Javascript Syntax Cheat Sheet

Defining Variables:

var hello = "Hello World"

let hello = "Hello World"

const hello = "Hello World"

Functions:

Definition:

```
function Hello () {
   //execute code here
   //use arguments
}
```

'return' Keyword:
- Stops execution of code
- Used in Functions to return values

Printing to the console.

console.log(someArgument)
- Displays Values
- Doesn't Return values

Invoking / Calling / Applying
- Use Parenthesis
- Runs the code of the Function

demo(arguments)

Arguments and Parameters

- Parameter: Placeholder for future value

```
function example(value1,value2){
console.log(value1)
console.log(value2)
}
```
- Arguments: The values passed to the function

example("stringValue", 22);

if / else statements:

```
if(expression returns true) {
        //run this code
} else {
        //run this code
}
```

if / else if / else statements:

```
if(expression returns true) {
        //run this code
} else if(expression returns true) {
        //run this code
} else {
        //run this code
}
```

Conditional Operators

- > "Greater Than"
- < "Less Than"
- >= "Greater Than or Equal To"
- <= "Less Than or Equal To"
- === "Identity Operator (is equal to?)"
- !== "Not Equal To"

Logical Operators

- && - AND true value && true value
- || - OR true value || false value
- ! - NOT toggles true and false

Strings

- A series of characters enclosed by a "" or ''
    var str1 = "Hello"
- Zero based index
- Bracket Notation

    var hello = "hello world"

    hello[0]; //returns 'h'

Looping through Strings

```
for(declair variables, set condition, count) {
      //run code
}

example
  for(var i = 0; i < hello.length; i++ {
        console.log(hello[i])
}
```

Arrays

- Are values that store multiple values
- You can loop through arrays like strings with a for loop

Empty Array
var myArray = []

Values in Array
var myArray = [1,2,3,4,5]

Objects

- Store data by key value pairs
- Values are accessed by dot or bracket notation

Empty Object
var myObj = {}

Values in a Object
var myObj = {
key1: "hello"
key2: "world"
}

myObj.key1 //returns "hello"
myObj["key2"] //returns "world"