

Javascript - The Basics

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Agenda

- Questions?
- Let's Talk - Baby Learns To Walk?
- Learn - What is programming?
- Build - Youtube Background Picker
- Learn - JS Variables & Types
- Build - Not so great calculator
- Learn - JS Arithmetic & Conditionals
- Build - Angry Parent Simulator
- Build - Temperature Converter
- Homework - Repetition

Questions

About last class or life



Baby Learns To Walk?



Half Hard Work and Half Believing You Can Do It

*thanks Vonds

The Golden Rule

SEPERATION OF CONCERNS

- HTML = Content / Structure
- CSS = Style
- JS = Behavior / Interaction

IDs & Classes



IDs

IDs are used for selecting distinct elements

Only one id with the same value per document

#idName

```
<section>
  <p>Hello, Twitch!</p>
  <p id="zebra">Hello, Youtube!</p>
</section>
```

```
#zebra {
  color: red;
}
```

Classes

Classes are for selecting multiple elements

Multiple with same value allowed per document

.className

```
<section>
  <p class="robot">Hello, Twitch!</p>
  <p id="zebra" class="bob">Hello, Youtube!</p>
  <p class="bob">Goodbye, Mixer!</p>
</section>
```

```
.bob {
  color: red;
}
```


Programming



A computer will do
what you tell it to do.

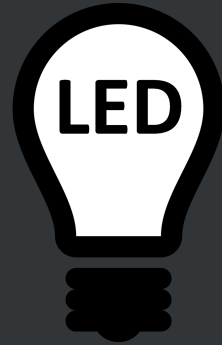
What is a program?

A **program** is a set of instructions that you write to tell a computer what to do

What is a programming?

Programming is the task of writing those instructions in a language that the computer can understand.

Simple Circuit



True Story



JAVASCRIPT



Has a specific 'Syntax'

Syntax: "Spelling and grammar" rules of a programming language.

JS Syntax

- Semicolon
- Brackets
- Parentheses
- Quotation Marks
- Other Unique characters?

Let's Code



A Youtube Background Picker

Variables

What are variables?

Variables

- We can tell our program to remember values for us to use later on
- The entity we use to store the value is called a variable

Variables

Declaration: let age

Assignment: age = 25

Both at the same time:

let age = 25

Variable Conventions

camelCase:

```
let numberOfApples = 9
```

Variables & Data Types

What can you store in variables?

Strings

- Stores text
- String is surrounded by quotes

"How is the weather today?"

'Warm'

Strings

Double vs Single Quoted Strings:

'They "purchased" it'
"It's a beautiful day"

Strings

New Line + Tabs:

"1. Preheat over to 350\n2. Grease the pan"
'\tBeginning of paragraph'



Numbers

Represent Numerical Data

int: 29

float: 5.14876

Numbers

Signed

int: +4

float: -10.375

Arithmetic In Javascript

Operator	Meaning	Example
+	Addition	8 + 10
-	Subtraction	10 - 8
*	Multiplication	12 * 2
/	Division	10 / 5
%	Modulus	10 % 6

Let's Code



A not so great calculator

Making Decisions

It's either TRUE or FALSE

If you are greater than 18 you are an adult

```
if (age > 18){  
  console.log("You are an adult")  
}
```

Comparisons: Equality

Are two things equal?

```
9 == 9 //true  
7 == 3 //false  
"Hello" == "Hello" //true
```


Logical Operators

x = 3

Logical Operators			
Operator	Description	Comparing	Returns
==	equal to	x == 8	FALSE
===	exactly equal to(value and type)	x === "3"	FALSE
		x === 3	TRUE
!=	is not equal	x != 8	TRUE
!==	is not equal(neither value nor type)	x !== "3"	TRUE
		x !== 3	FALSE
>	greater than	x > 8	FALSE
<	less than	x < 8	TRUE
>=	greater than or equal to	x >= 8	FALSE
<=	less than or equal to	x <= 8	TRUE

Conditional Syntax

```
if(condition is true) {  
    //Do cool stuff  
}
```

Conditional Syntax

```
if(condition is true) {  
    //Do this cool stuff  
}else if(condition is true){  
    //Do this other cool stuff  
}else{  
    //Default cool stuff  
}
```

Conditional Syntax

```
const pizza = "Dominos"

if (pizza === "Papa Johns") {
  console.log("Scram!")
} else if (pizza === "Dominos") {
  console.log("All aboard the train to flavor town")
} else {
  console.log("What are you even doing with your life?")
}
```



DANGER



Assignment vs. Comparison

Multiple Conditions

```
if (name === "Bruce" && parents === "Dead") {  
    //Turn off the bat signal  
}
```

Multiple Conditions

```
if (day === "Saturday" || day === "Sunday") {  
    //It is the weekend  
}
```

Let's Code



Career Skills, Class, or Weekend?

Let's Code



Angry Parent Simulator

Pseudo Code

Let's Code



A Temperature Converter

Homework



Do: Plan out your networking!

Read: <https://javascript.info/variables> + Tasks

Read: <https://javascript.info/function-basics> + Tasks

Do: Delete the JS and do it again for all assignments