

Lecture # 8

Course

Advance Web Designing &
Development

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Switch Statement

```
switch (x) {  
    case 0:  
        document.getElementById("demo").innerHTML = "";  
        break;  
    case 1:  
        document.getElementById("demo").innerHTML = "";  
        break;  
    default:  
        text = "No value found";  
}
```

Loops

- ▶ Loops can execute a block of code a number of times.
- ▶ **Different Kinds of Loops**
 - ▶ JavaScript supports different kinds of loops:
 - ▶ **for** - loops through a block of code a number of times
 - ▶ **for/in** - loops through the properties of an object
 - ▶ **while** - loops through a block of code while a specified condition is true
 - ▶ **do/while** - also loops through a block of code while a specified condition is true

The For Loop

- ▶ The for loop has the following syntax:
 - ▶ `for (statement 1; statement 2; statement 3) {`
 code block to be executed
 }
- ▶ **Statement 1** is executed before the loop (the code block) starts.
- ▶ **Statement 2** defines the condition for running the loop (the code block).
- ▶ **Statement 3** is executed each time after the loop (the code block) has been executed

For Loop

```
▶ for (i = 0; i < 5; i++) {  
    text += "The number is " + i + "<br>";  
▶ }
```

Statement 1

- ▶

```
for (i = 0, len = cars.length, text = ""; i < len; i++) {  
    text += cars[i] + "<br>";  
}
```
- ▶ And you can omit statement 1 (like when your values are set before the loop starts):
- ▶

```
var i = 2;  
var len = cars.length;  
var text = "";  
for (; i < len; i++) {  
    text += cars[i] + "<br>";  
}
```

Statement 2

- ▶ Often statement 2 is used to evaluate the condition of the initial variable.
- ▶ This is not always the case, JavaScript doesn't care. Statement 2 is also optional.
- ▶ If statement 2 returns true, the loop will start over again, if it returns false, the loop will end.
- ▶ If you omit statement 2, you must provide a **break** inside the loop

Statement 3

- ▶ Often statement 3 increments the value of the initial variable.
- ▶ This is not always the case, JavaScript doesn't care, and statement 3 is optional.
- ▶ Statement 3 can do anything like negative increment (`i--`), positive increment (`i = i + 15`), or anything else.
- ▶ Statement 3 can also be omitted (like when you increment your values inside the loop):

Example

```
▶ var i = 0;  
  var len = cars.length;  
  for (; i < len; ) {  
    text += cars[i] + "<br>";  
    i++;  
  }
```

The For/In Loop

► `var person = {fname:"John", lname:"Doe", age:25};`

```
var text = "";
```

```
var x;
```

```
for (x in person) {  
    text += person[x];  
}
```

The for/in loop

To Iterate Object

```
<p id="res"></p>
```

```
<script type="text/javascript">
```

```
var obj={Name:"Abc",Fname:"DEF",Id:12};
```

```
//for/in loop
```

```
var a,text="";
```

```
for(a in obj)
```

```
{
```

```
text=text + "<br>" +obj[a];
```

```
}
```

```
document.getElementById('res').innerHTML=text;
```

```
</script>
```

The While Loop

```
▶ while (i < 10) {  
    text += "The number is " + i;  
    i++;  
}
```

Do while loop

```
▶ do {  
    text += "The number is " + i;  
    i++;  
}  
while (i < 10);
```

The Break Statement

- ▶ You have already seen the break statement used in an earlier lecture . It was used to "jump out" of a switch() statement.
- ▶ Example:
- ▶

```
for (i = 0; i < 10; i++) {  
    if (i === 3) { break; }  
    text += "The number is " + i + "<br>";  
}
```

The Continue Statement

- ▶ The **continue** statement breaks one iteration (in the loop), if a specified condition occurs, and continues with the next iteration in the loop.
- ▶

```
for (i = 0; i < 10; i++) {  
    if (i === 3) { continue; }  
    text += "The number is " + i + "<br>";  
}
```

JavaScript

End Of Lecture 8