Web Advance: JavaScript

PGTE: 5505 | Section E | CRN: 6455

Instructor: Karla Polo

Week 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 I?

https://kaypolo.github.io/portfolio/

Who are you?

Are you registered or are you on the waiting list?
Name?
MFA 1st / 2nd year? BFA?
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/WebAdvancedJS_SP2020/blob/master/PGET_5505_CRN6455_POLOGARCIAKARLA_SP20.docx

WHY CODING?

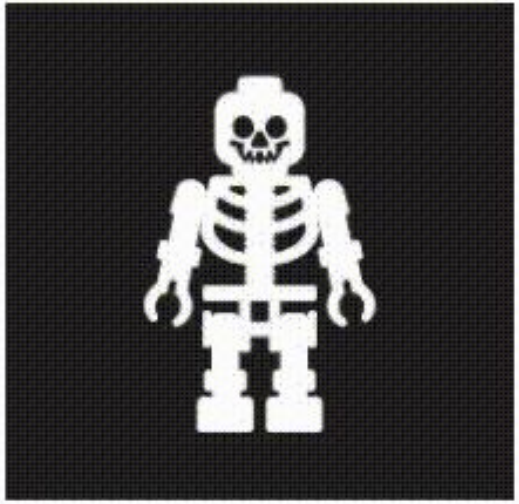
Why Coding?

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: Angular, Vue, Ionic..
- Libraries: React, jQuery, D3, Three, P5...

*Java & Javascript are not related. They are two different programing languages.

What Can Javascript do?

Generative:

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

Practical:

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

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

Informative

http://www.histography.io/

Apps

http://uber.com

Functional

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

3D

http://alteredqualia.com/three/examples/webgl_city.html

Tools of the Trade

Text Editors

Visual Studio Code: https://code.visualstudio.com

Sublime Text: https://www.sublimetext.com/

Atom: https://atom.io/

Chrome DevTools: https://developer.chrome.com/devtools

Browsers (latest versions)

Chrome: https://www.google.com/chrome/

Firefox: https://www.mozilla.org/en-US/firefox/

Vivaldi: https://vivaldi.com/

Debugger

(Built in browser Developer Console)

JS Bin: https://jsbin.com

Jshint: http://jshint.com

Other tools

Codeshare: https://codeshare.io/

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. If you have already done these lessons in the past, complete from 4-6.

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.

HW

2. Midterm Project

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