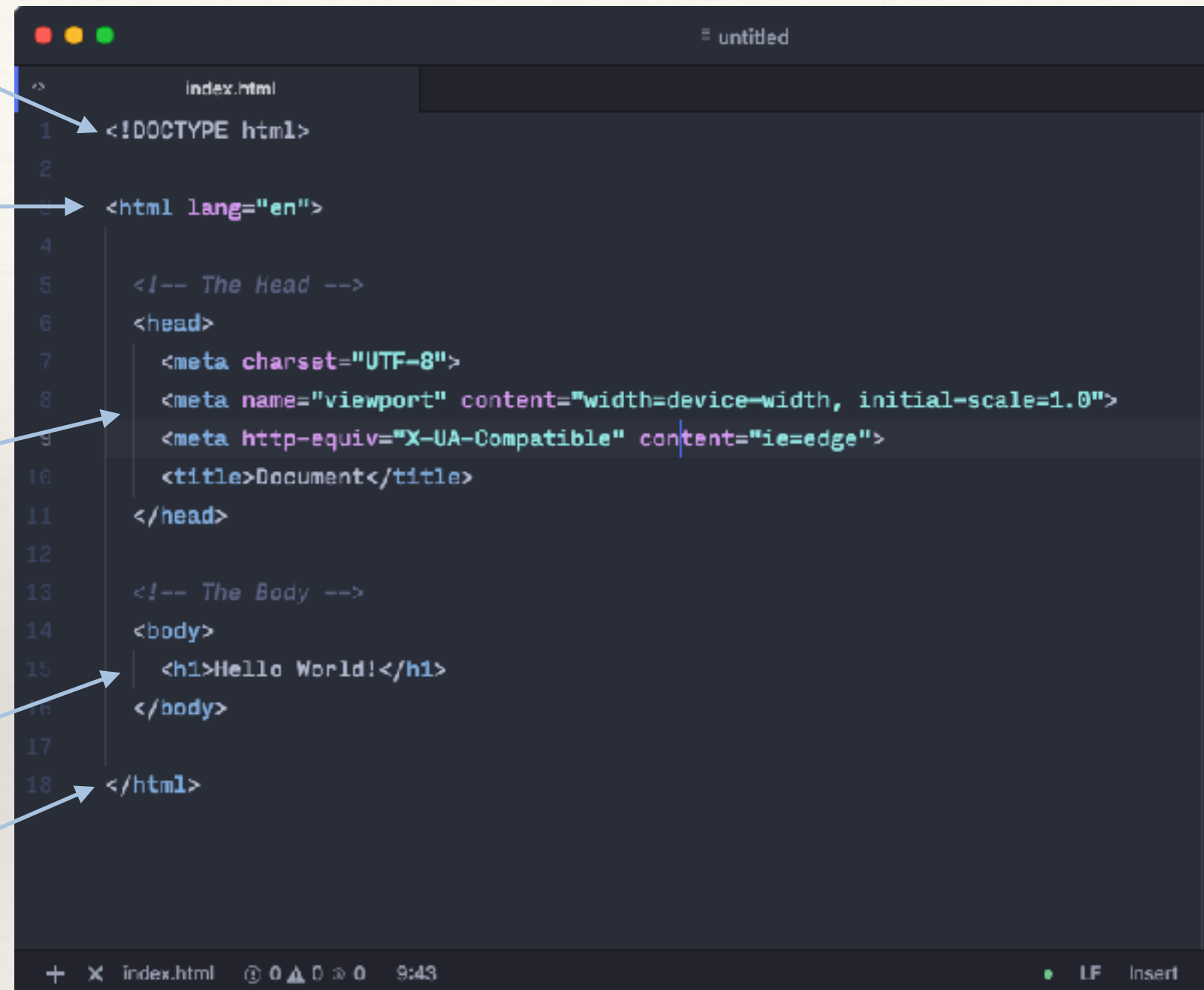
"Hey browser, this is an HTML Document!"

"The document starts here."

"Browsers! This is how to properly render what I made."

"Show this stuff to the humans."

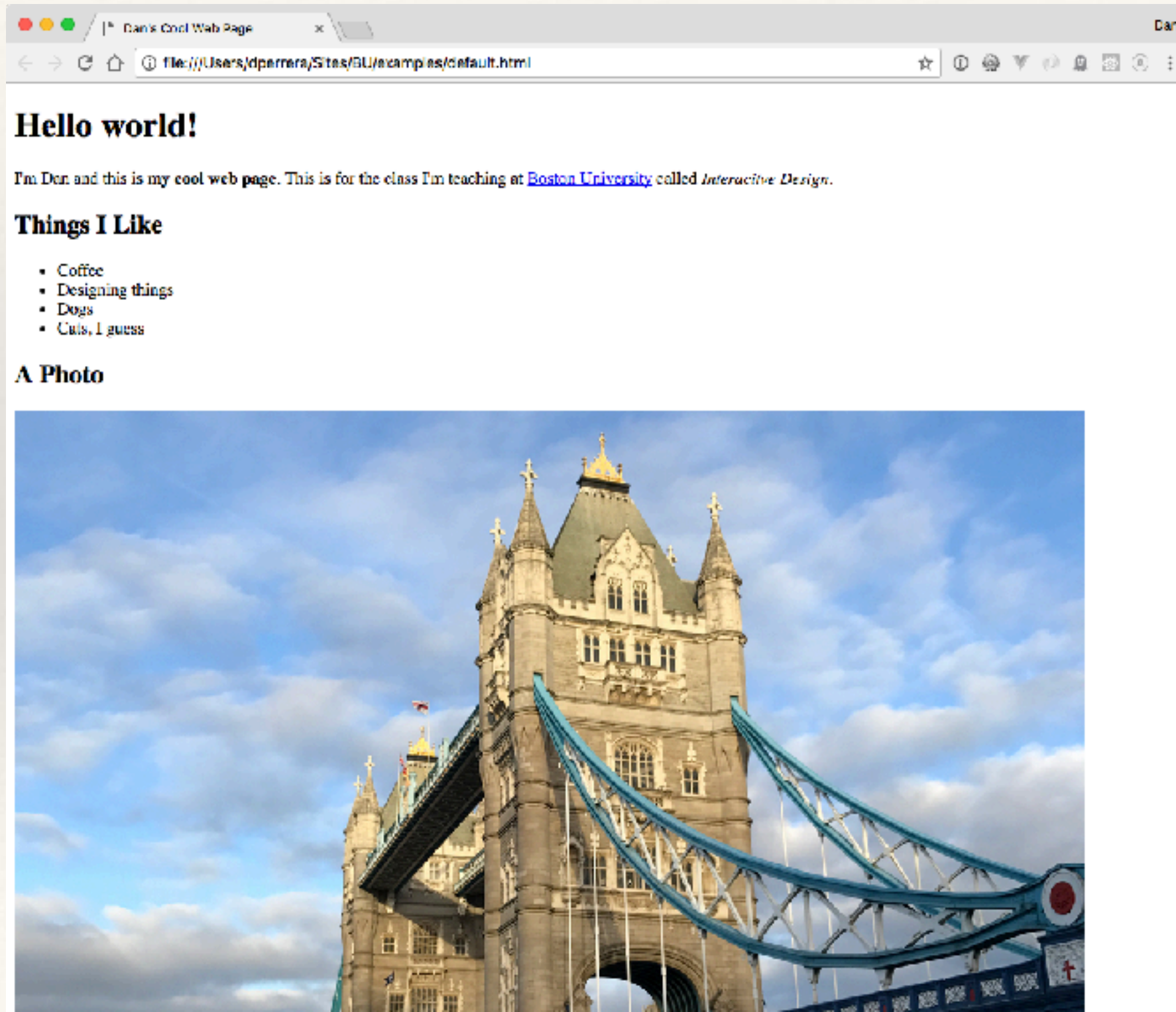
"All done!"

A screenshot of a code editor window titled "untitled" showing an HTML file named "index.html". The code is as follows:

```
1 <!DOCTYPE html>
2
3 <html lang="en">
4
5   <!-- The Head -->
6   <head>
7     <meta charset="UTF-8">
8     <meta name="viewport" content="width=device-width, initial-scale=1.0">
9     <meta http-equiv="X-UA-Compatible" content="ie=edge">
10    <title>Document</title>
11  </head>
12
13  <!-- The Body -->
14  <body>
15    <h1>Hello World!</h1>
16  </body>
17
18 </html>
```

Five blue arrows point from text annotations on the left to specific parts of the code: the first points to line 1, the second to line 3, the third to line 8, the fourth to line 15, and the fifth to line 18. The editor's status bar at the bottom shows "index.html", "9:43", and "LF Insert".

Default Styling



Adding Style

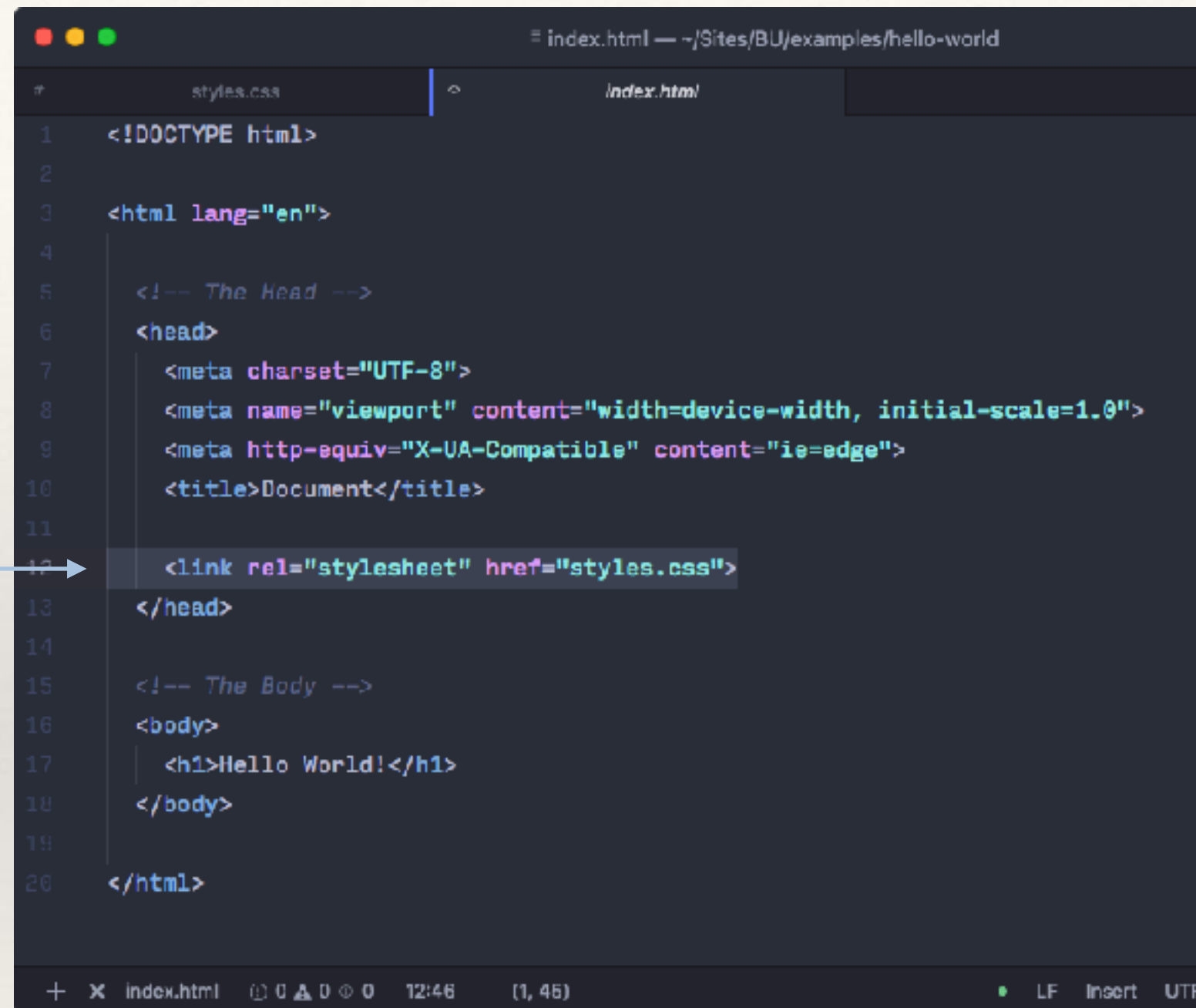
What is CSS?

- ❖ “Cascading Style Sheets”
- ❖ CSS is the language used to describe the style and layout of web pages.
- ❖ Your CSS files contain rules for the browser to follow.
- ❖ Files end in “.css”
- ❖ CSS files are “linked” in the head of your HTML document.

Open Atom and Chrome

- ❖ In Atom, make a new file called 'style.css' and save it to your desktop.
- ❖ Link the CSS file to your HTML document in the `<head>` of 'index.html'

“Hey Browser, check out this document to see how I want this page to look.”



The image shows a code editor window with two tabs: 'styles.css' and 'index.html'. The 'index.html' tab is active, displaying the following HTML code:

```
1 <!DOCTYPE html>
2
3 <html lang="en">
4
5   <!-- The Head -->
6   <head>
7     <meta charset="UTF-8">
8     <meta name="viewport" content="width=device-width, initial-scale=1.0">
9     <meta http-equiv="X-UA-Compatible" content="ie=edge">
10    <title>Document</title>
11
12    <link rel="stylesheet" href="styles.css">
13  </head>
14
15  <!-- The Body -->
16  <body>
17    <h1>Hello World!</h1>
18  </body>
19
20 </html>
```

A blue arrow points from the text on the left to the `<link rel="stylesheet" href="styles.css">` line in the code editor.

The editor's status bar at the bottom shows: '+ X index.html', icons for file operations, the time '12:46', the position '(1, 46)', and encoding options 'LF Insert UTF'.

A CSS Declaration

Selector → `h1 {`

Property → `color: red;` ← Value

`}`

A CSS Declaration

```
h1 {  
    color: red;  
    font-size: 20px;  
    text-transform: uppercase;  
}
```

Design Challenge!

Bread Recipe

Using HTML and CSS, make a web page to present a bread recipe with the provided text and image.

- ❖ Your solution must render correctly in a web browser.
- ❖ It must include the provided image.
- ❖ It must include at least 5 CSS rules linked from a separate file.
- ❖ <https://github.com/AR589/challenges/tree/master/1-bread-recipe>



Helpful Resources

- ❖ <https://developer.mozilla.org/en-US/docs/Learn/HTML>
- ❖ <https://developer.mozilla.org/en-US/docs/Learn/CSS>
- ❖ <http://htmlreference.io/>
- ❖ <http://cssreference.io/>