Lab 8: Event Handling

This lab gives you the chance to code JavaScript edvent handlers to some HTML input widgets. The emphasis is on invoking JavaScript functions that display basic information about the HTML tags, not on coding any intricate JavaScript that does anything with this information.

As usual, you'll have a starter file, *eventhandler.html*, that has some HTML to get you started (this isn't an HTML class, you know).

Let's take a look at what you will see when you're done with the lab.

Program Outputs

Upon loading the page, you'll see:

Event handlers for different input widgets

Attach event handlers to these widgets per instructions

Widget type	Example
Text Input	
Text Area	
Single Select	Choice1 ▾
CheckBox	☐ Check 1 ☐ Check 2
Radio	⬤ Radio 1 ⬤ Radio 2
Button	This is a button

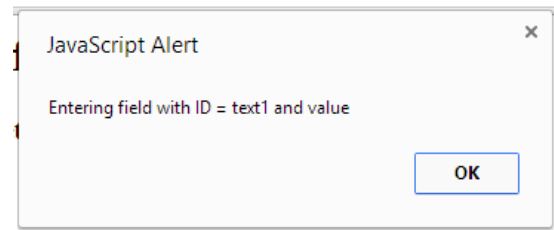This top table is the one you'll be working with; you'll *change the HTML* to invoke *JavaScript event handlers*.

These are HTML5 features in some widgets

This is for your edification; don't attach event handlers to these!

Widget type	Example
Input numbers within range	
Input numbers with a slider	
Date picker	mm/dd/yyyy
Color picker	▮
File picker	Choose File No file chosen

This bottom table is provided so you can see how to code some new HTML5 features; you need not do anything with this table. You are invited to try out the widgets.

When you *focus* on the **Text Input** field, you'll see: (you'll see this when you click in the field – that's how the field gets focus). You did not enter anything in the text field so the value is blank

JavaScript Alert

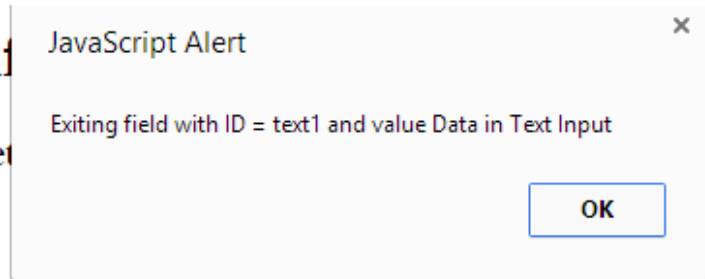Entering field with ID = text1 and value

OK

Click OK to dismiss the alert and type something in **Text Input**. Hit *tab* or move the mouse to the field below to the **Text Area** field. You'll see:

Event handlers for di

JavaScript Alert

Exiting field with ID = text1 and value Data in Text Input

OK

Attach event handlers to these widget

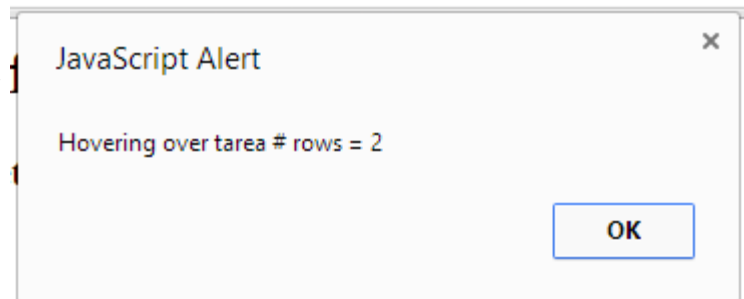| Widget type	Example
Text Input	Data in Text Input
Text Area	
Single Select	Choice1 ▾

Nowe, the contents of the text input field are displayed.
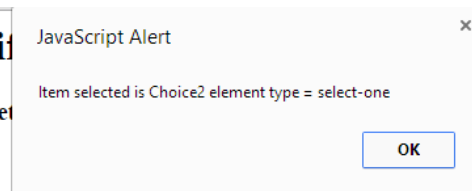
Click OK. The cursor should be in the **Text Area** field.

Move the mouse over *the text area field*. You should see:

tarea is the *id* value of the text are field.

JavaScript Alert

Hovering over tarea # rows = 2

OK

Click OK. Make a selection from the **Single Select** dropdown (Choice 2 will do). You should see:

Event handlers for di

JavaScript Alert

Item selected is Choice2 element type = select-one

OK

Attach event handlers to these widget

Widget type	Example
Text Input	Data in Text Input
Text Area	
Single Select	Choice2 ▾

Note the *selectyed item* and the *element type* is shown in the alert.

Click OK to dismiss the alert and select **Check 1** from the **Check Box**. You'll see:

Note the *element type* is *checkbox*.

Event handlers for di...

Attach event handlers to these widge...

Widget type	Example
Text Input	Data in Text Input
Text Area	
Single Select	Choice2 ▼
CheckBox	☑ Check 1 ☐ Check 2

JavaScript Alert ✕

Item selected is Check 1 element type = checkbox

OK

Do the same for **Radio** and you'll see the same alert dialog, just with the *item selected and element type changed.*

Dismiss the alert and click the **Button**. You'll see the button text change from This is a button to I am Changed!!!

You are finally done!!!

What to do

You'll need to:

> Change HTML to call the JavaScript functions when certain events occur,
> Code the JavaScript event handlers to display the alerts, change the button

Here's the event handlers you should code:

For the **Text Input** field:

> Code event handlers to execute when the field *gains focus* and *loses focus*. The handler that runs when the field gains focus displays *'Entering field', the ID value of the field and its value.*
> The handler that runs when the field loses focus displays *'Exiting field', the ID value of the field and its value.*

For the **Text Area** field:

> Code an event handler to execute when you *move the mouse over the field*. Have your handler display an alert showing *'Hovering over', the ID of the field and the number of rows coded in the HTML* (take a few guesses on how you could do this)

For the **Single Select**, **Check Box** and **Radio** fields:

Code an event handler to execute when the field *changes value.* Have your handler display an alert showing *'Item Selected', the value of the field and the element type (select-one, checkbox, radio)*

For the **Button**:

Code an event handler to execute when you *mouse down on the button.* Have your handler *change the button text (value) to 'I am Changed!!!'.*