

# Introductory/Revision Exercise

Using a text-editor, create a web-page that includes a form, e.g.:

```
<!DOCTYPE html>
<html>
  <head>
  </head>
  <body>
    <form name="theForm">
    </form>
  </body>
</html>
```

The form should have a `name`, but don't bother specifying an `action` or `method` since the form won't be submitted over the internet.

- Within the `<form>` tags, create a *text-area*, e.g.:

```
<textarea name="txtBox">Some text...</textarea>
```

- *Outside* of the `<form>` tags, create a button, e.g.:

```
<button onclick="processForm()">Process Form</button>
```

View the page in a browser and check that the text-area and button display correctly.

In the `<head>` section of the HTML document, add a pair of `<script>` tags, e.g.:

```
<script type="text/javascript">
</script>
```

Within the `<script>` tags, write a function that is called when the button is clicked.

The function should have the same name as that specified in the `onclick` attribute of the button, e.g.:

```
function processForm() {
}
```

Within the function, write a line of code that:

- recovers the text within the text-area
- displays it in a dialog-box.

You can access the properties of form-elements in the following way:

```
document.<form_name>.<element_name>.property
```

e.g.:

```
document.theForm.txtBox.value
```

`value` is a property which represents the text in a text-area. It can be read or written.

Other properties of a text-area, such as its size, color, visibility, etc., can be accessed in the same way as the `value`.)

To display the recovered text, use an `alert` dialog-box, e.g.:

```
alert(data);
```

Where `data` is a quoted string or variable to be displayed.

In this case, it should be the reference to the text in the text-area, obtained as described above:

```
alert(document.theForm.textBox.value);
```

View your page in a browser. Type some text into the text-area, then click the button. This should cause a dialog-box to appear, containing the text you typed into the text-area.

Add a *selection-box* to your web-page. Selection-boxes are created as follows:

```
<select name="selBox">
  <option>Option 1</option>
  <option>Option 2</option>
  <option>...</option>
  <option>Option n</option>
</select>
```

View the page in a browser and check that the selection-box displays correctly.

Write a function which is called whenever the selection in the selection-box is changed, and which displays (in a dialog-box) the new selection.

- You can call the function by adding an `onchange` event-handler to the opening `<select>` tag.
  - `onchange` works in much the same way as the `onclick` event-handler used with the `<button>`.
  - Make sure the function-name specified in the event-handler matches the function you wish to call in the script.
- Selection-box properties can be accessed in the much same way as those of text-areas
  - The relevant property of a selection-box is `selectedIndex`, an integer which indicates which of the options has been selected (counting from zero).
  - Obtain this property and display it in a dialog-box whenever the selection is changed.
  - Check that the displayed value is what you expect (e.g., `0` if the first option is selected, `1` if the second option has been selected, and so on).

The `selectedIndex` indicates *which* of the options has been selected, but not what it is.

Modify the function so that it reports the *text* of the selected option.

The options within a selection-box are organised as an array, and the text within each option is held in a property called `text`.

Therefore you can access the text of a particular option (either to read it or write it) in the following way:

```
document.selBox.options[i].text
```

Where `i` is the `selectedIndex` of the required option.

If time allows when you have all of the above working:

- modify your selection box so that it lists the 12 months of the year
- add an `onchange` event-handler to the box which calls a function whenever the month is changed.
- create a second selection box that contains the numbers 0-31
- write a function that sets the appropriate number of days in the second box whenever the month is changed in the first box.