

SheCodesNow

Intro to JavaScript

Before we get started make sure you have:

1. Connected to WiFi
2. Have Sublime or another code editor
3. Have Downloaded:

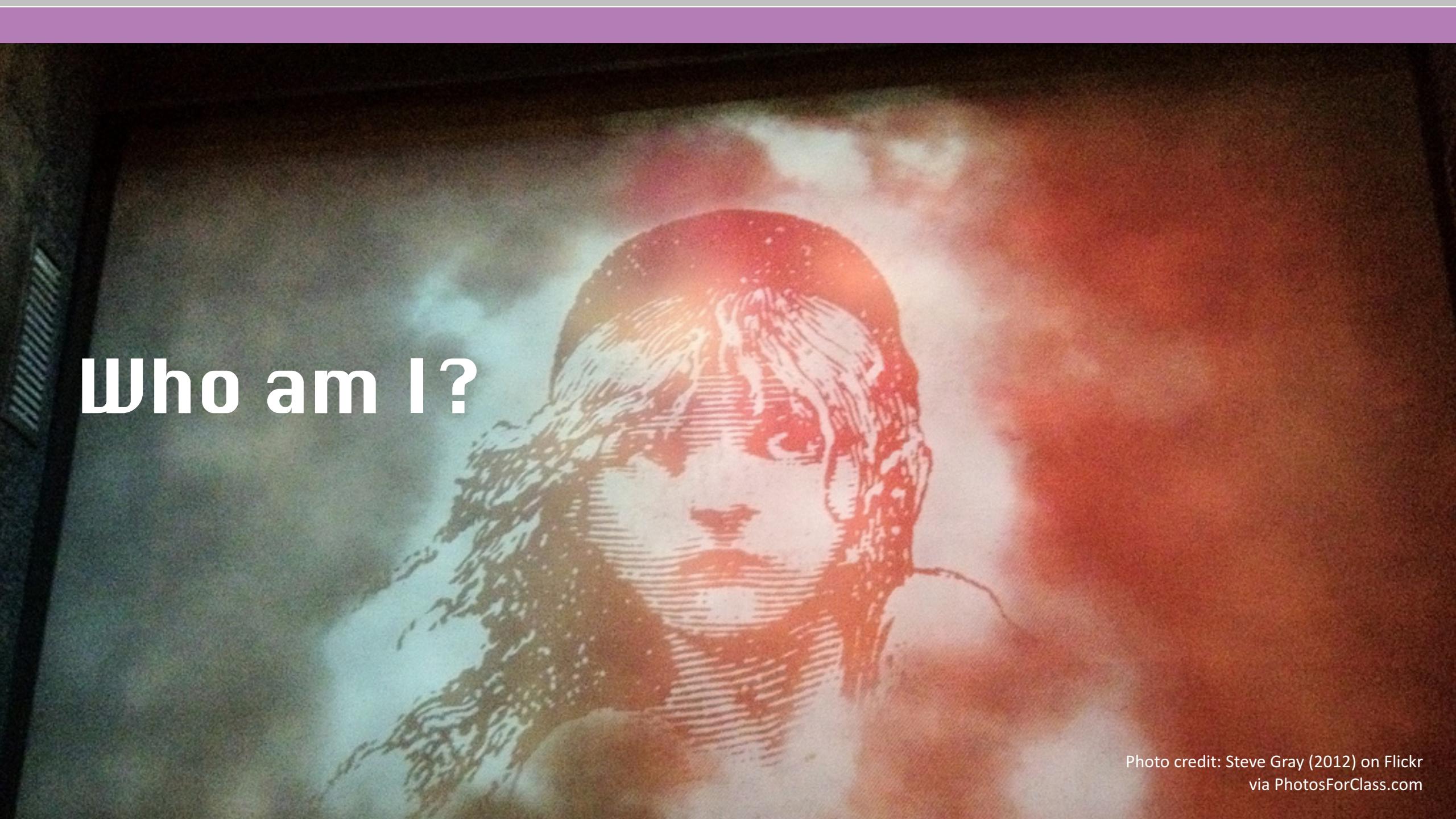
https://github.com/sheyna/SheCodesNow_JavaScript

Photo credit: BlackGirlsCode (2011) on Flickr
via PhotosForClass.com





sheCodesNow

A photograph of a woman's face, which is partially obscured by a vibrant, multi-colored glow. The glow is composed of various colors including red, orange, yellow, green, and blue, creating a dreamlike and ethereal effect. The woman has dark hair and is looking directly at the camera.

Who am I?

Photo credit: Steve Gray (2012) on Flickr
via PhotosForClass.com

What will be discussed tonight?

Beginning JavaScript Concepts:

- Variables and data types
- User prompts and alerts
- If/Else conditional statements
- Operators
- While loop



“OH NO!

Math Scary” You Say?

HTML

Content

- Headlines
- Photos
- Links
- Articles (copy)

CSS

Styles

- Fonts
- Colors
- Borders
- Backgrounds
- Layout



JavaScript

Interactivity

- Personalization
- Games
- Effects
- Animation**
 - ** CSS can do animation as well



In class_files Folder Open basic.html

```
1 <html>
2   <head>
3     <title>This is my page title</title>
4   </head>
5   <body>
6     <!-- Content for the page goes here -->
7
8     <script>
9       // Write your JavaScript here:
10
11
12   </script>
13   </body>
14 </html>
15
```



Hello World

In the basic.html file add this on line 10:

```
alert("Hello World");
```



Basic Syntax

Declare a function (tell the computer what you want it to do when you call this function)

```
function myFunction(x) {  
    return x + 6;  
}
```

Call a function (tell the computer to do it now)

```
var y = myFunction(4);
```



Syntax Hints

Do not forget the semicolon!

```
myFunction();
```

All opening curly braces, quote marks and parenthesis must have a matching closing curly brace, quote mark or parenthesis

```
function myFunction() {  
    ...  
}
```



Dear Algebra,

Please stop asking us to find your x .

She's never coming back and don't
ask y .



Variables

In JavaScript, “var” declares a variable and lets the computer know that “x” is a variable name.

```
var x = 3;
```



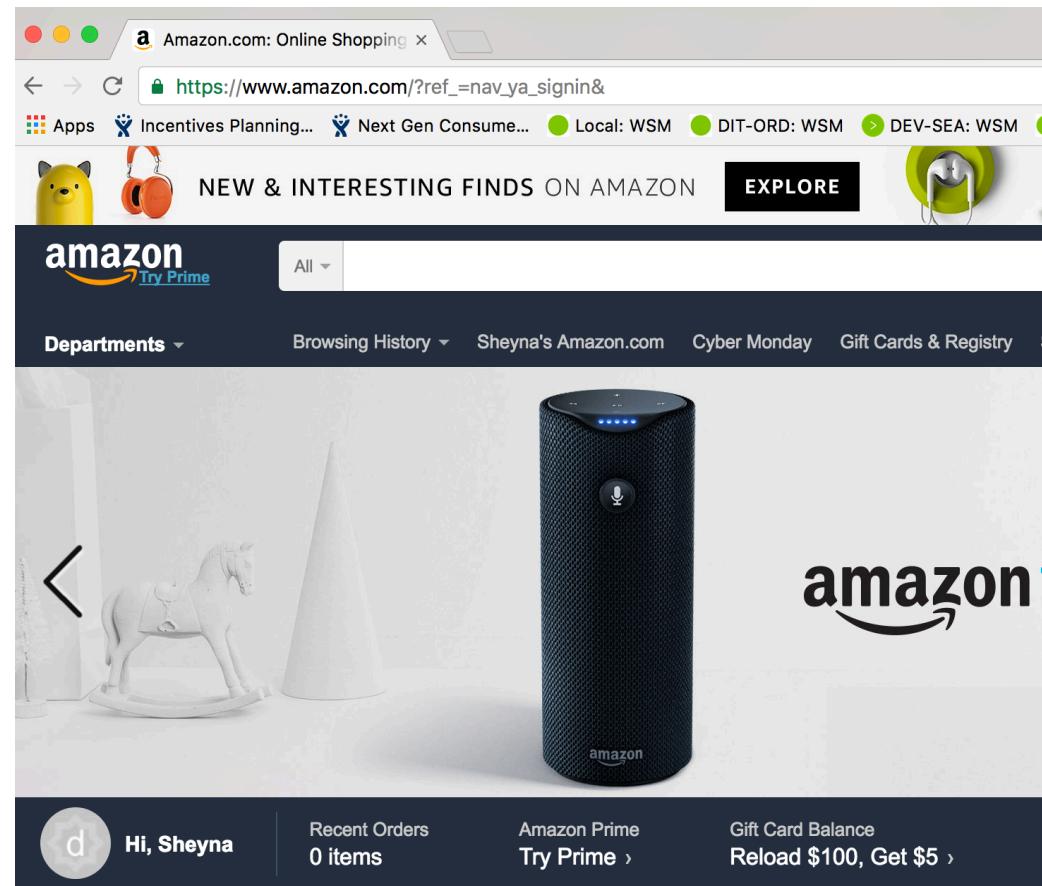
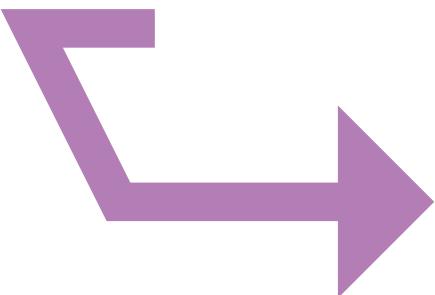
Using Variables in Hello World

Go back to the basic.html file and change your code as follows, adding a variable declaration before the alert.

```
var userName = prompt("What is your name?");  
alert("Hello " + userName);
```



Where Have We Seen This Before?



Holiday deals [See all deals](#)



Variables: Data Types*

Boolean: A true or false value

Number: A number written in numerals (ex: 24)

String: Any combination of letters, numerals or special characters placed in quotation marks (ex: "What is your name?")

(*There are also Objects, Arrays, Symbols, Null, Undefined)



If-Else Conditional

If something is true, do this.

If it's not true, do this instead.

```
var userName = prompt("What is your name?");

if (userName == "Sheyna") {
    alert("You are super cool!");
} else {
    alert("You are not Sheyna.");
}
```



A Few Operators

= Assigns a value to a variable.

`x = 3` means that `x` is now equal to 3

== Checks if 2 values are the same.

`x == 3` checks to see if `x` equals 3

!= Checks if 2 values are not the same.

`x != 3` checks to see if `x` does NOT equal 3

|| The “Or” operator. Checks if one of two or more values is true.

`x == 3 || x == 8` if `x` equals 3 OR 8 this will return true

&& The “And” operator. Checks if both of two or more values is true.

`x == 3 && y == 8` will return true only if `x` equals 3 AND `y` equals 8



Homework 1

Allow the user to guess again if they are wrong the first time.

```
while (answer != guess) {  
    // write the code  
}
```



Homework 2

Store user's incorrect guesses in an array.* Start by creating an empty array.

```
var eliminated = [];
```

After each incorrect guess add that guess to the array

```
if (answer != guess) {  
    eliminated.push(guess);  
}
```

Can you think of a way to use this data to help the user narrow down their guesses?



Homework 2 (cont.): *Arrays

To learn more about how to use Arrays, here are some useful resources:

Treehouse:

<https://teamtreehouse.com/library/javascript-foundations/arrays/creating-arrays>

<https://teamtreehouse.com/library/javascript-loops-arrays-and-objects>

Khan Academy:

<https://www.khanacademy.org/computing/computer-programming/programming/arrays/p/intro-to-arrays>



Homework 3

Keep a tally of how many times the user has made a guess. Create a variable, and for every guess add one to the variable.

```
var numberOfGuesses = 1;
```

In the Loop that controls the guesses add 1 to the numberOfGuesses variable

```
numberOfGuesses = numberOfGuesses + 1;
```



Homework 4

Instead of using alerts and prompts to communicate to the user, try to use an HTML form. Use a text field and using JavaScript get the value of those inputs. Here is an example of how to do this:

https://www.w3schools.com/jsref/prop_text_value.asp

You will find additional notes and hints in the words.html file in the class_files folder.



Online Learning Resources

Treehouse

<https://teamtreehouse.com/library/topic:javascript>

Codecademy

<https://www.codecademy.com/>

Code School

<https://www.codeschool.com/search?query=JavaScript>

Khan Academy

<https://www.khanacademy.org/computing/computer-programming/programming>



Online Learning Resources (cont.)

Tutorials Point

<https://www.tutorialspoint.com/javascript/index.htm>



Local Meetups for Beginners

Girl Develop It: Seattle

<http://www.meetup.com/Girl-Develop-It-Seattle/>

Women Who Code: Seattle

<https://www.womenwhocode.com/seattle>

Chictech: Seattle

<http://seattle.chicktech.org/>

