

# Functions }

*Client Side Scripting*

# Functions

— { Functions

— { Arguments

# Functions



# Functions

- { What are they?
- { What are they used for?
- { Create a function
- { Calling a function

# Functions: What are they?

- { A function is a group of code
- { Functions can contain multiple lines of code
- { Think of it as a few lines of code that you want to do all the time. Instead of always writing out that code, you create a function which is like a shortcut to that code.

# Functions:

## What are they used for?

- { They are used as a way to hold your code until you're ready to use it.
- { They are used to make code more efficient.
- { They are used to save time when modifying, manipulating, or testing your code.

# Functions: Create a Function

```
function showMyName(){  
}
```

# Functions: Create a Function

```
function showMyName(){  
}
```

**Reserved Name to declare the function**

# Functions:

## Create a Function

```
function showMyName(){  
}
```

Custom name that defines the function.  
Function names follow variable naming rules

# Functions: Create a Function

```
function showMyName()  
{  
}
```

**Syntax for declaring an argument, we will talk more about this later.**

# Functions: Create a Function

```
function showMyName(){  
}
```

**Syntax for starting and ending the function**

# Functions: Create a Function

```
function showMyName(){  
    var name = "josh";  
    alert(name);  
}
```

**Code inside your function**

# Functions: Calling a function

```
function showMyName(){  
    var name = "josh";  
    alert(name);  
}
```

```
showMyName();
```

**This calls, or executes the function**

# Functions: Calling a function

```
function showMyName(){  
    var name = "josh";  
    alert(name);  
}
```

```
showMyName();  
showMyName();  
showMyName();
```

You can call a function as many times as you want

# Functions: Calling a function

- { Functions can be called just about anywhere
- { They are great for delaying functionality for things like button clicks and other user interactivity.

# Arguments



# Arguments

- { What is an argument?
- { What are they used for?
- { Create an argument
- { Call a function with the argument
- { What's really happening?
- { Call multiple functions
- { Create multiple arguments
- { Call multiple arguments

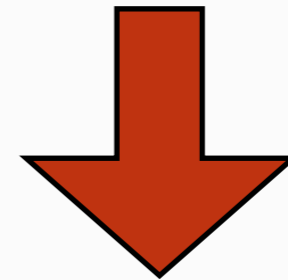
# Arguments: What is an argument?

- { It's a way to make a function unique
- { To repeat similar tasks but get slightly different results

```
showMyName();  
showMyName();  
showMyName();  
showMyName();  
showMyName();  
showMyName();  
showMyName();  
showMyName();  
showMyName();  
showMyName();  
showMyName();
```

This runs the exact same function (code) 10 times

Argument



```
showMyName("John");
```

This allows for the function to operate differently

```
showMyName("Josh");  
showMyName("Sam");  
showMyName("Bob");  
showMyName("John");  
showMyName("Ringo");  
showMyName("Paul");  
showMyName("George");  
showMyName("James");  
showMyName("Greg");  
showMyName("Mike");
```

**These function calls using arguments will yield different results**



Think of it as a way to answer  
a question

```
gotoAndPlay(30)}
```

*Does this look familiar?*

*This is actually a function using an argument to determine where to play*

```
gotoAndPlay(30)}
```

Where do you want to play?

```
gotoAndPlay(30)}
```

Where do you want to play?

30

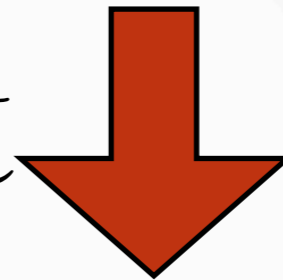
# Arguments:

## What are they used for?

- { Clarify parts of a function
- { Allow for flexibility in your code
- { Save Time / Typing
- { Save file space

# Arguments:

## Create an argument

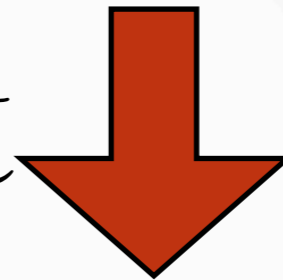


Define the  
argument

```
function showMyName(newName){  
  
    var name = "josh";  
    alert(newName);  
  
}
```

# Arguments:

## Create an argument



Define the  
argument

```
function showMyName(newName){  
  
    var name = "josh";  
    alert(newName);  
  
}
```

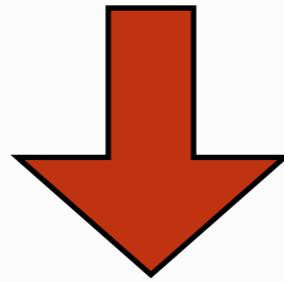


Use the  
argument

# Arguments:

## Call a function with an argument

```
function showMyName(newName){  
    var name = "josh";  
    alert(newName);  
}
```



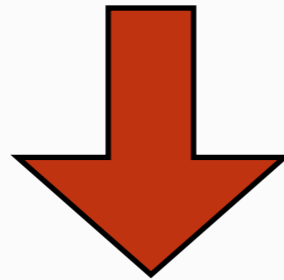
**argument**

```
showMyName("Bob");
```

# Arguments:

## Call a function with an argument

```
function showMyName(newName){  
    var name = "josh";  
    alert(newName);  
}
```



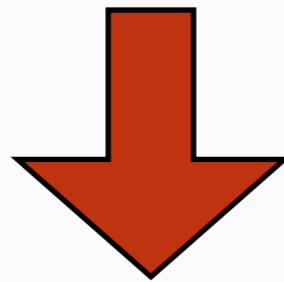
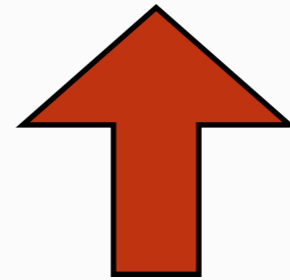
```
showMyName("Bob");
```

This gets stored as a  
variable called newName

# Arguments:

## Call a function with an argument

```
function showMyName(newName){  
    var name = "josh";  
    alert(newName);  
}
```



```
showMyName("Bob");
```

**newName = "Bob"**

# Arguments:

## Call a function with an argument

```
function showMyName(newName){  
    var name = "josh";  
    alert(newName);  
}
```



```
showMyName("Bob");
```

Since `newName = "Bob"`  
This will output Bob on  
the screen

# Arguments:

## Call multiple functions

```
showMyName("Josh");  
showMyName("Sam");  
showMyName("Bob");  
showMyName("John");
```

It's the same **function** but you get **different** results

# Arguments:

## Create Multiple Arguments

- { Functions can support an infinite number of arguments
- { This can make functions more flexible

# Arguments: Create Multiple Arguments


```
function showMyName(name, age, loc){  
    message = "My name is " + name + " I am " + age +  
    " I live in " + loc;  
    alert(message);  
}
```

# Arguments: Create Multiple Arguments

```
function showMyName(name, age, loc){  
  
    message = "My name is " + name + " I am " + age +  
    " I live in " + loc;  
    alert(message);  
  
}
```

# Arguments: Create Multiple Arguments

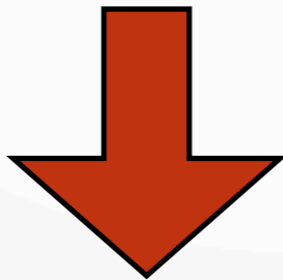
```
function showMyName(name, age, loc){  
    message = "My name is " + name + " I am " + age +  
    " I live in " + loc;  
    alert(message);  
}
```



Each new argument is  
separated by commas

# Arguments: Create Multiple Arguments

```
function showMyName(name, age, loc){  
  
    message = "My name is " + name + " I am " + age +  
    " I live in " + loc;  
    alert(message);  
  
}
```



```
showMyName("Josh", 29, "Greentree")
```

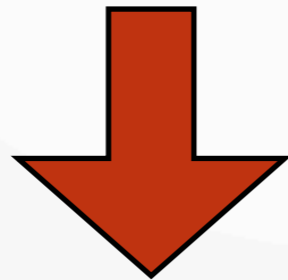
**Also separated by commas**

**WAIT!!!!!!**



# Arguments: Create Multiple Arguments

```
function showMyName(name, age, loc){  
  
    message = "My name is " + name + " I am " + age +  
    " I live in " + loc;  
    alert(message);  
  
}
```



```
showMyName("Josh", 31, "Greentree")
```

**Whys is 31 missing quotes**



It's a number

# Functions: Summary

- { Functions
- { Arguments