### Web Fundamentals

Prof. Craig Protzel Explorable Stories NYUAD J-Term 2018

### How does the Web work?

#### CLIENT



CLIENT



SERVER



CLIENT



FRONTEND

SERVER



BACKEND

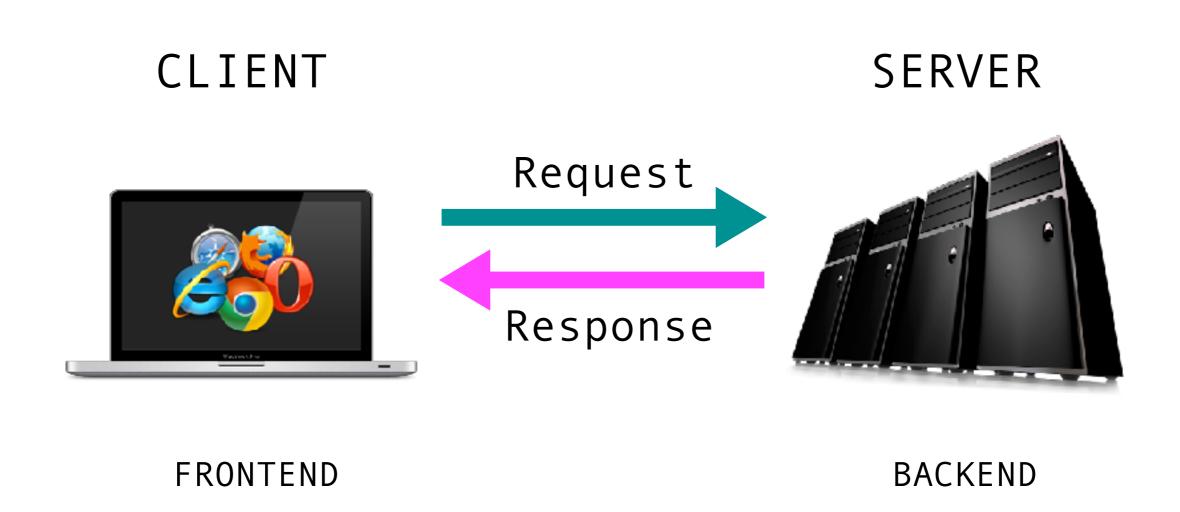
**FRONTEND** 

# CLIENT SERVER Request

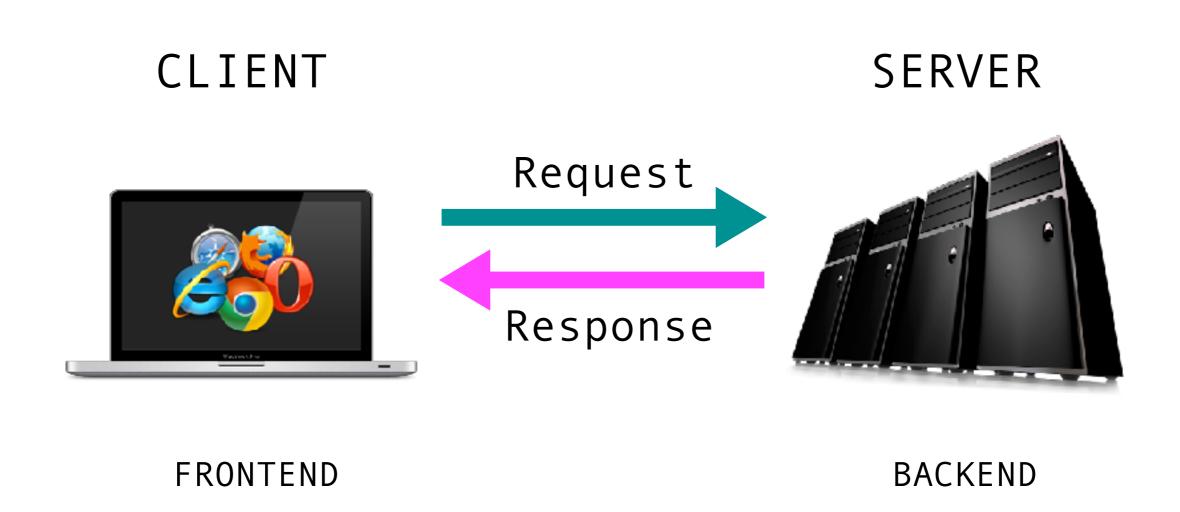
BACKEND

# CLIENT SERVER Request Response

FRONTEND BACKEND



Hyper Text Transfer Protocol



Hyper Text Transfer Protocol

I want my Facebook

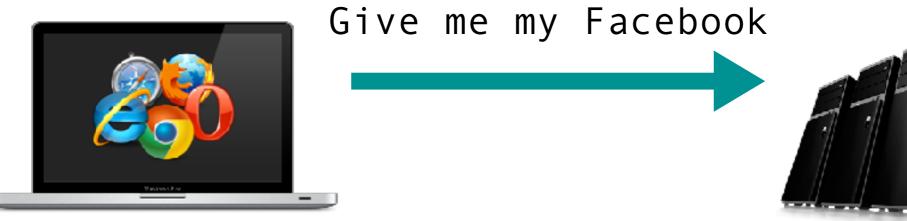






#### facebook.com/craig

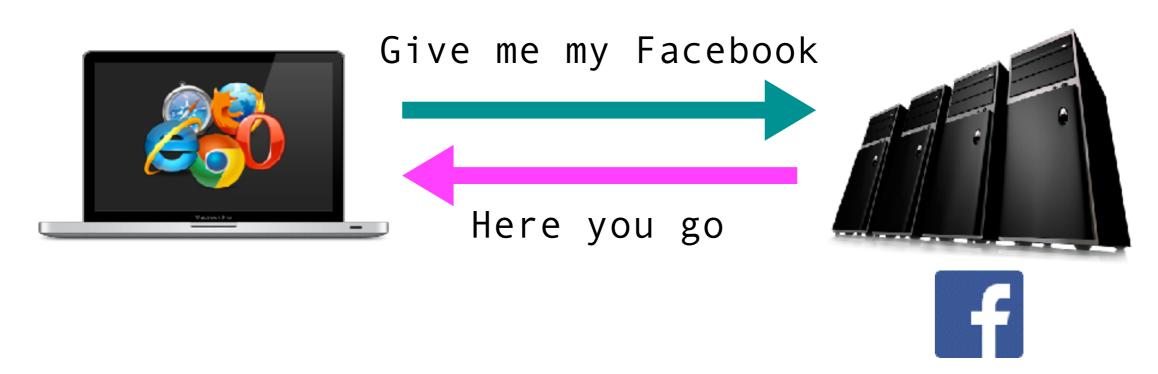




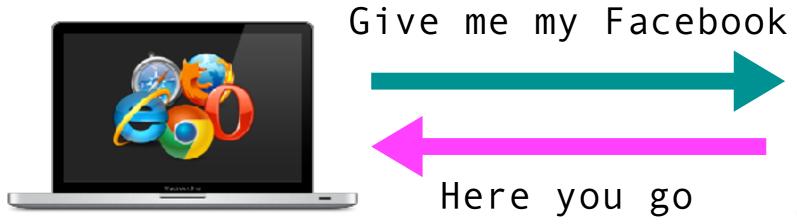




#### facebook.com/craig



#### facebook.com/craig





my.html

my.css

my.js



### your website

HTML A Markup Language CONTENT<br/>The info on the page

HTML A Markup Language CONTENT<br/>The info on the page

CSS A Markup Language

STYLE
How the info looks

HTML A Markup Language CONTENT
The info on the page

CSS A Markup Language

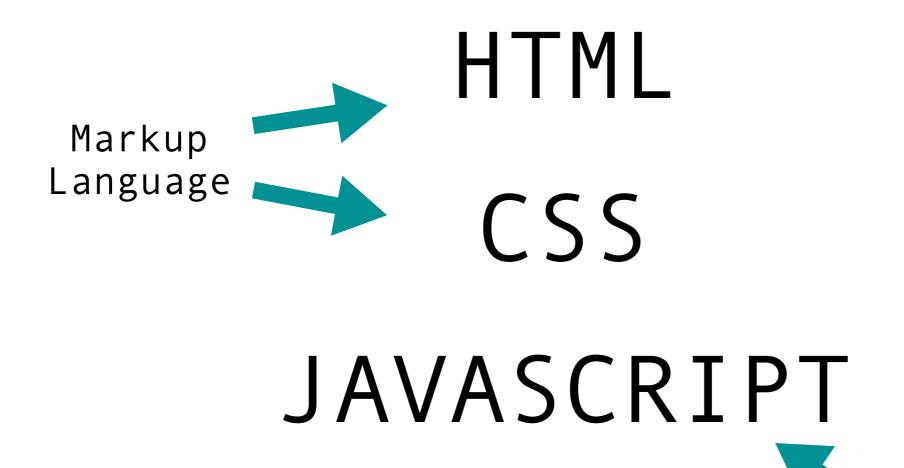
STYLE How the info looks

JAVASCRIPT
A Programming Language



INTERACTIVITY
How the info behaves

# HTML CSS JAVASCRIPT



Programming Language

index.html
style.css
scripts.js

TEXT EDITOR BROWSER DEVELOPER TOOLS

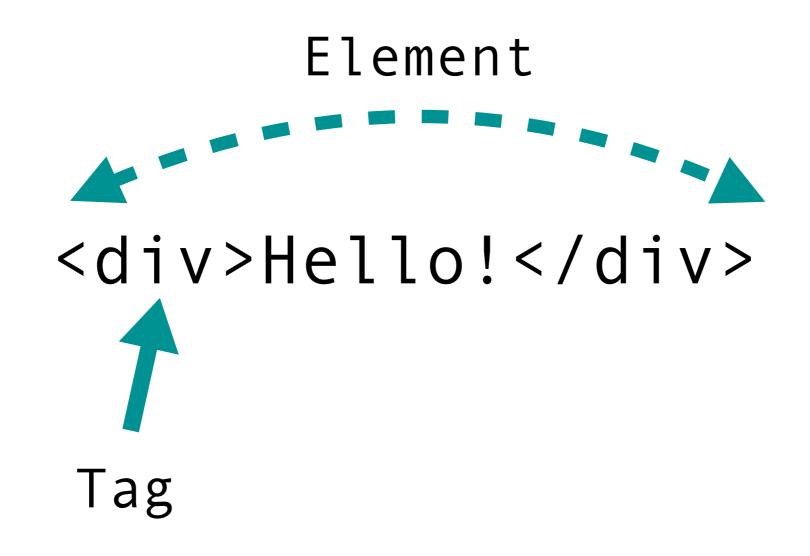


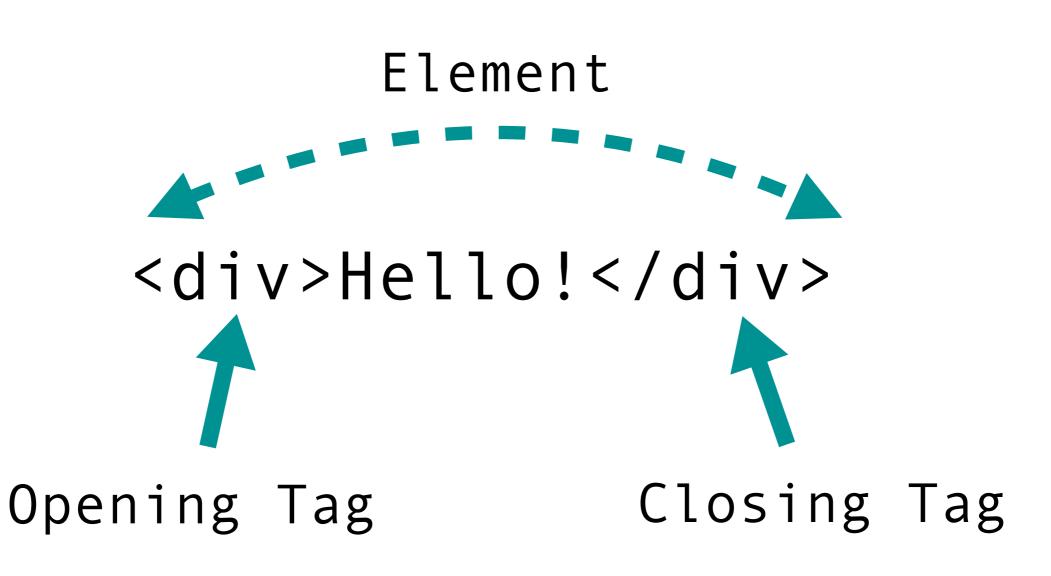
# Hyper Text Markup Language

<div>Hello!</div>

<div>Hello!</div>

Tag





```
<html>
   <head>
    <title>My WebPage</title>
   </head>
   <body>
    <div>Hello!</div>
   </body>
</html>
```

```
<html>
   <head>
    <title>My WebPage</title>
   </head>
   <body>
    <div>Hello!</div>
   </body>
</html>
```

## Basic Page

# Cascading Style Sheets

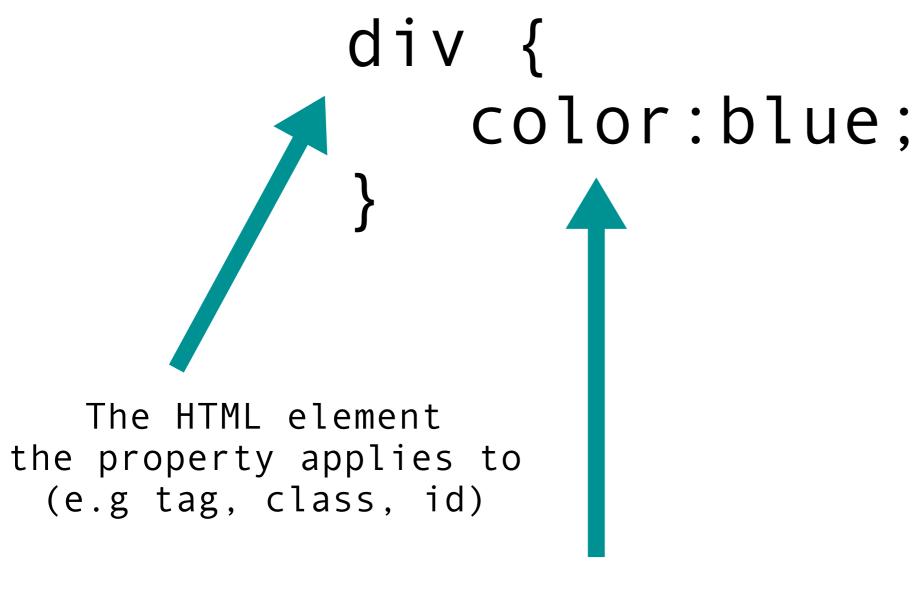
```
selector {
   property:value;
}
```

The HTML element

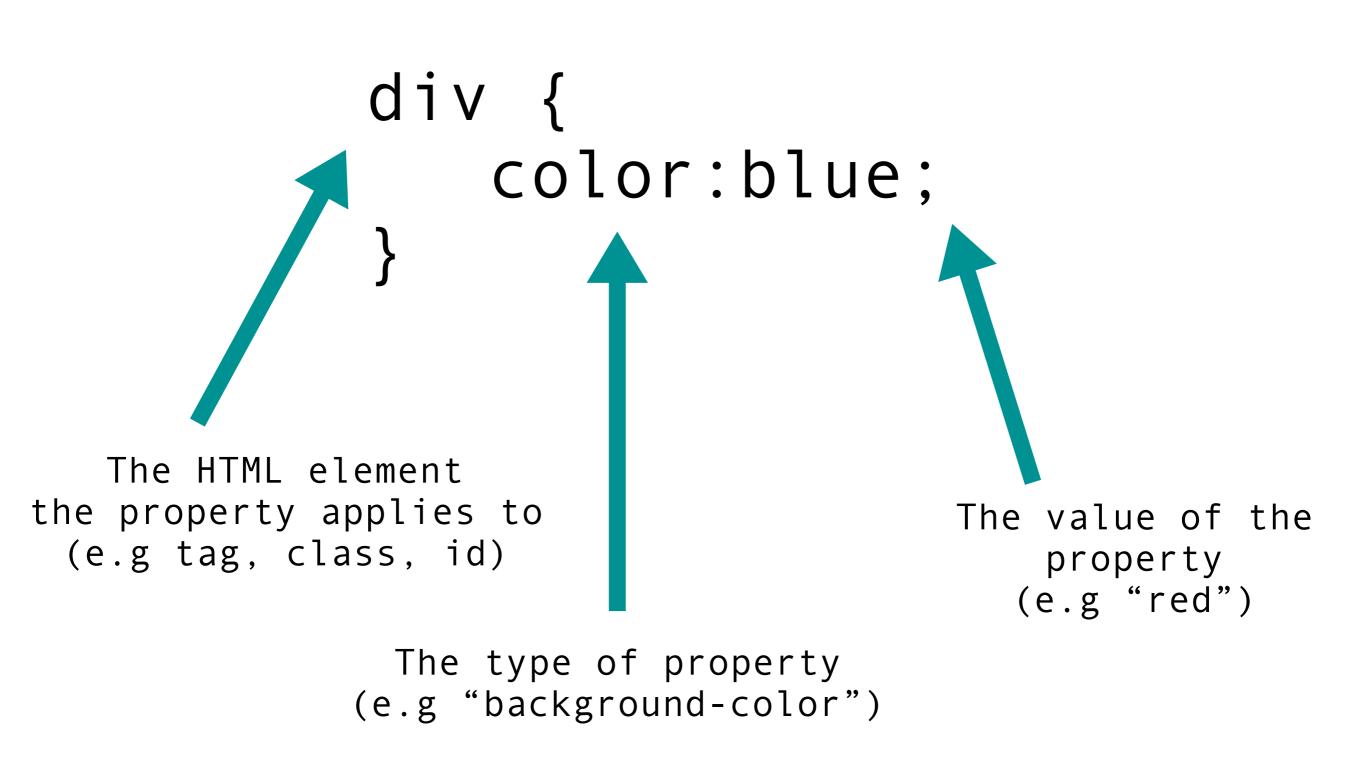
the property applies to

(e.g tag, class, id)

```
div {
    color:blue;
}
```



The type of property (e.g "background-color")



```
div {
     background-color: red;
.redBG {
     background-color: rgb(255,0,0);
#redBG {
     background-color: #FF0000;
```

\* everything on the page

body, div, p specific elements

class a group of items on the page.

#id a unique item on the page

## Add Style