Working with the Window Object

The Window object has been added to the HTML specification as part of HTML5. Prior to this, it has been an unofficial standard; browsers have implemented roughly the same set of features in a broadly consistent way. With HTML5, the Window object in the specification incorporates the de facto functionality and a few enhancements. Implementation of this object is mixed; different browsers have different levels of compliance. This chapter focuses on the features that have a reasonable level of support.

Note Some of the advanced features described in this chapter rely on DOM events, which are the topic of Chapter 30. If you are unfamiliar with events, you may wish to read that chapter and then return to the examples in this one.

The Window object has been a bit of a dumping ground for features that don’t have a natural home elsewhere. You will see what I mean as we tour the features of this object. Table 27-1 provides the summary for this chapter.

Table 27-1. Chapter Summary

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<th>Solution</th>
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<td>Use the alert, confirm, prompt, and showModalDialog methods on a Window object</td>
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</table>
Perform simple operations on the browser history

Use the back, forward, and go methods on the History object returned by the Window.history property

Manipulate the browser history

Use the pushState and replaceState methods on the History object returned by the Window.history property

Send a message to a script running in a different document

Use the cross-document messaging feature

Set one-off or repeating timers

Use the setInterval, setTimeout, clearInterval, and clearTimeout methods on the Window object

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Obtaining a Window Object

You can get a Window object in two ways. The official HTML5 way is to use the defaultView property on the Document object. Another approach is to use the window global variable, which all of the browsers support. Listing 27-1 demonstrates both techniques.

Listing 27-1. Obtaining a Window Object

```html
<!DOCTYPE HTML>
<html>
  <head>
    <title>Example</title>
  </head>
  <body id="bod">
    <table>
      <tr><th>outerWidth:</th><td id="owidth"></td></tr>
      <tr><th>outerHeight:</th><td id="oheight"></td></tr>
    </table>
    <script type="text/javascript">
      document.getElementById("owidth").innerHTML = window.outerWidth;
      document.getElementById("oheight").innerHTML = document.defaultView.outerHeight;
    </script>
  </body>
</html>
```

In the script I use the Window object to read the value of a pair of properties, outerWidth and outerHeight, which are explained in the following section.