

Form Validation

Lecture 25

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1 Form Validation

2 Detecting Javascript Errors

3 The \$() Function

4 Assignment

Outline

1 Form Validation

2 Detecting Javascript Errors

3 The \$() Function

4 Assignment

Form Validation

- An HTML form should attempt to validate the information that is entered before sending that information to the PHP file.
- At a minimum, it should verify that every required field is filled.
- It can also check that numerical values are within a reasonable range, etc.

Form Validation

Form Validation

```
<form method="POST" onsubmit="return validate()"  
      action="profile.php">  
      :  
</form>
```

- The `onsubmit` event handler will invoke Javascript when the submit button is pressed.

Form Validation

The validate() Function

```
function validate()
{
    var fname = document.getElementById("fname").value;
    if (fname == "")
    {
        alert("Please enter your first name");
        return false;
    }
    return true;
}
```

- This function checks that the `fname` element is not blank.

Form Validation

The validate() Function

```
function validate()
{
    var age = document.getElementById("age").value;
    age = parseInt(age);
    if (age <= 0 || age > 120)
    {
        alert("Please enter a valid age");
        return false;
    }
    return true;
}
```

- This function checks that age is a reasonable number.

Form Validation

The validate() Function

```
function validate()
{
    var state = document.getElementById("state").value;
    if (state == "0")
    {
        alert("Please select your state");
        return false;
    }
    return true;
}
```

- To detect errors from a pull-down menu, set a default value of 0.

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The onerror Event Handler

The onerror Event Handler

```
onerror = errorHandler;
```

- The global onerror event handler can be used to direct execution to a specified function if a Javascript error occurs.

The errorHandler Function

The errorHandler Function

```
function errorHandler(message, url, line)
{
    errMsg = "Sorry, an error was encountered\n\n";
    errMsg += "Error: " + message + "\n";
    errMsg += "URL: " + url + "\n";
    errMsg += "Line: " + line + "\n";
    errMsg += "Click OK to continue.\n\n";
    alert(errMsg);
    return true;
}
```

- The values of `message`, `url`, and `line` are automatically generated.
- In this example, the `errorHandler()` function will be called if a Javascript error occurs.

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The \$() Function

The getElementById() Function

```
function $(id)
{
    return document.getElementById(id);
}
```

```
function validate()
{
    var fname = $("fname").value;
    :
}
```

- The getElementById() function is used so frequently that programmers often write a function called \$() to replace it.

The \$() Function

The validate() Function

```
function validate()
{
    var fname = $("fname").value;
    if (fname == "")
    {
        alert("Please enter your first name");
        return false;
    }
    return true;
}
```

- The earlier example, now using \$().

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- Visit the W3Schools website
 - http://www.w3schools.com/js/js_form_validation.asp
 - Visit the section labeled “JS Validation.”
- Visit the EchoEcho website
 - <http://www.echoecho.com/jsforms.htm>
 - Visit that page and subsequent pages.
- Incorporate validity-checking into your Tigerbook application wherever applicable.