IT350 Web and Internet Programming
Fall 2007

SlideSet #11: Dynamic HTML
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";
Cash Register Example

```html
<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>

<body>
<table border="2">
    <tr>
        <td id ="moneyLabel" > Total money: </td>
        <td colspan = "2" align="center" 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>
```
Form Validation Example

```html
<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 name="game" method="get" action="submit.cgi"
onsubmit="return confirmSubmit()" >
    <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" />
</form> </body> </html>
```
All Kinds of Events

- onblur
- onfocus
- onchange
- onclick
- onload (only on <body>)
- onmousedown, onmouseup, onmouseout, onmouseover, onmousemove
- onsubmit (only on <form>)
- onselect (only on <input>, <textarea>)
- onunload (only on <body>)
Exercise #1 – Change this code to make the <p> element have a bigger font when you move the mouse over it.

```html
<html xmlns = "http://www.w3.org/1999/xhtml">
<head>
    <title>Bigger</title>
    <script type = "text/javascript">

</script>
</head>
<body>

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

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

<html xmlns = "http://www.w3.org/1999/xhtml">
   <head>
      <title>Change Link</title>
      <script type = "text/javascript">

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