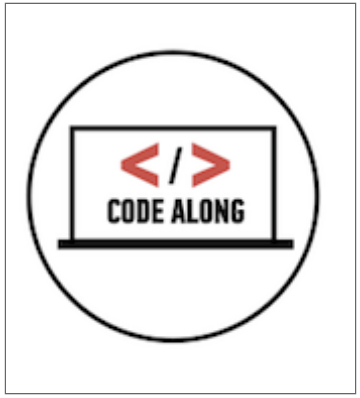
FEWD - VARIABLES CONDITIONALS

AGENDA

- Reivew
- Data types
  - Strings
  - Numbers
- Variables
- Conditionals
- Lab Time

REVIEW



JQUERY EXERCISES

VARIABLES

What are variables?

VARIABLES

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

VARIABLES

- The action of getting the value from a variable is called accessing the variable
- We will use all the above techniques to store values into variables, and generate new values using existing variables

VARIABLES

```
var age = 21;
```

Declaration:

```
var age;
```

Assignment:

```
age = 21;
```

VARIABLE RE-ASSIGNMENT

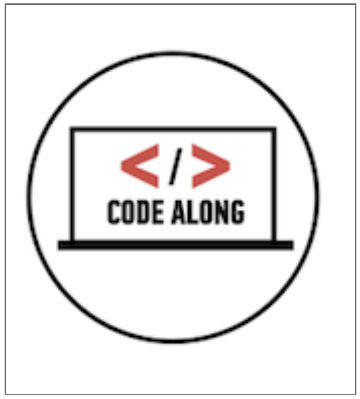
```
var name = "Jo";

name = Amir;
```

VARIABLE CONVENTIONS

- Variables start with a lower case letter
- If they contain multiple words, subsequent words start with an upper case letter.

  var numberOfStudents = 10;



SCORE KEEPER

VARIABLES & DATA TYPES

What can you store in a variables?

DATA TYPES

The types of different values we support include:

- **String** text
- **int**, **float** numbers
- **Boolean** true or false

STRINGS

- Stores textual information
- String literal is surrounded by quotes

```
"How is the weather today?"
```

```
'Warm'
```

STRINGS

Double vs single quoted strings:

'They "purchased" it'

"It's a beautiful day"

NUMBERS

Represent numerical data

int:

42

float:

3.14159265

ARITHMETIC IN JAVASCRIPT

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

BOOLEANS

```
true
```

```
false
```

CONDITIONALS

MAKING DECISIONS

All conditions are either TRUE or FALSE

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

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

COMPARISONS - EQUALITY

Are two things equal?

```
10 === 10 //true
10 === 5 //false
"hi" === "hi" //true
```

COMPARISONS == VS ===

```
10 == 10 //true
10 == '10' //true
10 === 10 //true
10 === '10' //false
```

CONDITIONAL SYNTAX

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

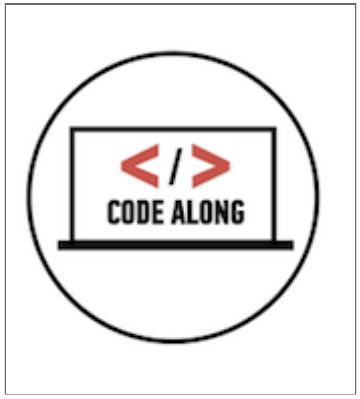
CONDITIONAL SYNTAX

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

CONDITIONAL SYNTAX

```
var topic = "JS";

if (topic === "JS") {
    console.log("You're learning JavaScript");
}
else if (topic === "JavaScript") {
    console.log("You're still learning JavaScript");
}
else {
    console.log("You're learning something else");
}
```



COMPARE THAT

MULTIPLE CONDITIONS

&&

||

MULTIPLE CONDITIONS - &&

```
if (name === "GA" && password === "YellowPencil"){
    //Allow access to internet
}
```

THE TRUTH TABLE

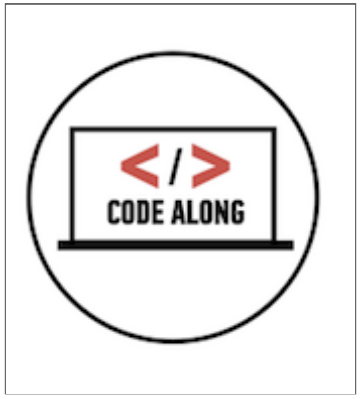
AND - &&	TRUE	FALSE
TRUE	true	false
FALSE	false	false

MULTIPLE CONDITIONS - ||

```
if (day === "Monday"  || day === "Wednesday") {
    //We have class today
}
```

THE TRUTH TABLE

OR - ||	TRUE	FALSE
TRUE	true	true
FALSE	true	false



BLACKOUT

TEMP CONVERTER