

# 17. JavaScript Form Validation

## 17.1. JavaScript Form Validation

JavaScript can be used to validate data in HTML forms before sending off the content to a server.

Form data that typically are checked by a JavaScript could be:

- has the user left required fields empty?
- has the user entered a valid e-mail address?
- has the user entered a valid date?
- has the user entered text in a numeric field?

## 17.2. Required Fields

The function below checks if a field has been left empty. If the field is blank, an alert box alerts a message, the function returns false, and the form will not be submitted:

```
function validateForm()
{
  var x=document.forms["myForm"]["fname"].value;
  if (x==null || x=="")
  {
    alert("First name must be filled out");
    return false;
  }
}
```

The function above could be called when a form is submitted:

## Example

```
<form name="myForm" action="demo_form.asp"
onsubmit="return validateForm()" method="post">
First name: <input type="text" name="fname">
<input type="submit" value="Submit">
</form>
```

## 17.3. E-mail Validation

The function below checks if the content has the general syntax of an email.

This means that the input data must contain an @ sign and at least one dot (.). Also, the @ must not be

the first character of the email address, and the last dot must be present after the @ sign, and minimum 2 characters before the end:

```
function validateForm()
{
var x=document.forms["myForm"]["email"].value;
var atpos=x.indexOf("@");
var dotpos=x.lastIndexOf(".");
if (atpos<1 || dotpos<atpos+2 ||
dotpos+2>=x.length)
{
    alert("Not a valid e-mail address");
    return false;
}
}
```

The function above could be called when a form is submitted:

## Example

```
<form name="myForm" action="demo_form.asp"
onsubmit="return validateForm();" method="post">
Email: <input type="text" name="email">
<input type="submit" value="Submit">
</form>
```