

# CMPT 165

## INTRODUCTION TO THE INTERNET AND THE WORLD WIDE WEB

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*UNIT 4: INTRO TO JAVASCRIPT*

# TOPICS

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1. Programming and Web Pages
2. JavaScript Basics
3. Variables and Functions
4. The jQuery Library
5. Working with jQuery
6. Events and Behaviour
7. Why doesn't my code work?

## VARIABLE ASSIGNMENT STATEMENT

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a variable is a way to store a value in our program

the = is used to assign to the variable

it takes the value on the right and stores it in the variable named on the left

when a variable assignment statement runs  
the value is stored in the computer's memory  
and the variable name can be used to refer back to  
that value later

## VARIABLE TYPES

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in JavaScript, any type of value can be stored in any variable,  
and there are many types the language supports

## VARIABLE TYPES - NUMBERS

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Numbers can be stored and calculated on in probably the obvious ways

```
count = 7  
pi = 3.1416  
more = count + 1  
twice_as_much = count * 2
```

## VARIABLE TYPES - STRINGS

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strings are sequences of characters (text)

```
greeting = 'Hello'  
name = "Becky B Barrington"  
personal_greeting = greeting + ' ' + name
```

## VARIABLE TYPES - FUNCTIONS

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as we have seen, functions can be stored in variables



## VARIABLE TYPES - OBJECTS

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an object is a value in JavaScript that can contain  
other things:

numbers, strings, functions, other objects, ...

## VARIABLE TYPES - OBJECTS

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the type of information you're dealing with obviously affects what you can do with it

For example, this code makes sense if **a** and **b** are both numbers:

it will subtract the two values

```
result = a - b
```

# JAVASCRIPT FUNCTIONS

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```
say_hello = function() {  
    alert('Hello world!');  
}
```

this code creates a variable named `say_hello`, this variable holds a `function`

# JAVASCRIPT FUNCTIONS

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a function contains some logic

- it could be a particular calculation
- code you want to execute as the result of an event
- or any other sensible collection of logic

```
function_name =  
function(optional arguments  
list) {  
    ...  
}
```

Any Questions?