FEWD

GENERAL ASSEMBLY

WEEK 5 / LESSON 10:

FUNCTIONS

Leonie Dunnett

LEARNING OBJECTIVES

- Describe arguments as they relate to functions

- Predict values returned by a given function

- Differentiate between anonymous and named functions

TODAY'S SCHEDULE

- Review: Variables & Conditionals

- Functions

  - Cash Register `Code Along`

  - Weather Application Part 2 `Lab`

REVIEW

VARIABLES & CONDITIONALS

Questions?

CONVERTING DATA TYPES

Solution to **Compare that** Code Along

CONVERSION: STRING TO INTEGER

```
var intString = "4";
var intNumber = parseInt(intString, 10);
var intNumber = ~~intString;
```

parseInt(string, radix)

~~string //shorthand

radix = an integer between 2 and 36. **10 for decimal.**

- **Always specify to the radix parameter** eliminate reader confusion and guarantee predictable behavior.
- Different implementations produce different results when a radix is not specified.

For more see: Mozilla MDN on parseInt

CONVERSION: STRING TO FLOAT

```
var floatString = "3.14159";
var floatNumber = parseFloat(floatString);
var floatNumber = +floatString;
```

parseFloat(string)

+string //shorthand

WHY CONVERT DATA TYPES?

- Number may be read as string input eg. "3"
- Convert date (month number or name)
- etc...
- For more see W3Schools on JS Comparisons

CONVERSION: NUMBER TO STRING

```
var number = 4;
number.toString();
```

OR

```
number + "";
```

FUNCTIONS

*A block of code designed to perform a
particular task*

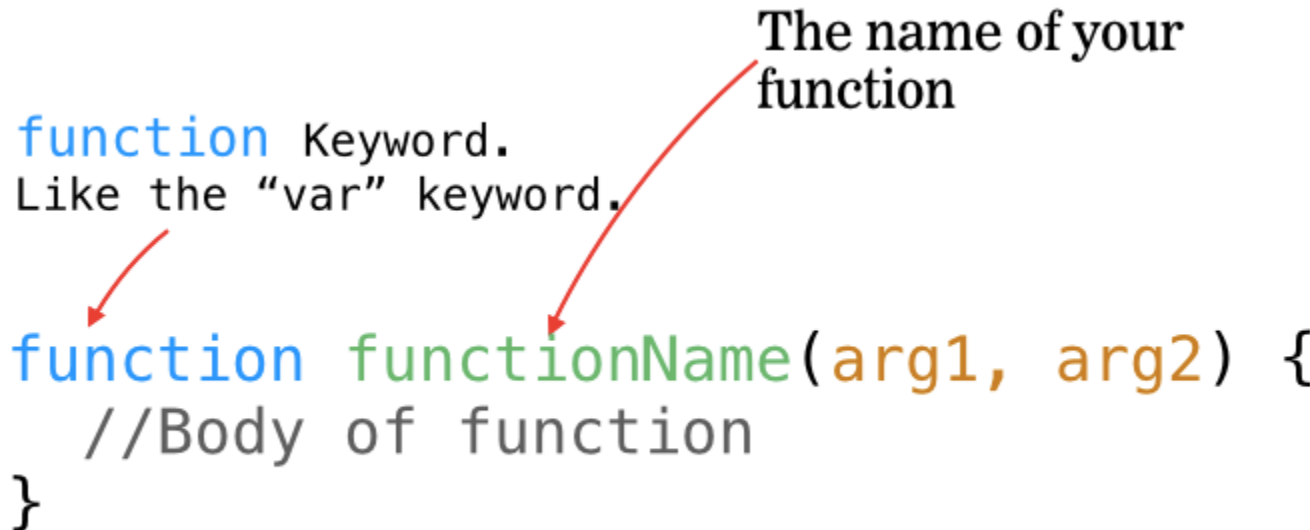*Executed when "something" invokes it
(calls it)*

W3Schools

FUNCTIONS SYNTAX

```
function Keyword.
Like the "var" keyword.
```

The name of your function

```
function functionName(arg1, arg2) {
  //Body of function
}
```

FUNCTION CALLS

```javascript
function helloWorld() {
  console.log("Hello Functions");
}

helloWorld(); //Prints "Hello Functions to the
console.
```

The brackets execute the function.
Try calling the function without
them to see what happens.

FUNCTION ARGUMENTS

Arguments let you pass data into the function

```
function functionName(arg1, arg2) {
    //Body of function
}
```

The functions executed code goes between the { } brackets. Much like an "if" statement.

FUNCTION ARGUMENTS

```javascript
function addAndPrint(num1, num2) {
  var sum = num1 + num2;
  console.log(sum);
}

addAndPrint(1, 2); // Result is 3

addAndPrint(8, 2); // Result is 10
```

CASH REGISTER

Anonymous vs. Named Functions

Return functions

WEATHER APPLICATION - PART 2

Temp Converter

WEATHER APPLICATION - PART 2

- Code the temperature converter application

- Complete Celsius to Fareinheit code

- Add background changing functionality.

REVIEW: LEARNING OBJECTIVES

- Describe arguments as they relate to functions

- Predict values returned by a given function

- Differentiate between anonymous and named functions

HOMEWORK

- **Review:**

  Slides and Resources

- **Code:**

  Re-create the weather widget app we began in class as a city widget web application that takes a user's input and updates the page's background and images to reflect the input (images provided).

  See Week 5 Assignment folder for details.

JAVASCRIPT FUNCTION RESOURCES

- Mozilla MDN: Function Guide

- W3Schools: JS Functions, Function Definition, Reserved Words

- jQuery.com: Named and Anonymous Functions, Code Organisation Concepts