

Front End Basics

HTML, CSS, and JavaScript

Objectives

- Understand the difference between Front-End and Back-End Code
- Understand the roles of HTML, CSS, and JavaScript

HTTP request

website decide what content to send back

Front End Vs. Back End

1. The Front End is the stuff that you see and interact with: HTML, CSS , and JS
2. The Back End is everything else: so many choices!
3. Restaurant Analogy: The backend is everything that happens in the kitchen; the front end is what is plated and sent to your table

front end, what i see in browser

figuring out the content: back-end: server side logic
With Database, Mongo etc.

<http://skillcrush.com/2012/04/17/frontend-vs-backend-3/>

dynamic pages vs static pages
change some back-end code

describe what we want
skeleton, structure of a page

HTML

- HyperText Markup Language
- Defines the structure of a webpage
 - "put an image here"
 - "put a form here"
- The "nouns" of a webpage

a style of the page
styles existing html

CSS

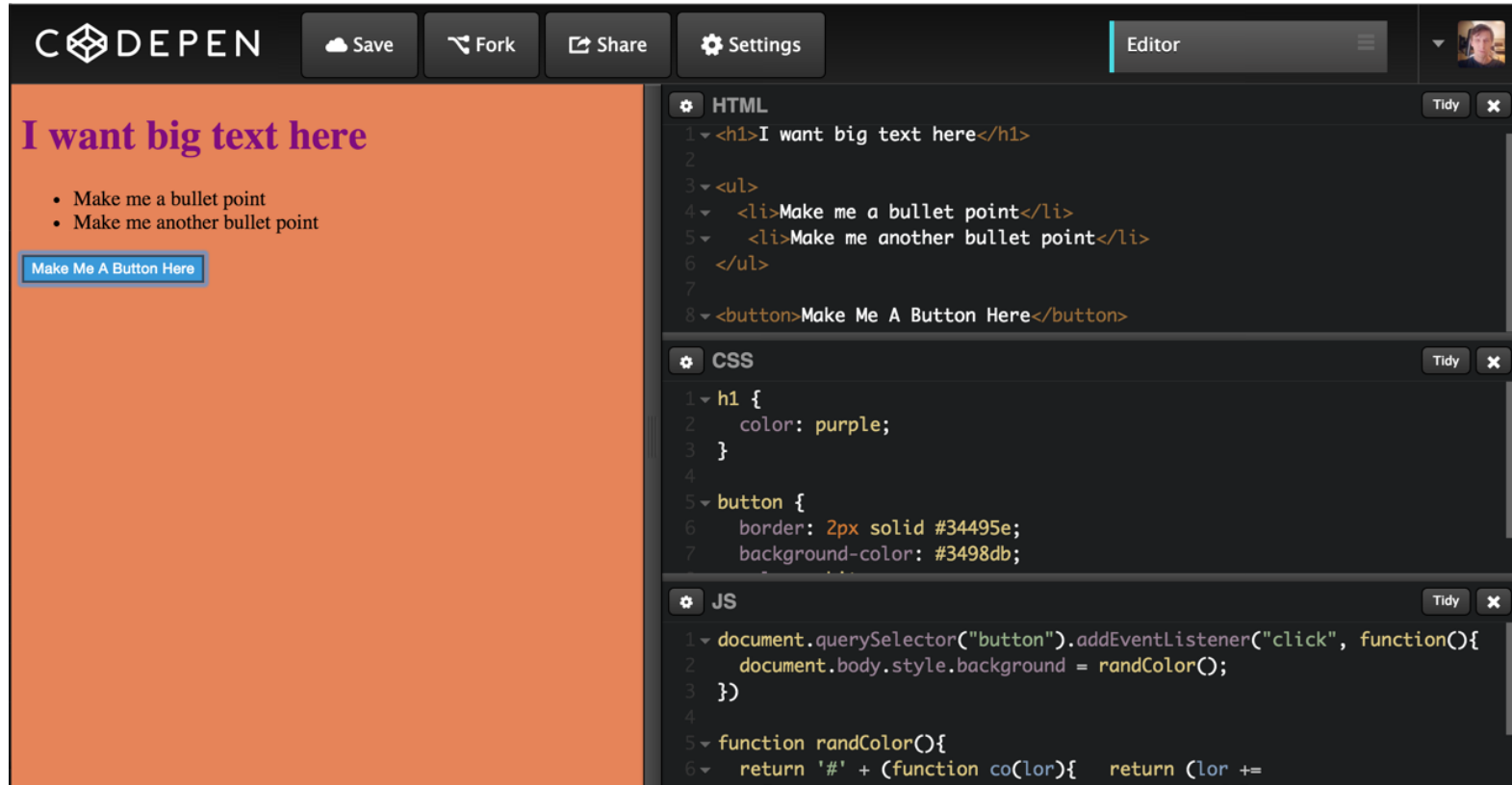
- Cascading Style Sheets
- Defines the style of HTML
 - "make all text purple"
 - "give the first image a yellow border"
- The "adjectives" of a webpage

more complex:
interactivity

JavaScript

- Adds logic and interactivity to a page
 - "Do some math"
 - "Change color when the user clicks"
 - "Load new data from twitter"
- The actions or "verbs" of a webpage

Demo CodePen



The screenshot displays the CodePen interface with a dark theme. The top navigation bar includes the CodePen logo, 'Save', 'Fork', 'Share', 'Settings', and an 'Editor' tab. A user profile picture is visible in the top right corner.

The main workspace is divided into three sections:

- HTML:** Contains the following code:

```
1 <h1>I want big text here</h1>
2
3 <ul>
4   <li>Make me a bullet point</li>
5   <li>Make me another bullet point</li>
6 </ul>
7
8 <button>Make Me A Button Here</button>
```
- CSS:** Contains the following code:

```
1 h1 {
2   color: purple;
3 }
4
5 button {
6   border: 2px solid #34495e;
7   background-color: #3498db;
```
- JS:** Contains the following code:

```
1 document.querySelector("button").addEventListener("click", function(){
2   document.body.style.background = randColor();
3 })
4
5 function randColor(){
6   return '#' + (function color(){ return (lor +=
7     0.00000001 * Math.random() * 16777215).toString(16).padStart(6, '0');
```

The preview area on the left shows the rendered output: a large orange rectangle with the text "I want big text here" in purple, two bullet points, and a blue button labeled "Make Me A Button Here".