JavaScript Lab

Lesson 10

Agenda

- Review Variables & Conditionals
- Introduce .attr jQuery method
- Lab Time
  - Discuss final project proposals

Variables & Conditionals Review

Variables

Variables are essentially containers for storing data values in JS.

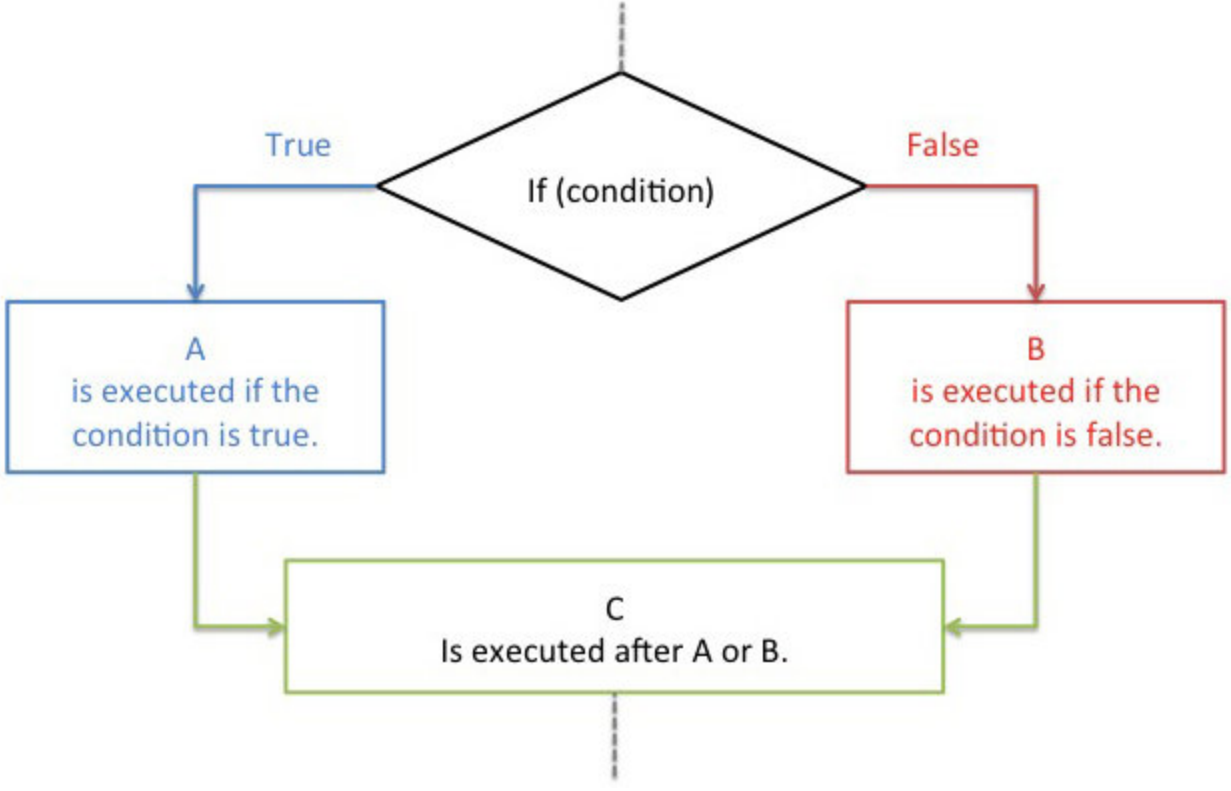
```
// Declare a variable
var myAge;

// Assign value to variable
myAge = 30;

// Declare + Assign to variable
var myNewAge = 31;

// Access variables
myAge;
myNewAge;
```

Data Types

Variables can contain different data types. Below are the 3 most common:

- **String** - any textual data
- **Number** - any numerical data
- **Boolean** - true or false

Control Flow



"If/Else If" Statement Example

You can even chain multiple if/else statements for more conditions...

```
if (age > 17){
    console.log("You are an adult.");
}else if(age > 12){
    console.log("You are a teenager.");
}else{
    console.log("You are a child.");
}

// Continue running script...
```

Comparison Operators

To check if something is true or not, we need **comparison operators** to compare the criteria.

Operator	Description	Example	Result
==	Equal to	1 == 1	true
===	Equal in value and type	1 === '1'	false
!=	Not equal to	1 != 2	true
!==	Not equal in value and type	1 !== '1'	true
>	Greater than	1 > 2	false
<	Less than	1 < 2	true
>=	Greater than or equal to	1 >= 1	true
<=	Less than or equal to	2 <= 1	false

Logical Operators

To check if **multiple things** are true or not, we can use **logical operators** in our "if" statements.

Operator	Description	Example
&&	and	(x < 10 && y > 1) is true
||	or	(x == 5 || y == 5) is false
!	not	!(x == y) is true

```
x = 6 and y =3
```

Code Along

Open: **Where Am I Codepen**

Directions:

1. Open the **Where Am I Codepen** review
2. Together, add the appropriate JS/jQuery to the Codepen to get it to display the proper continent based on your input

Timing:

- **10 minutes** - As a class, let's write a basic jQuery application to review

Tips:

- The pseudocode has been written for you...
- Pay attention to the **order of events** in your application -- ask yourself: "what triggers what, and when?"

.attr jQuery Method Practice

Code Along

Open: **.attr jQuery Practice**

Lab Time

Open:

lesson_10/starter_code/temp_converter

Directions:

1. Open the **lesson_10/starter_code/temp_converter** folder
2. Build out an interactive website that converts the temperature from F to C, and changes the background color accordingly

Timing:

- **130 minutes** - build out an interactive website using JS and jQuery
- **10 minutes** - Review instructor solution file together

Tips:

- Take it one step at a time!
- Use the pseudocode from next slide as your general guidelines when developing.

- On submit, get temperature in Celsius
- Convert temperature to Fahrenheit
- Check F temperature to determine what color to change the background:
  - if F temperature is less than/equal to 32
    - set background to Blue
  - if F temperature is greater than 32, but less than 65
    - set background to Yellow
  - if F temperature is greater than/equal 65, but less than 100
    - set background to Orange
  - if F temperature is greater than/equal to 100
    - set background to Red

Exit Tickets

Take 5-10 minutes to give us some

(Link is in Slack Room)

Week 5 Homework

- Assignment: **CitiPix (version 1)**
- Due: **Wednesday, May 29th at 11:59pm ET**
- Remember to commit/push your changes to your fork when you are done.
- Grading rubric can be found in the **Assignment** folder
- **FOLLOW THE RUBRIC!**

Next Class...

Wednesday: Advanced CSS (Instructor/Student Choice)