Front-End Web Development

HTML

Skeleton

```html
<!DOCTYPE html>
<html>
  <head>
    <title>Browser Tab Text</title>
    <!-- Metadata, CSS, etc. -->
  </head>
  <body>
    <!-- Content displayed in browser -->

    <!-- JavaScript -->
  </body>
</html>
```

Pop Quiz: What tags do you know?

http://jsbin.com/?html,output

developer.mozilla.org

CSS

In a nutshell

In your `<head />`,

```html
<link rel="stylesheet" type="text/css" href="style.css" />
```

Selectors

```
element
#id
.class
```

Pseudo-classes
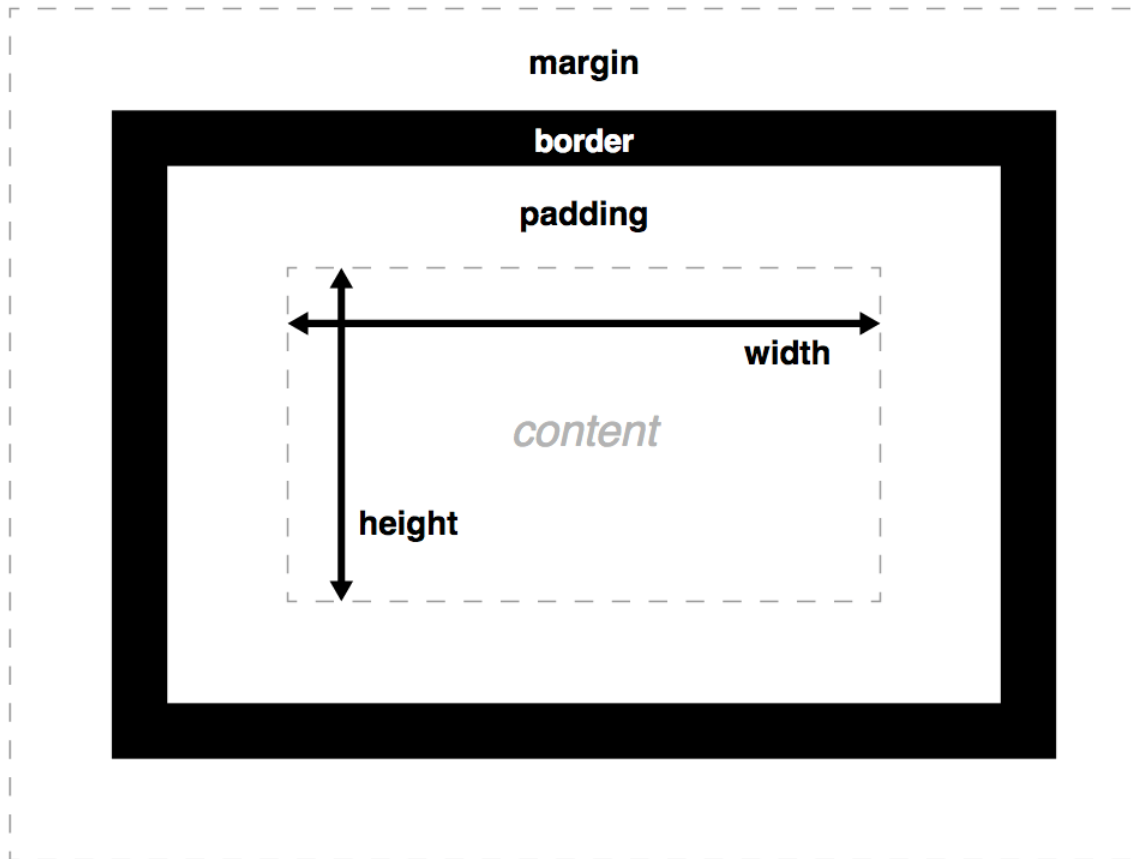
```
a:hover
```

Properties

```
selector {
  property: value;
  property2: value2;
  /* etc. */
}
```

Example:

```
.btn-primary {
  color: blue;
  box-shadow: 2px 2px 7px 1px #1C6EA4;
}
```

```
<button class="btn btn-primary">Save</button>
```

Box model

margin

border

padding

content

width

height

developer.mozilla.org/en-US/docs/Learn/CSS/Introduction_to_CSS/Box_model

Media queries

```css
body {
  padding: 0 20px;
}

@media (max-width: 480px) {
  body {
    padding: 0;
  }
}
```

Flexbox

flexboxfroggy.com

Bootstrap

getbootstrap.com/docs/4.1

JavaScript

Adding **dynamic** behavior *after* page load.

DOM

Selecting elements

```
const nodes = document.querySelectorAll(SELECTOR);
```

Then:

- Read information

- Update / Insert HTML

- Toggle CSS classes / animation

Event listeners

```html
<button id="buy">Buy!</button>
```

```javascript
const button = document.getElementById("buy");
button.addEventListener('click', (event) => {
  // Event callback
});
```

AJAX

```javascript
const data = { name: "a name", email: "an@email.com" };
fetch(url, {
  method: 'POST',
  headers: { "Content-Type": "application/json" },
  body: JSON.stringify(data)
})
.then(response => response.json())
.then((data) => {
  console.log(data);
});
```

lewagon.com/blog/from-jquery-to-dom-and-es6

Keywords & Trends

Mobile First

- SEO
- Responsive
- Adaptive

SPA

Single Page Application

JavaScript Frameworks

- Angular

- Ember

- **React**

- Vue

medium.com/@ericclemmons/javascript-fatigue-48d4011b6fc4

PWA

Progressive Web Apps

Going Further

github.com/humiaozuzu/awesome-flask

Happy Web-ing!