Advanced Coding Club using JavaScript (week 3)

Mr Johanson

Last week we learned…

1. More about variables that are numbers and strings and booleans (true or false variables)
2. This week we will look at something called conditions!
3. After a little reminder!

Some things to remember...

/*
Some words in JavaScript or Droidscript cannot be used as variable names

These are special reserved words
*/

break	case	class	catch
const	continue	default	
delete	do	else	export
extends	finally	for	function
if	import	in	instanceof
let	new	return	super
switch	this	throw	try
typeof	var	void	while
with	yield		

When coding...

1. No **spaces** in variable names

2. **Always** check you end the line with a semi-colon **;**

3. The best thing to do when coding is do **small, tiny** changes then running your program

Conditions!
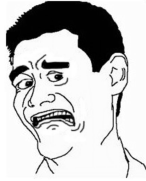
```
var boolbirthday = false;
var strbirthday = "get out the presents !";
var strchristmas = "how many days until christmas ?";

if( boolbirthday == true )
{
        alert(strbirthday );
}
else
{
        alert( strchristmas );

}
```

What do you think this code does ?

What do you think the == bit does ?

The whole idea of the IF condition is to TEST if something is

TRUE or FALSE,

RIGHT OR WRONG,

YES OR NO

About Conditions!

/*
We often want to take different actions in our program depending on certain conditions and the easiest way to do this is using an 'if' statement like this:
*/
var x = 1001;
var splat = false;

if(x > 1000)
{
   splat = true;
}
/* The line of code above would set the variable 'splat' to true if the variable 'x' contains a value greater than 1000. */

/*
We can also use the 'else' statement in combination with 'if' statement to do one thing or the other

Like the previous example
*/

var myBirthday = "NOWAY";
var strbirthday = "get out the presents !!";
var strchristmas = "how many days until christmas ??";

if(myBirthday == "YES!!")
{
        alert(strbirthday);
}
else if(myBirthday == "NOWAY")
{
        alert(strchristmas);
}
else
{
        …..
}

More conditions!

```
/*
 These are the different TESTS you can do in an IF Statement.
*/

var Thingy =    ;
var Stuff   =    ;
```
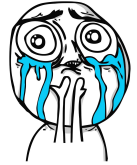
Thingy is greater than or equal to Stuff
 Thingy >= Stuff

Thingy is less than or equal to Stuff
 Thingy <= Stuff

Thingy is equal to Stuff
 Thingy == Stuff

Thingy is not equal to Stuff
 Thingy != Stuff

Thingy is greater than Stuff
 Thingy > Stuff

Thingy is less than to Stuff
 Thingy < Stuff

Try this …

```
var Thingy = 208;
var Stuff  = 999;

if( Thingy <= Stuff )
{
   alert( "Woo hoo! Thingy  less than or equal to Stuff" );
}
else
{
  alert( "Ahhh! Thingy GREATER than Stuff" );
}
```

So…

You know how to make variables that are:

1. **Numbers and Strings (text) and Boolean**
2. **Test them with IF statements**
3. **Now on to LOOPS…**

Loops

```
/*
Loops allow our program or code to do things over and
over again
*/
```

A WHILE LOOP

```
var answer = "not yet";

while( answer != "yes" )
{
   answer = prompt( "Are you ready?" );
}
```

Another WHILE loop with numbers

```
var  num = 1;

while(   num < 9 )
(
    alert( "only " + num );
    num = num + 1;
}

alert( "Hooray " + num );
```

MORE Loops

```
/*
Loops allow our program or code to do things over and
over again
*/

A FOR  LOOP

var txt = "G";

for( var i = 0;  i < 10 ; i = i+1 )
{

        txt += "O";
}

txt += "GLE"
alert( txt );
```

This loop had some parts to it that make it work

```
for (
        var i = 0;
        i < 10 ;
        i = i+1
)
```