Introduction to JavaScript-PART 1
Next Two Weeks 😊
<!DOCTYPE html>
<html lang="en">
<head>
</head>
<body>
<div class="jumbotron text-center">
  My First JavaScript Program!
</div>
<div class="container">
  <p>Click on the button to see a special message from me. </p>
  <button type="button" class="btn btn-info" onclick="showMessage();">Message</button>
</div>
<nav class="navbar fixed-bottom navbar-light bg-light">
  <div class="small">Stu Dent © 2019 Fixed bottom footer.</div>
</nav>
</body>
</html>
function showMessage() {
   // opens a popup window that displays a message
   alert("It is cold in San Francisco.")
}
</script>

Message from me. <p>onclick="showMessage();" >1
```javascript
/*
 * Defining Table
 * Use Bootstrap styling: jumbotron, container, btn, navbar
 * Input: No user input
 * Processing: None
 * Output: The message "It is cold in San Diego!"
 */

function showMessage() {
    // opens a popup window that contains the message described in comments
    alert("It is cold in San Diego!");
}

function name() {
}
```
I want to send you greetings.

Please click on the button: Hello!

```html
<div class="alert alert-warning" role="alert">
  <strong>I want to send you greetings.</strong>
  
  Please click on the button:
  <button type="button" class="btn btn-warning" role="alert" onclick="greetUser();">Hello!</button>
</div>
```
```javascript
function greetUser() {
  // prompt the user to type in their name
  var name = prompt("Please enter your name: ");

  // create a personalized greeting for the user
  var greeting = "Hello " + name + ". I hope you are having fun today."

  // display the greeting in a popup window
  alert(greeting);
}
```
This page says

Please enter your name:

function greetUser() {
    // prompt the user to type in their name
    var name = prompt("Please enter your name: ");
    // create a personalized greeting for the user
    var greeting = "Hello " + name + ". I hope you are having fun today."
    // display the greeting in a popup window
    alert(greeting);
}

This page says

Hello mary. I hope you are having fun today.
inspect
I want to send you greetings.
Please click on the button: Hello!
```javascript
function greetUser() {
    // prompt the user to type in their name
    var name = prompt("Please enter your name: ");
    // create a personalized greeting for the user
    var greeting = "Hello " + name + ", I hope you have a nice day!"
    // display the greeting in a popup window
    alert(greeting);
}
```
Hi!

Please enter your name here: and click on the button to see your personalized saying.

Your Saying
Hi!

Please enter your name here: **Polly**
and click on the button to see your personalized saying.

**Your Saying**

---

**Polly,**

Did you know that a dog is man's best friend?
<div class="container">
  <h3>Hi!</h3>
  <p>Please enter your name here:</p>
  <input type="text" id="nameInputBox" />
  and click on the button to see your personalized saying.
  <button type="button" class="btn btn-info" onclick="applySaying()">Your Saying</button>
</div>
function applySaying() {
    // Get user name from the text field with nameInputBox id and store it.
    var name = document.getElementById('nameInputBox').value;

    // Use string concatenation to create a personalized saying
    var saying = "Did you know that a dog is man's best friend?";

    // Display the saying in the div that has the outputDiv id
    document.getElementById('outputName').innerHTML = name + ", ";
    document.getElementById('outputSaying').innerHTML = saying;
}

</script>
object: Dog, collar

actions: (verbs)
- eat
- poop
- run
- bark

properties:
- brown hair
- cute
- run
Polly,

Did you know that a dog is man's best friend?
Variables & Arithmetic Operators

* A variable has a:

1. Name
2. Type
3. Value
4. Scope
Declaring a variable - basic syntax

```
var name, name2, ...
```

- **keyword** used to declare a variable
- **names** of multiple variables
- **statement terminator**
Example

```javascript
var x, y;
var balance, interest;
```

variables have names
It is important to know the data type so that you know the appropriate operations on the data.

Variables have data types!!
DATA TYPE EXAMPLES:

Boolean → true, false
number → w/ or w/o decimal \{3, 14, 7\}
string → “San Diego”
function → function() { return 27; }
object → Array \{ name: “Mike”,
          phone: “1234” \}
In JavaScript:

DATA TYPE IS DETERMINED BY VALUE STORED IN VARIABLE !!!
DEFAULT VALUE: undefined

if no value is assigned to the variable.

one cannot use undefined in any calculation.
to avoid your vars being undefined

then:

```javascript
var name = value;
```

example:

```javascript
var price = 12.95;
```

this initializes the variable