# Data Types

# Assignments

```
var name = prompt( "What is your name?" );
var name = Date();
var name = window.location;
```

# Types

- In many programming languages, variables need to have a single type

- In JavaScript, a variable can take on many different types

- What are these types?

# Number

- Numerical values
  - with or without decimals

```javascript
var width = window.innerWidth;
var pi = 3.14;
```

# String

- A String is a collection of characters (letters, numbers, punctuation, ….)

- To create a string you put the value in quotes "…"

```
var location = window.location;
var name = "Colleen";
```

# Boolean

- In programming, a boolean value is one that is either true or false

```
var status=false;
var windowStatus=window.closed;
```

- Later, we will learn how to write our own boolean expressions to check if things are true or false

# **Object**

- Sometimes the variables are more complex
  - A node in the DOM a good example

```
var topic= document.getElementById('myID') ;
```

- Nodes are more than a single value, they have attributes

# Array

- How can a function return more than one value?

```
var links= document.getElementsByTagName('a') ;
```

# Accessing Array Elements

- Arrays store multiple value using a variable name, and an index for each element in the array

```
var links= document.getElementsByTagName('a') ;
document.write(links[0]);
```

- We will cover arrays in depth later in the course

# Review

- Luckily in JavaScript you have a lot of flexibility with the types of data

- For now, focus on learning the types of data returned by the most common APIs

# Acknowledgements/Contributions