

Lesson 3 – Functions

HTTP 5122

Front-End Web Development

“Almost everything will
work again if you unplug
it for a few minutes,
including you.”

—Anne Lamott,
ALMOST EVERYTHING



Functions

Key Concepts

- A function is a block of code that waits until it is called to execute.
- Functions can have parameters that act like variables within the function.
- Functions can return one value at the end of their logical operations.
- Functions can be used anywhere in our logic, and can be called from inside other functions.
- Variables declared inside a function cannot be "seen" outside of that function. Where a variable can be seen is referred to as scope.

Blocks of code.

```
if( thisThing === true ) {  
    //Run this code if condition is  
    true.  
}
```

Blocks of code.

```
if( thisThing === true ) {  
    //Run this code if condition is  
    true.  
} else {  
    //Run this code if not true  
}
```

Blocks of code.

```
switch( thingToCompare ) {  
    case "test":  
        //Code to run for a match  
        break;  
}
```

Blocks of code.

```
for( var i = 0; i < 5; i++ ) {  
    //Run this code with each  
    iteration of the loop.  
}
```


Blocks of code.

```
while( thisThingIsTrue === true ){  
    //Run this code until the  
    running condition is not true.  
}
```

A function is a block of code that waits until it is called to execute.

```
function doThis() {  
    Code to run when this function  
    is called.  
}
```

Calling a function...

```
doThis();  
doThis();
```

Functions can have parameters that act like variables within the function.

```
function doThis(one, two) {  
    var z = one + two;  
    alert(z);  
}
```

Calling a function with parameters...

```
doThis(num1, num2);
```

Functions can return one value at the end of their logical operations.

```
function doThis(one, two) {  
    var z = one + two;  
    return z;  
}
```

Calling a function with parameters & handling the return value...

```
var result = doThis(num1, num2);
```

Functions can be used anywhere in our logic, and can be called from inside other functions.

```
if ( doThis(one, two) > 0 ) {
```

```
function getTotal(subtotal) {  
    var total = addTax(subtotal);
```

Variables declared inside a function cannot be "seen" outside of that function. Where a variable can be seen is referred to as scope.

```
var myGlobalvar = "Global vars can be seen everywhere!";

function checkVars() {
    var myPrivateVar = "Private vars are only seen within the function!";
    //myGlobalvar CAN BE ACCESSED INSIDE OF HERE
    console.log(myGlobalvar + " " + myPrivateVar);
}

console.log(myPrivateVar); //says myPrivateVar is undefined.
```

Lesson 3 – Functions

HTTP 5122

Front-End Web Development