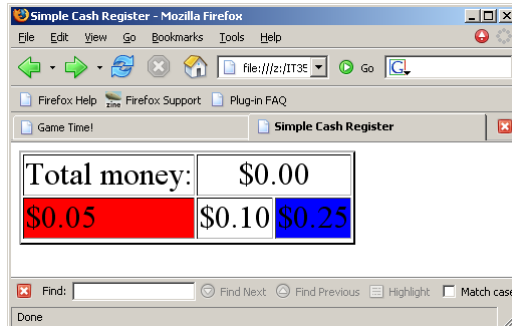


IT350 Web and Internet Programming

SlideSet #11: Dynamic HTML
(some from Chapter 9, 11,12 &13 of book)

What can we do with DHTML?

What can we do with DHTML?



What techniques do we need?

- Find the HTML object we want to change

```
var domLink = document.getElementById("linkToAnimal");
```
- Change the object's:
 - HTML properties

```
domLink.href = "cat.html";
```
 - CSS properties

```
domLink.style.backgroundColor = "blue";
```
- Register event handler

```
<input type = "button" value = "change" onclick = "changeLink()">
```

Cash Register Example

```
<script type = "text/javascript">
  var totalCents = 0;

  function addMoney(extraCents) {
    totalCents += extraCents;

    var domTotal = document.getElementById("moneyTotal");
    domTotal.innerHTML = "$" + totalCents / 100;

    var domLabel = document.getElementById("moneyLabel");
    if ( (totalCents % 10) == 0)
      domLabel.style.color = "red";
    else
      domLabel.style.color = "blue";
  }
</script> </head>
<body>
<table border="1">
  <tr> <td id="moneyLabel" > Total money: </td>
    <td colspan = "2" id="moneyTotal" > $0.00 </td>
  </tr>
  <tr>
    <td style="background-color: red"  onclick="addMoney( 5)" > $0.05 </td>
    <td style="background-color: white" onclick="addMoney(10)" > $0.10 </td>
    <td style="background-color: blue"  onclick="addMoney(25)" > $0.25 </td>
  </tr>
</table> </body> </html>
```

Exercise #1 – Change this code to make the <p> element have a large font when you move the mouse over it.

```
<!DOCTYPE html>
<html>
  <head> <meta charset = "utf-8" />
    <title>Bigger</title>
    <script type = "text/javascript">

      </script>
    </head>
  <body>

    <p>
      Welcome to my page!
    </p>

  </body>
</html>
```

Form Validation Example

```
<script type = "text/javascript">
// Returns true if the number of steps is okay
function checkAttending() {
    var number = document.getElementById("numAttend").value;
    if ( (number >= 1) && (number <= 100) )
        return true;
    else {
        window.alert("Please enter a value between 1 and 100.");
        return false;
    }
}

// Asks user to confirm submission, returns true if ok
function confirmSubmit() {
    if (!checkAttending())
        return false;
    if (window.confirm("Do you want to submit?"))
        return true;
    else
        return false;
}
</script>
</head>
<body>
<form method="get" onsubmit="return confirmSubmit()"
    action="http://www.usna.edu/Users/cs/adina/teaching/it350/tools/FormChecker/submit.cgi" >
    <p> <br/>Last name:
        <input type="text" name="lastname" />
    <br/>Number attending (1-100):
        <input type="text" name="numAttend" id="numAttend"
            onblur="return checkAttending()" />
    <br/><input type="submit" value="Sign Up" /> </p>
</form> </body> </html>
```

All Kinds of Events

- onblur
- onfocus
- onchange
- onclick
- onload (<body> only)
- onmousedown, onmouseup, onmouseout, onmouseover, onmousemove
- onselect (<input>, <textarea> only)
- onsubmit (<form> only)
- onunload (<body> only)

Exercise #2 – Modify so that clicking on the button changes target of <a> element to “dog.html”

```
<!DOCTYPE html>
<html><head>
  <meta charset = "utf-8" />
  <title>Change Link</title>
  <script type = "text/javascript">

      </script>
</head>
<body>
<p><a href="cat.html">See some animals!</a></p>

<form>
  <input type="button" value="Change animal" />

</form>
</body> </html>
```

Exercise #3 – Write a form to read in a password from the user in two boxes. When they submit the form, proceed only if the passwords are the same.