Dynamic Web Authoring – COM 353

Form Validation

Task 0 – Get Informed

Revise the lecture notes

Understand the class examples

Use the following online tutorials to reinforce your learning on access to form elements (radio button, check box, etc.) using javascript and validation:

http://wps.aw.com/aw_webwizard/234/60015.cw/index.html

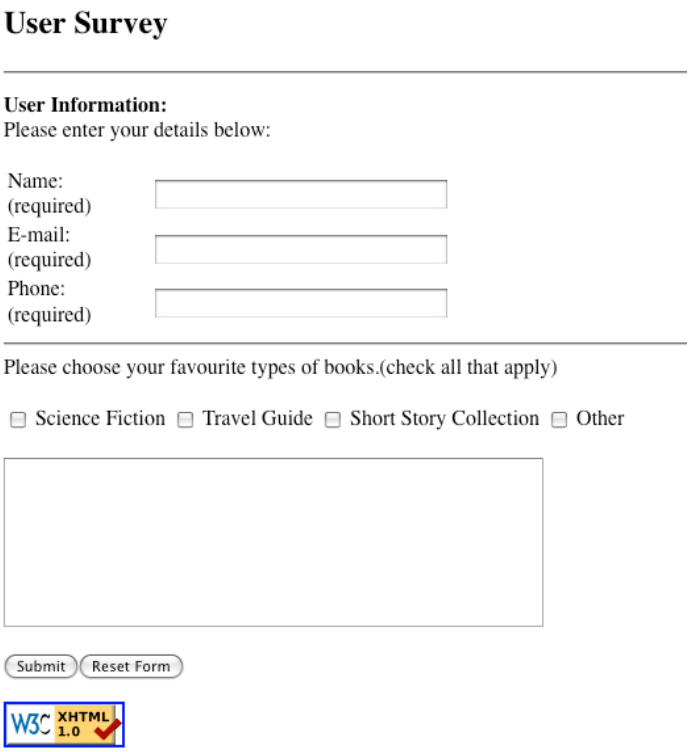
http://www.javascriptworld.com

http://www.w3schools.com/JS/default.asp

Task 1 – Form Validation

i. Write a script to create a form as below, which will provide an online survey on users' favourite music.

   Name the form as userSurvey, the Name input field as userName; the Phone input field as phone; the book selection choices as bookChoice0, bookChoice1, bookChoice2 and bookChoice3. Save the script as week8_Q.html.



ii. Write a function validName() in the script to validate the input field of name, if the visitor doesn't provide the name before submit the form (use onsubmit() method, refer to lecture notes), an alert message will be displayed and the mouse curse will be focused on the field;

iii. The following function is used to reformat the phone number into +44 (0) 28 9036-6591 format. Explain statement by statement how this code will be working.

```
function validNo()
{
    if (!document.userSurvey.phone.value)
    {
     window.alert("Phone number missing. Please enter a valid
     phone number to continue.");
        document.userSurvey.phone.focus();
        return false;
    }
    else
```

```
    {
        var numbersOnly = "";
        var chars = "";
        var phoneNo = document.userSurvey.phone.value;

        for (i = 0; i < phoneNo.length; i++)
        {
            chars = phoneNo.substring(i,i+1);

if (chars >= "0" && chars <= "9")
            {
                numbersOnly = numbersOnly + chars;
            }
        }

        if (numbersOnly.length != 13)
        {
            window.alert("Incorrect phone number format.You must
enter 13 numbers.");
            document.userSurvey.focus();
            return false;
        }
        else
        {
            var areacode = numbersOnly.substring(0,2);
            var leading0 = numbersOnly.substring(2,3);
            var exchange = numbersOnly.substring(3,5);
            var ext1 = numbersOnly.substring(5,9);
            var ext2 = numbersOnly.substring(9);
            var newNumber =( "+" + areacode + " " +"(" + leading0
+ ")" + exchange + " " + ext1 + "-" + ext2);
            document.userSurvey.phone.value = newNumber;
return true;
        }
    }
}
```

iv. Insert the function validNo() into the script, and using validNo( ) to reformat the phone number visitor inputs. *Hint: modify onsubmit () method to check validNo() function*

v. String method indexOf is used to search a sub-string in the string from a specific starting position (if no specified, it will start

from beginning, that is index 0). The method returns the starting position where the substring is found at the first time. The syntax is: string.indexOf(searchvalue,start). (reference: http://www.w3schools.com/jsref/jsref_indexof.asp)

For example:

```
var name = "university of ulster";
var iposition = name.indexOf("i", 1); //iposition = 2
var iposition = name.indexOf("i", 3); //iposition = 7
var erposition = name.indexOf ("er"); // erposition = 4
```

Now, explain the function validEmail ( ) below, and summary the email validation rules.

```
function validEmail()
{
    if (!document.userSurvey.eMail.value) {
        window.alert("E-mail Address missing. Please enter a valid
E-mail address to continue.");
        document.userSurvey.eMail.focus();
         return false;

    }
    else
    {
        var emailAddress = document.userSurvey.eMail.value;
        var atLoc = emailAddress.indexOf("@",1);
        var dotLoc = emailAddress.indexOf(".",atLoc+2);
        var len = emailAddress.length;

        if (atLoc > 0 && dotLoc > 0 && len > dotLoc+2)
        {
            return true;
        }
        else
        {
            alert("Invalid E-mail address! Please enter your e-
mail address again.");
            document.userSurvey.eMail.focus();
            return false;
        }
    }
}
```

vi. Modify onsubmit() method to validate the email input using this function.

vii. The following function is used to validate selection choices. Understand the function and complete two missing statements.

viii. Add function validChoice( ). Modify onsubmit() method to validate the choice input using this function.

```
function validChoice()
{
    var bookChoice = "";
    var x= "";


    for (i=0;i< 4;i++)
    {
        if (document.userSurvey['bookChoice'+i].checked)
        {
            bookChoice                                          =
document.userSurvey['bookChoice'+i].value;
            x = x +"\n"+ bookChoice;         //"\n"   output   a
newline
        }
    }

    if (bookChoice == "")
    {
        window.alert("You   must   select   at   least   one   book
category.");
        //insert a statement missing here
    }
    else
    {
        var userName = document.userSurvey.userName.value;
        var eMail = document.userSurvey.eMail.value;
        var phoneNo = document.userSurvey.phone.value;

        //insert a statement here so that the values of username,
email,  phoneNo  and  the  book  selected  will  be  display  in  the
textarea;

        return true;
    }
}
```

ix. Finally, create a function named as validAll( ) to fulfil the function below:

a. if all functions of validName( ), validEmail( ), validNo( ) and validChoice( ) are true, the validation is successful, that is validAll ( ) is true.
b. else the validation failed

Task 2 – Update the Learning Log

In learning log, summarise the learning activities and the techniques you used, also provide the links to the html files that you developed in the above tasks.