Developing Cross-Browser JavaScript

Browsers have come a long way since 1999. Thanks to standards bodies such as the W3C and ECMA and a revival of competition in the browser market, modern browsers have largely eliminated the proprietary extensions and behaviors that plagued browsers in the late 1990s. Gone are the days when developers had to spend countless hours tweaking HTML layout and JavaScript code to get an application to function properly across different browsers. Today, developers who write code that adheres to standards can be assured that the code will function properly in any standards-compliant browser.

Implementing Ajax techniques in your application will likely dictate that you use JavaScript to dynamically update the page content, whether it be by creating new content, deleting existing content, or changing existing content. Unfortunately, some quirks do still exist in certain browsers, causing erratic behavior and giving developers headaches.

The most frequent offender of these quirks is Internet Explorer. Internet Explorer's HTML-rendering engine and JavaScript environment have received few updates in the past several years, and thus Internet Explorer is the least standards-compliant browser today. However, since Internet Explorer continues to maintain most of the browser market, you must write JavaScript code that works effectively in Internet Explorer as well as other browsers.

The scenarios in this appendix are situations in which you’re likely to see browser incompatibilities. This is not an exhaustive list but rather the scenarios you’re most likely to encounter when implementing Ajax techniques. These workarounds should behave as expected in all modern browsers.

Appending Rows to a Table

At some point in your experiences with Ajax, you’re likely to want to append a row to an existing table using JavaScript or to create a new table with rows from scratch. The `document.createElement` and `document.appendChild` methods make this easy to do. You just create table cells using `document.createElement`, and you add the table cells to table rows using `document.appendChild`. The next logical step is to append the rows to the table using `document.appendChild`.

This works as expected in modern browsers such as Firefox, Safari, and Opera. Using Internet Explorer, however, the rows never show up in the table. Worse yet, Internet Explorer