Slide 14.14: JavaScript functions Slide 14.16: JavaScript while loop Home



JavaScript For Loop

Loops execute a block of code a specified number of times, or while a specified condition is true. Often when you write code, you want the same block of code to run over and over again in a row. Instead of adding several almost equal lines in a script we can use loops to perform a task like this. In JavaScript, there are two different kind of loops:

- *for*, which loops through a block of code a specified number of times. It is discussed in this slide.
- *while*, which loops through a block of code while a specified condition is true. It will be discussed in the next slide.

The syntax of <u>for</u> loop is given on the right:

The script checks whether the entered ID is numeric or not. It uses a for loop to loop through the ID byte by byte. The property <u>length</u> of the object <u>String</u> contains the length of the string. For

```
var s = "Hello!";
document.write(
```

```
for ( var=start; var<=end; var+=increment ) {
  code to be executed
}</pre>
```

example,

```
s.length );
```

will print a value of 6.

```
<html>
<head>
  <script type="text/javascript">
    var digits = '0123456789';
    function isNumber( parm ) {
     if ( parm == "" ) return true;
      for (i = 0; i < parm.length; i++)
        if ( digits.indexOf( parm.charAt( i ), 0 ) == -1 )
          return false;
      return true;
 </script>
</head>
<body>
 <script type="text/javascript">
   var ID = window.prompt( "Enter ID:" );
    if ( isNumber( ID ) )
      document.write( "Valid ID: " + ID );
    else
      document.write( "Wrong ID: " + ID );
 </script>
</body>
</html>
                 Display the HTML
                                      Reset
```

Demonstration

The following demonstration shows how the script of HTML and JavaScript is displayed on the Web.

```
Display the HTML
                                                         Reset
<html>
<head>
 <script type="text/javascript">
  function howMany (selectItem) {
   var numberSelected=0
   for (var i=0; i < selectItem.options.length; i++)</pre>
    if (selectItem.options[i].selected == true)
     numberSelected++;
   return numberSelected
  }
 </script>
</head>
<body>
 <form name="selectForm">
  Choose some book types:
  <select multiple name="bookTypes" size="6">
    <option selected> Classic </option>
    <option> Information Books </option>
```

Slide 14.14: JavaScript functions Slide 14.16: JavaScript while loop Home

