## Web Advance: JavaScript

PGTE: 5505 | Section B | CRN: 7792

Instructor: Karla Polo

Class 1: Introduction to JavaScript

#### Today's Menu

Get to know you.

Let's talk about the Syllabus.

Github class repo.

Refresh your memory with some coding.

## Who am !?

http://karlapolo.com

## Who are you?

Are you registered or are you on the waiting list?
Name?
1st / 2nd year?
On a scale of 1-10, how good are you at web?
What do you hope to learn in this class?
Hobbies? I won't judge!

## Syllabus

https://github.com/KayPolo/

WebAdvanced\_Fall2019/blob/master/

PGET\_5505\_CRN7792\_POLOGARCIAKARLA\_FA19.docx

## WHY CODING?



#### Why Coding?

Age of Specialization.

Many available tools to generate code.

Coding is difficult to master.

#### **But** ...

Better understanding of the process needed to build.

Better control in defining execution params.

Create better and more efficient designs.

HTML structure



CSS presentation/appearance



JavaScript dynamism/action



#### What is JS?

- Is a Programing Language
- Runs in your browser, not in a server like most programing languages.
- Provides Interactivity
- Provides real-time content updates
- Enables animations
- Allows for many approaches to Design Patterns
- Frameworks: jQuery, Angular, Vue, React

<sup>\*</sup>Java & Javascript are not related. They are two different programing languages.

#### What Can Javascript do?

Generative: Apps

http://color-wander.surge.sh/ http://uber.com

Practical: Functional

https://codepen.io/TheVVaFFle/project/editor/ZRbWaG#0

https://codepen.io/giana/pen/GJMBEv

Informative

http://www.histography.io/

http://kenwheeler.github.io/slick/

3D

http://alteredqualia.com/three/exa

mples/webgl city.html

#### **Tools of the Trade**

#### **Text Editors**

Visual Studio Code: <a href="https://code.visualstudio.com">https://code.visualstudio.com</a>

Sublime Text: <a href="https://www.sublimetext.com/">https://www.sublimetext.com/</a>

Atom: <a href="https://atom.io/">https://atom.io/</a>

Chrome DevTools: <a href="https://developer.chrome.com/devtools">https://developer.chrome.com/devtools</a>

#### **Browsers (latest versions)**

Chrome: <a href="https://www.google.com/chrome/">https://www.google.com/chrome/</a>

Firefox: <a href="https://www.mozilla.org/en-US/firefox/">https://www.mozilla.org/en-US/firefox/</a>

Vivaldi: <a href="https://vivaldi.com/">https://vivaldi.com/</a>

#### Debugger

(Built in browser Developer Console)

Jshint: <a href="http://jshint.com">http://jshint.com</a>

#### Let's Set Github

https://github.com/KayPolo

## 15 Minutes!!!

# If you're not registered, email me! karla@newschool.edu

## Let's Refresh

#### HTML

- -Semantic HTML tags
- -Newer HTML5 tags: <section> <header>
- <nav> <footer> <article>, etc
- -Including CSS
- -Including JS
- -Importing custom fonts and other assets

#### **CSS**

- -Inline, Internal, External Styles
- -Basic CSS Selectors
- -Values & units (px, %, em, rem)
- -Basic web color principles (RGB, RGBA, hexadecimal color, HSL)
- -CSS Layout (The Box Model)
- -CSS Positioning
- -Floats and clearfixes
- -New CSS Features (box-shadow, text-shadow, etc)
- -Responsive CSS with media queries

#### **JS: Back to Basics**

- JS definitions
- -Variable and Data types
- -Arrays vs Objects
- -Iteration
- -Conditionals
- -Functions: Declarations and Expressions
- -Scopes and Closures
- -Timing functions

## Let's Code

### HW

1. Codeacademy: Introduction to JavaScript

https://www.codecademy.com/learn/introduction-to-javascript

Mandatory: Complete lessons 1-3 (Only those sections that are free) Submit the higher badge you get to Canvas.

Bonus: Try to go as far as you can, this is going to help you to create a solid foundation for the Web Advanced class.



#### 2. Final Project

Define what project you are going to be developing during the semester from now until you final. Submit your concept and rough ideas to Canvas