

# 11. JavaScript If...Else Statements

Conditional statements are used to perform different actions based on different conditions.

## 11.1. Conditional Statements

Very often when you write code, you want to perform different actions for different decisions. You can use conditional statements in your code to do this.

In JavaScript we have the following conditional statements:

- **if statement** - use this statement to execute some code only if a specified condition is true
- **if...else statement** - use this statement to execute some code if the condition is true and another code if the condition is false
- **if...else if....else statement** - use this statement to select one of many blocks of code to be executed
- **switch statement** - use this statement to select one of many blocks of code to be executed

## 11.2. If Statement

Use the if statement to execute some code only if a specified condition is true.

### Syntax

```
if (condition)
{
    code to be executed if condition is true
}
```

Note that *if* is written in lowercase letters. Using uppercase letters (IF) will generate a JavaScript error!

### Example

Make a "Good day" greeting if the time is less than 20:00:

```
if (time<20)
{
    x="Good day";
}
```

The result of  $x$  will be:

Good day

Notice that there is no `..else..` in this syntax. You tell the browser to execute some code **only if the specified condition is true**.

## 11.3. If...else Statement

Use the `if...else` statement to execute some code if a condition is true and another code if the condition is not true.

### Syntax

```
if (condition)
{
    code to be executed if condition is true
}
else
{
    code to be executed if condition is not true
}
```

### Example

If the time is less than 20:00, you will get a "Good day" greeting, otherwise you will get a "Good evening" greeting

```
if (time<20)
{
    x="Good day";
}
else
{
    x="Good evening";
}
```

The result of  $x$  will be:

Good day

## 11.4. If...else if...else Statement

Use the if...else if...else statement to select one of several blocks of code to be executed.

### Syntax

```
if (condition1)
{
    code to be executed if condition1 is true
}
else if (condition2)
{
    code to be executed if condition2 is true
}
else
{
    code to be executed if neither condition1 nor
    condition2 is true
}
```

### Example

If the time is less than 10:00, you will get a "Good morning" greeting, if not, but the time is less than 20:00, you will get a "Good day" greeting, otherwise you will get a "Good evening" greeting:

```
if (time<10)
{
    x="Good morning";
}
else if (time<20)
{
    x="Good day";
}
else
{
    x="Good evening";
}
```

The result of  $x$  will be:

Good day

## 11.5. More Examples

### a) Random link.

This example will write a link to either GOOGLE or to BING. By using a random number, there is a 50% chance for each of the links.

```
<!DOCTYPE html>
<html>
<body>

<p id="demo"></p>

<script>
var r=Math.random();
var x=document.getElementById("demo")
if (r>0.5)
{
x.innerHTML="<a href='http://www.google.com'>Visit
Google</a>";
}
else
{
x.innerHTML="<a href='http://www.bing.com'>Visit
Bing</a>";
}
</script>

</body>
</html>
```