Reinforcement Exercises

Exercise 8-1

In this exercise you will create a Web page that uses document.write() statements in a script section to print dietary recommendations for a healthy heart. The Web page will conform to the strict DTD.

1. Create a new HTML 5 document in your text editor and use "Dietary Recommendations" as the content of the <title> element.

2. Add the following text and elements to the document body:

```
<h1>Dietary Recommendations</h1>
<p>The American Heart Association recommends the
following dietary guidelines for a healthy heart:</p>
```

3. Add the following script section to the end of the document body. The script section contains a CDATA section to ensure that the Web page is valid, and includes block comments that will contain your name, the current date, and "Exercise 8-1". Be sure to add your name and the current date where indicated.

```
<script type="text/javascript">
/* <![CDATA[ */
/*
your name
current date
Exercise 8-1
*/
/* ]]> */
</script>
```

4. Add the following `document.write()` statements to the script section, immediately after the statement that contains the closing block comment characters (*/). These statements use an unordered list element to print dietary recommendations for a healthy heart.

```
document.write("<ul>");
document.write("<li>Eat less fat</li>")
document.write("<li>Avoid sugary and processed ⏎
    foods</li>")
document.write("<li>Eat plenty of ⏎
    fiber-rich foods</li>")
document.write("<li>Cut down on salt</li>")
document.write("<li>Eat at least 400g of fruit ⏎
    and vegetables each day</li>")
document.write("<ul>");
```

5. Save the document as **HealthyHeart.html** in the Exercises folder for Chapter 8.

6. Use the W3C Markup Validation Service to validate the **HealthyHeart.html** document, and fix any errors in the document. Once the document is valid, close it in your text editor, open it in your Web browser, and examine how the elements are rendered.

7. Close your Web browser window.

Exercise 8-2

In this exercise, you will create a Web page that uses variables to display information about the five largest islands in the world.

1. Create a new HTML 5 document in your text editor and use "Largest Islands" as the content of the `<title>` element.

2. Add the following `<h1>` element to the document body:
```
<h1>Largest Islands</h1>
```

3. Add the following script section to the end of the document body:
```
<script type="text/javascript">
/* <![CDATA[ */
/* ]]> */
</script>
```

4. In the script section, type the following statements that declare variables containing the names and sizes of the world's five largest islands:

```
var island1Name = "Greenland";
var island2Name = "New Guinea";
var island3Name = "Borneo";
var island4Name = "Madagascar";
var island5Name = "Baffin";
var island1Size = 2175600;
var island2Size = 790000;
var island3Size = 737000;
var island4Size = 587000;
var island5Size = 507000;
```

5. Next, add the following statements to the end of the script section. These statements print the values stored in each of the variables you declared and initialized in the last step:

```
document.write("<p>The largest island in the world is "
    + island1Name + " with " + island1Size
    + " miles.</p>");
document.write(
    "<p>The second largest island in the world is "
    + island2Name + " with " + island2Size
    + " miles.</p>");
document.write(
    "<p>The third largest island in the world is "
    + island3Name + " with " + island3Size
    + " miles.</p>");
document.write(
    "<p>The fourth largest island in the world is "
    + island4Name + " with " + island4Size
    + " miles.</p>");
document.write(
    "<p>The fifth largest island in the world is "
    + island5Name + " with " + island5Size
    + " miles.</p>");
```

6. Save the document as **LargestIslands.html** in the Exercises folder for Chapter 8, and then open the document in your Web browser to examine how the elements are rendered.

7. Close your Web browser window.

Exercise 8-3

In this exercise, you will create a Web page that displays an alert dialog box when the user clicks a command button.

1. Create a new HTML 5 document in your text editor and use "Alert Box" as the content of the `<title>` element.

2. Add the following heading element and form to the document body:

```
<h1>Alert Box</h1>
<form action="" method="get">
</form>
```

3. Add the following command button to the form. Notice that the button includes an `onclick` event handler that displays an alert dialog box with the text "Welcome to my Web site."

```
<p><input type="button" value="Click Me"
onclick="alert('Welcome to my Web site')" /></p>
```

4. Save the document as **AlertBox.html** in your Exercises folder for Chapter 8.

5. Use the W3C Markup Validation Service to validate the **AlertBox.html** document, and fix any errors in the document. Once the document is valid, close it in your text editor, open it in your Web browser, and click the **Click Me** button. You should see the alert dialog box that displays the text "Welcome to my Web site."

6. Click the **OK** button to close the alert dialog box, and then close your Web browser window.

Exercise 8-5

In this exercise, you will move the variable declaration statements from the script section in the document head of the NewsItems.html file to a JavaScript source file.

1. Return to the **NewsItems.html** file in your text editor, and cut the variable declaration statements from the script section in the document head; the statements are placed on your clipboard.

2. Create a new document in your text editor, and then paste the variable declaration statements into the file.

3. Save the document as **newsitems.js** in your Exercises folder for Chapter 8, and then close the document.

4. Return to the **NewsItems.html** document in your text editor.

5. Add a src attribute to the opening <script> tag in the document head so that it calls the external JavaScript source file:

```
<script type="text/javascript" src="newsitems.js">
</script>
```

6. Save the **NewsItems.html** document, open it in your Web browser, and test the functionality. The script should work the same as it did before you created the JavaScript source file.

7. Close your Web browser window and the NewsItems.html document in your text editor.