**Day 11:**

**HTML5 Linking JavaScript Files/JavaScript file X1.js:Enlarging pictures and coupon**

There are numerous JavaScript functions that need to be linked to our html shopping cart page.

It is the code in these functions that make the page functional.

To somewhat simplify things. I have decided to have 5 separate javaScript files. All linked to the html page.

We will examine them one at a time, but first, the lines need to be put into our html page to link the page to the files,

<script type="text/javascript" src="X1.js"></script&> <!-- file to make pictures and coupon bigger-->

 <script type="text/javascript" src="X2.js></script> <!-- Drag and Drop functions-->

 <script type="text/javascript" src="X3.js"></script> <!-- Note/wish list function-->

 <script type="text/javascript" src="X4.js"></script> <!-- Discount function-->

 <script type="text/javascript" src="X5.js"></script> <!-- Submit Order function-->

Put these links on your clipboard and paste them between the beginning and ending head tags of your html document.

We will build the JavScript files one at a time.

First we need to create a link to the file from our html shopping cart file.

Our first javaScript file is called X1.js. It includes the functions to enlarge the images and coupon and then put the coupon back to original size when it no longer has the focus.

This code appears below.

function bigImg(x)

{

x.style.height="130px";

x.style.width="130px";

}

function normalImg(x)

{

x.style.height="54px";

x.style.width="54px";

}

function openWin0()

{

myWindow=window.open('images0b.jpg',"\_blank","toolbar=yes, location=yes, directories=no, status=no, menubar=yes, scrollbars=yes, resizable=yes, copyhistory=yes, width=250, height=250");

myWindow.focus();

}

function openWin1()

{

myWindow=window.open('images1b.jpg',"\_blank","toolbar=yes, location=yes, directories=no, status=no, menubar=yes, scrollbars=yes, resizable=yes, copyhistory=yes, width=250, height=250");

myWindow.focus();

}

function openWin2()

{

myWindow=window.open('images2b.jpg',"\_blank","toolbar=yes, location=yes, directories=no, status=no, menubar=yes, scrollbars=yes, resizable=yes, copyhistory=yes, width=250, height=250");

myWindow.focus();

}

function openWin3()

{

myWindow=window.open('images3b.jpg',"\_blank","toolbar=yes, location=yes, directories=no, status=no, menubar=yes, scrollbars=yes, resizable=yes, copyhistory=yes, width=250, height=250");

myWindow.focus();

}

function openWin4()

{

myWindow=window.open('images4b.jpg',"\_blank","toolbar=yes, location=yes, directories=no, status=no, menubar=yes, scrollbars=yes, resizable=yes, copyhistory=yes, width=250, height=250");

myWindow.focus();

}

function openWin5()

{

myWindow=window.open('images5b.jpg',"\_blank","toolbar=yes, location=yes, directories=no, status=no, menubar=yes, scrollbars=yes, resizable=yes, copyhistory=yes, width=250, height=250");

myWindow.focus();

}

function openWin6()

{

myWindow=window.open('images6b.jpg',"\_blank","toolbar=yes, location=yes, directories=no, status=no, menubar=yes, scrollbars=yes, resizable=yes, copyhistory=yes, width=250, height=250");

myWindow.focus();

}

function openWin7()

{

myWindow=window.open('images7b.jpg',"\_blank","toolbar=yes, location=yes, directories=no, status=no, menubar=yes, scrollbars=yes, resizable=yes, copyhistory=yes, width=250, height=250");

myWindow.focus();

}

function openWin8()

{

myWindow=window.open('images8b.jpg',"\_blank","toolbar=yes, location=yes, directories=no, status=no, menubar=yes, scrollbars=yes, resizable=yes, copyhistory=yes, width=250, height=250");

myWindow.focus();

}

Put it on the clipboard.

Open Notepad++.

Make a new file.

CTRL + V or Edit and Paste from Notepad++ to paste it into Notepad++.

Save it as a JavaScript file type (.js) called X1.js.

Run the program by launching it in Chrome.

Try clicking on each product. It should open in a new window , show an enlarged image and a price and description of each item.

 Pass the mouse over the coupon

It should show an enlarged image.

When you move the mouse away, it should go back to normal size.

Let us examine the code that makes this happen.

It is in your newly created JavaScript File called X1.js.

function bigImg(x)

{

x.style.height="130px";

x.style.width="130px";

}

function normalImg(x)

{

x.style.height="54px";

x.style.width="54px";

}

The first function bigImg(x) is called or executed, when the user passes the mouse over the image of the coupon.

img onMouseOver="bigImg(this)"

The image increases in size to 130 pixels by 130 pixels from its original 54 pixels by 54 pixels.

The second function normalImg(this) returns the image to its normal size.

<onmouseout="normalImg(this)" border="3" src="coupon2.jpg" hspace="10">

Demonstrate how this works for your instructor.

The next nine functions relate to each product featured on our page.

 function openWin0()

{

myWindow=window.open('images0b.jpg',"\_blank","toolbar=yes, location=yes, directories=no, status=no, menubar=yes, scrollbars=yes, resizable=yes, copyhistory=yes, width=250, height=250");

myWindow.focus();

}

When the user clicks on the first picture, function openWin0() is called.

When the user clicks on the second picture, function openWin(1) is called.

Each image is opened in a blank 250 pixel by 250 pixel window, resizeable with tool bar, menu bar, and scroll bars.

Demonstrate how this works for your instructor.

Printout a copy of your html file and JavaScript file X1 for your instructor

Also include a print screen of your finished work. Just put the page on the screen, size it by using the CTRL Key and the roller on the mouse. Press Print Screen key. Open Word. Paste it into work and print it out.

**Day 12:**

**JavaScript file :drag and drop functions X2.js**

Now it is time to add the JavaScript code to make the drag and drop work.

Put on your clipboard the code that appears below.

var total = 0

var price0 = 0

var price1 = 0

var price2 = 0

var price3 = 0

var price4 = 0

var price5 = 0

var price6 = 0

var price7 = 0

var price8 = 0

var price9 = 0

var salesTax0 = 0

var salesTax1 = 0

var salesTax2 = 0

var salesTax3 = 0

var salesTax4 = 0

var salesTax5 = 0

var salesTax6 = 0

var salesTax7 = 0

var salesTax8 = 0

var salesTax9 = 0

var shipping0 = 0

var shipping1 = 0

var shipping2 = 0

var shipping3 = 0

var shipping4 = 0

var shipping5 = 0

var shipping6 = 0

var shipping7 = 0

var shipping8 = 0

var shipping9 = 0

var salesTax0 = 0

var salesTax1 = 0

var salesTax2 = 0

var salesTax3 = 0

var salesTax4 = 0

var salesTax5 = 0

var salesTax6 = 0

var salesTax7 = 0

var salesTax8 = 0

var salesTax9 = 0

var salesTax = 0

var shipping = 0

var subTotal = 0

var total=0

var discount = total\*.10

function allowDrop(ev)

{

ev.preventDefault();

}

function drag(ev)

{

ev.dataTransfer.setData("Text",ev.target.id);

}

function drop(ev)

{

ev.preventDefault();

var data=ev.dataTransfer.getData("Text");

ev.target.appendChild(document.getElementById(data));

 if (data == "0")

 {

 document.productsForm.jewel[0].checked = true;

 document.productsForm.price[0].checked = true;

 document.productsForm.item0.value = "pink sapphire ring";

 document.productsForm.price0.value = "895.00";

 price0=895.00

 shipping0=3.95;

 salesTax0=price0 \*.07;

 subTotal = subTotal + price0

 salesTax = salesTax + salesTax0;

 shipping = shipping + shipping0

 total = total + price0 + shipping + salesTax;

 document.productsForm.subTotal.value = Math.round(subTotal \* 100)/100;

 document.productsForm.salesTax.value = Math.round(salesTax \* 100)/100;

 document.productsForm.shipping.value = Math.round(shipping \* 100)/100;

 document.productsForm.total.value = Math.round(total \* 100)/100;

 //document.productsForm.pinkring.value = "pink sapphire ring";

 }

 else if (data == "1")

 {

 productsForm.jewel[1].checked = true;

 productsForm.price[1].checked = true;

 document.productsForm.item1.value = "black pearl and jade necklace";

 document.productsForm.price1.value = "395.00";

 price1=395.00;

 shipping1=3.95;

 salesTax1=price1\*.07;

 subTotal = subTotal + price1;

 salesTax = salesTax + salesTax1;

 shipping = shipping + shipping1

 total = total + price1 + shipping+ salesTax;

 document.productsForm.subTotal.value = Math.round(subTotal \* 100)/100;

 document.productsForm.salesTax.value = Math.round(salesTax \* 100)/100;

 document.productsForm.shipping.value = Math.round(shipping \* 100)/100;

 document.productsForm.total.value = Math.round(total \*100)/100;

 }

 else if (data == "2")

 {

 productsForm.jewel[2].checked = true;

 productsForm.price[2].checked = true;

 document.productsForm.item2.value = "yellow diamond 3ct";

 document.productsForm.price2.value = "$1,895";

 price2=1895;

 shipping2=3.95;

 salesTax2=price2\*.07;

 subTotal = subTotal + price2;

 salesTax = salesTax + salesTax2;

 shipping = shipping + shipping2

 total = total + price2 + shipping+ salesTax;

 document.productsForm.subTotal.value = Math.round(subTotal \* 100)/100;

 document.productsForm.salesTax.value = Math.round(salesTax \* 100)/100;

 document.productsForm.shipping.value = Math.round(shipping \* 100)/100;

 document.productsForm.total.value = Math.round(total \*100)/100;

 }

 else if (data == "3")

 {

 productsForm.jewel[3].checked = true;

 productsForm.price[3].checked = true;

 document.productsForm.item3.value = "Citizens watch";

 document.productsForm.price3.value = "$695";

 price3=695;

 shipping3=3.95;

 salesTax3=price3\*.07;

 subTotal = subTotal + price3;

 salesTax = salesTax + salesTax3;

 shipping = shipping + shipping3

 total = total + price3 + shipping+ salesTax;

 document.productsForm.subTotal.value = Math.round(subTotal \* 100)/100;

 document.productsForm.salesTax.value = Math.round(salesTax \* 100)/100;

 document.productsForm.shipping.value = Math.round(shipping \* 100)/100;

 document.productsForm.total.value = Math.round(total \*100)/100;

 }

 else if (data == "4")

 {

 productsForm.jewel[4].checked = true;

 productsForm.price[4].checked = true;

 document.productsForm.item4.value = "annivesary band";

 document.productsForm.price4.value = "$4,910";

 price4=4910;

 shipping4=3.95;

 salesTax4=price4\*.07;

 subTotal = subTotal + price4;

 salesTax = salesTax + salesTax4;

 shipping = shipping + shipping4

 total = total + price4 + shipping+ salesTax;

 document.productsForm.subTotal.value = Math.round(subTotal \* 100)/100;

 document.productsForm.salesTax.value = Math.round(salesTax \* 100)/100;

 document.productsForm.shipping.value = Math.round(shipping \* 100)/100;

 document.productsForm.total.value = Math.round(total \*100)/100;

 }

 else if (data == "5")

 {

 productsForm.jewel[5].checked = true;

 productsForm.price[5].checked = true;

 document.productsForm.item5.value = "emerald cut 4 ct diamond ring";

 document.productsForm.price5.value = "$1,295";

 price5=1295.00;

 shipping5=3.95;

 salesTax5=price5\*.07;

 subTotal = subTotal + price5;

 salesTax = salesTax + salesTax5;

 shipping = shipping + shipping5

 total = total + price5 + shipping+ salesTax;

 document.productsForm.subTotal.value = Math.round(subTotal \* 100)/100;

 document.productsForm.salesTax.value = Math.round(salesTax \* 100)/100;

 document.productsForm.shipping.value = Math.round(shipping \* 100)/100;

 document.productsForm.total.value = Math.round(total \*100)/100;

 }

 else if (data == "6")

 {

 productsForm.jewel[6].checked = true;

 productsForm.price[6].checked = true;

 document.productsForm.item6.value = "4ct cocktail diamond ring";

 document.productsForm.price6.value = "$4,295";

 price6=4295.00;

 shipping6=3.95;

 salesTax6=price6\*.07;

 subTotal = subTotal + price6;

 salesTax = salesTax + salesTax6;

 shipping = shipping + shipping6

 total = total + price6 + shipping+ salesTax;

 document.productsForm.subTotal.value = Math.round(subTotal \* 100)/100;

 document.productsForm.salesTax.value = Math.round(salesTax \* 100)/100;

 document.productsForm.shipping.value = Math.round(shipping \* 100)/100;

 document.productsForm.total.value = Math.round(total \*100)/100;

 }

 else if (data == "7")

 {

 productsForm.jewel[7].checked = true;

 productsForm.price[7].checked = true;

 document.productsForm.item7.value = "blue nile diamond ring";

 document.productsForm.price7.value = "$4,000";

 price7=4000.00;

 shipping7=3.95;

 salesTax7=price7\*.07;

 subTotal = subTotal + price7;

 salesTax = salesTax + salesTax7;

 shipping = shipping + shipping7

 total = total + price7 + shipping+ salesTax;

 document.productsForm.subTotal.value = Math.round(subTotal \* 100)/100;

 document.productsForm.salesTax.value = Math.round(salesTax \* 100)/100;

 document.productsForm.shipping.value = Math.round(shipping \* 100)/100;

 document.productsForm.total.value = Math.round(total \*100)/100;

 }

 else if (data == "8")

 {

 productsForm.jewel[8].checked = true;

 productsForm.price[8].checked = true;

 document.productsForm.item8.value = "3 ct sapphire ring";

 document.productsForm.price8.value = "$3,500";

 price8=3500.00;

 shipping8=3.95;

 salesTax8=price8\*.07;

 subTotal = subTotal + price8;

 salesTax = salesTax + salesTax8;

 shipping = shipping + shipping8

 total = total + price8 + shipping+ salesTax;

 document.productsForm.subTotal.value = Math.round(subTotal \* 100)/100;

 document.productsForm.salesTax.value = Math.round(salesTax \* 100)/100;

 document.productsForm.shipping.value = Math.round(shipping \* 100)/100;

 document.productsForm.total.value = Math.round(total \*100)/100;

 }

 else

 {

 alert("No product selected");

 }

}

Start a new file in Notepad++

 Paste this new section of code into Notepad++.

Save your JavaScript file. Call it X2.js

**What does it mean?**

Information came from <a href="http://www.w3schools.com/html/html5\_draganddrop.asp">W3 Schools</A>

function allowDrop(ev)

{

ev.preventDefault();

}

function drag(ev)

{

ev.dataTransfer.setData("Text",ev.target.id);

}

function drop(ev)

{

ev.preventDefault();

var data=ev.dataTransfer.getData("Text");

ev.target.appendChild(document.getElementById(data));

We mentioned earlier that we made the images of our products draggable, by setting its draggable property to true.

The html looks looks like. <img src="images0.jpg" id="0" height=75 width=75 border= 3 draggable="true" ondragstart="drag(event)" onClick="openWin0()"/>

At first all the variables used need to be declared and initialized - set to zero.

Next we need to specify what should happen when the image is dragged.

The ondragstart attribute calls a function, drag(event), that specifies what data to be dragged.

The dataTransfer.setData() method sets the data type and the value of the dragged data.

In this case, the data type is "Text"and the value of the dragged data. element("drag1").

 The ondragover event specifies where the dragged data can be dropped,

By default, data/elements cannot be dropped in other elements.

To allow a drop, we must prevent the default handling of the element.

This is done by calling the event.preventDefault() method for the ondragover event.

event.preventDefault()

When the dragged data is dropped, a drop event occurs.

In our example above, the ondrop attribute calls a function, drop(event);

**Code Explained**

Call preventDefault() is to prevent the browser default handling of the data (default is open as link on drop)

Get the dragged data with the dataTransfet.getData("Text") method. This method will return any data that was set to the same type in the setData() method.

The dragged data is the id of the dragged element('drag1')

Append the dragged element into the drop element.

The data is arranged in an array. The first element in the array is 0. The next is 1, the next one is 2

Jewel[0], Jewel[1], Jewel[2], Jewel[3], Jewel[4], Jewel[5], Jewel[6], Jewel[7], Jewel[8]

The data number corresponds with the array number. If item 6, Jewel[6], for example, is dragged into the shopping cart , then The check box for this item is checked as well as the price check box.

In addition, the two text boxes that go with each item, display the name and price of the item.

 The next lines set the price, determine shipping, sales tax subtotal and total for each item

Below is the code that relates to product 6.

 price6=4295.00;

 shipping6=3.95;

 salesTax6=price6\*.07;

 subTotal = subTotal + price6;

 salesTax = salesTax + salesTax6;

 shipping = shipping + shipping6;

 total = total + price6 + shipping+ salesTax;

The next lines do the calculations and put the numbers in the total box on the html form - kid4 article 4K

 document.productsForm.subTotal.value = Math.round(subTotal \* 100)/100;

 document.productsForm.salesTax.value = Math.round(salesTax \* 100)/100;

 document.productsForm.shipping.value = Math.round(shipping \* 100)/100;

 document.productsForm.total.value = Math.round(total \*100)/100;

There is also a rounding off math function included.

document.productsForm.subTotal.value = Math.round(subTotal \* 100)/100;

The line above refers to the html document and the form on it called productsForm and the text box called subtotal. The value of that item is placed in that box.

There is a line for sales tax shipping and total

**Day 13:**

**JavaScript file X3.js: code for the note or wish list.**

var noteref, mystorage;

 var defaulthtml = '<div id="note" contenteditable="false">(Enter some text, close your browser and then open this page again.)</div>\n';

 function initialize() {

 if (supports\_html5\_storage()) {

 // save a reference to the note area

 noteref = document.getElementById("note");

 mystorage = window.localStorage || (window.globalStorage ? globalStorage[location.hostname] : null);

 if (mystorage) {

 // if there is a note already stored

 if (mystorage.notedata) {

 // re-load it

 noteref.innerHTML = mystorage.notedata;

 }

 // capture keystrokes and save to local data store

 noteref.onkeyup = function (e) {

 mystorage.notedata = this.innerHTML;

 }

 }

 } else {

 alert('local storage not available with your browser.');

 }

 }

 function supports\_html5\_storage() {

 try {

 return 'localStorage' in window && window['localStorage'] != null;

 } catch (e) {

 return false;

 }

 }

 function reset\_note(){

 //alert("Data to be cleared " + noteref.innerHTML );

 // clear box

 noteref.innerHTML=("");

 // erase storage

 mystorage.notedata=("");

 }

The next javaScript file you will create enables us to store information on the user's computer until explicitly removed by the application or user.

To make a copy of the file. Put the code onto the clipboard. Create a new file. Paste the information and save it in the same folder as your html document. Make sure you save the file as <u>X3.js</u>.

The code for file X3.js came from the textbook called <u>HTML5 Digital Classroom</u> by Osborn & AGI Creative Team.

**Day 14:**

**JavaScript file X4.js: Calculate Discount**

The last JavaScript File is used to calculate the 10% discount if the user puts in the correct promotional code.

Below is a listing of that code.

function calculateDiscount(productsForm)

{

 document.getElementById('subTotal');

 var discount = subTotal \* .10

 var discountedSubTotal = subTotal-discount;

 var discountedSalesTax = discountedSubTotal \*.07

 var discountedTotal = discountedSubTotal + discountedSalesTax + shipping;

 document.getElementById('discountId');

 if (discountId.value == "87987")

 {

 alert("Promotional code is valid. Click OK to apply discount");

 document.productsForm.subTotal.value = Math.round(discountedSubTotal \* 100)/100;

 document.productsForm.salesTax.value = Math.round(discountedSalesTax \* 100)/100;

 document.productsForm.total.value = Math.round(discountedTotal \* 100)/100;

}

 else

 {

 alert("Incorrect code number. Discount not given");

 document.productsForm.discountId.value="";

 }

}

The function is called by the following line in the HTML5 code. See code for day 10

<TD>Discount Code</td><td><input type="checkbox" name="discount"><input type="text" id="discountId" onchange = "calculateDiscount(productsForm);"></td>

The onChange event is called when someone types text into an input field. The javaSCript function calculateDiscount(productsForm) is executed. Remember productsForm is the name of the form.

Put the code for the calculate discount function on your clipboard. and create a new JavaScript file in Notepad++

Make sure that you call the file X4.js, since that is the file linked to the html page.

First the function is named calculateDiscount(productsForm)

A left-facing curly brace outlines the beginning of what the function will do.

The next line declare the discount to be the subtotal amount times .10

The next line declares that the variable discountedSubTotal is equal to the subtotal minus the discount.

A new sales tax must be computed based on the reduced price. This is the next line

A new discounted total is calculated by taking the discounted subtotal and adding discounted sales tax and shipping.

Now we need to get the discountId number from the html page

Next we check to see if is the promotional code from the coupon.

If the code is equal to 87987 a box pops up and tells the user the promotional code is valid. Click OK to apply the discount.

Total numbers will change reflecting the 10% discount.

If the number entered into the text box on the html page is not equal to 87987 then a box pops up telling the user that this is an incorrect code number.

**Day 15:**

**Getting javaScript function tallyorder**

 Now we need to create a javaScript file to help us process the order.

The information for the file appears below. Put it on your clipboard.

var total

var price0

var price1

var price2

var price3

var price4

var price5

var price6

var price7

var price8

var price9

var salesTax0

var salesTax1

var salesTax2

var salesTax3

var salesTax4

var salesTax5

var salesTax6

var salesTax7

var salesTax8

var salesTax9

var shipping0

var shipping1

var shipping2

var shipping3

var shipping4

var shipping5

var shipping6

var shipping7

var shipping8

var shipping9

var salesTax0

var salesTax1

var salesTax2

var salesTax3

var salesTax4

var salesTax5

var salesTax6

var salesTax7

var salesTax8

var salesTax9

var salesTax

var shipping

var subTotal

var total

var discount = total\*.10

function tallyorder(productsForm)

{

 var r = confirm("Press OK button to process order.\nor Press Cancel button to cancel order.");

 shipping = shipping0 + shipping1 + shipping2 + shipping3 + shipping4 + shipping5 + shipping6 + shipping7 + shipping8;

 subTotal=price0 + price1 + price2 + price3 + price4 + price5 + price6 + price7 + price8;

 salesTax=subTotal \*.07;

 total = subTotal + shipping + salesTax;

 if(r==true)

 {

 document.productsForm.submit();

 }

 else

 {

 alert("Order cancelled.")

 }

}

Open a new file in Notepad++

Paste the code into the editor.

Save it and call it X5.js

First all variable are declared - global

Next comes the name of the function: tallyorder(productsForm)

Left facing curly brace begins the code for the function

A variable r is assigned to the confirm statement box. OK and Cancel are choices assigned to a confirm box.

Shipping is charged for each item sent. The variable shipping equals shipping for all items in the shopping cart.

The subTotal variable is the sum of all items in the shopping cart

Sales tax is calculated on the subtotal. In this example it is 7%

The total variable adds the subtotal, shipping and sales tax

If OK is clicked the form is processed

If Cancel is pressed, the order is not sent.