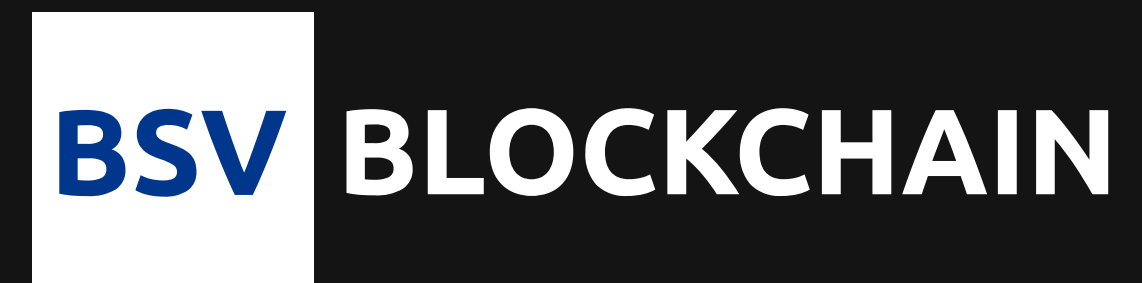




# Introduction to JavaScript

## Part 3

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# else if

```
var colors = ['red', 'blue', 'green', 'yellow'];
var selectedColor = colors[3];

if( selectedColor === 'red' ){
    console.log("The color is red");
}

else if (selectedColor === "blue") {
    console.log("The color is blue");
}

else if (selectedColor === "green") {
    console.log("The color is green");
}

else {
    console.log("The color is yellow");
}
```

# switch

```
var colors = ['red', 'blue', 'green', 'yellow'];  
var selectedColor = colors[3];  
  
switch(selectedColor){  
    case "red": console.log("the color is red");  
        break;  
    case "blue": console.log("the color is blue");  
        break;  
    case "green": console.log("the color is green");  
        break;  
    case "yellow": console.log("the color is yellow");  
        break;  
    default: console.log("There was an error");  
}
```

# Using &&

true: if both of the conditions are true

```
var goodMood = true;
var gotSleep = true;

if( goodMood && gotSleep ){
    console.log("today is a good day");
}
else {
    console.log("I am grumpy");
}
```

# Using ||

**true:** if either or both of the conditions is /are true

```
var goodMood = true;
var gotSleep = true;

if( goodMood && gotSleep ){
    console.log("today is a good day");
}
else {
    console.log("I am grumpy");
}
```

# Loops in JavaScript

## for loop

initialize  
counter

condition

incrementor

```
for (var i = 0; i < 10; i++) {  
    console.log(i);  
}
```

```
<!doctype html>  
<html>  
<head>  
    <meta charset="UTF-8">  
    <title>Loop Examples</title>  
</head>  
  
<body>  
  
    <h1>Loop Examples</h1>  
  
    <script>  
  
        for( var i=0; i<10; i++ ){  
            console.log(i + '\n');  
        }  
  
    </script>  
  
</body>  
</html>
```

# Loops in JavaScript

## for ..of loop

```
var food = ["grapes", "cheese", "bread", "olives"];

for( var eachItem of food ){
    console.log(eachItem);
}
```



# Loops in JavaScript

## while Loops

```
var incrementor = 0;
var text = "";

while( incrementor < 10 ){
    text += "The incrementor has gone up to " + incrementor + "\n";
    incrementor++;
}

console.log(text);
```

```
var incrementor = 0;
var text = "";

while( incrementor < 10 ){
    text += `The incrementor has gone up to ${incrementor} \n`;
    incrementor++;
}

console.log(text);
```



# Functions in JavaScript

## Reusable Sets of Instructions

A function lets you  
combine a group of  
instructions together  
and give them a name

```
function name() {  
    do something  
    do something  
}
```

```
name();
```

```
function doStuff(){  
  
    var myString = "here is a message";  
    var upperString = myString.toUpperCase();  
    console.log(myString);  
    console.log(upperString);  
}  
  
doStuff();
```

# Functions in JavaScript

## Passing in Data

Functions can take data through parameters that are passed into the function

```
function name(param1, param2) {  
    do something  
    do something  
}
```

```
name("stuff1", "stuff");
```

```
function addNums( num1, num2){  
    var sum = num1 + num2;  
    console.log(sum);  
}  
  
addNums( 4, 3 );
```

# Functions in JavaScript

## Returning Data

A function can return a data after performing whatever operations it was set to execute.

```
function name(param1, param2) {  
    do something with parameters;  
    return result;  
}
```

```
name("stuff1", "stuff");
```

```
function returnSum( num1, num2){  
    var sum = num1 + num2;  
    return sum;  
}  
  
console.log( returnSum( 5, 3 ) );
```

# Functions in JavaScript

## Functions can be anonymous

### Arrow functions

```
var greeting = "Hello, and good morning!";

function capitalizeFunction(anyString){
    anyString = anyString.toUpperCase();
    return anyString;
}

var capitalizeExpression = function(anyString){
    anyString = anyString.toUpperCase();
    return anyString;
}

var capitalizeArrow = anyString => anyString.toUpperCase();

console.log( capitalizeExpression(greeting) );
console.log( capitalizeFunction(greeting) );
console.log(capitalizeArrow(greeting));
```