- If you're using Internet Explorer, it might be running in what Microsoft call *quirks mode*, which is backward compatible with old IE releases but is also broken. IE switches into *standards mode*, which works better with the AJAX stuff, if the first line of the downloaded page is an appropriate DOCTYPE header. Our layouts use

```
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"
         "http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">
```

The Customer Is Never Satisfied

We're feeling pretty pleased with ourselves. We changed a handful of lines of code, and our boring old Web 1.0 application now sports Web 2.0 AJAX speed stripes. We breathlessly call the client over. Without saying anything, we proudly press `Add to Cart` and look at her, eager for the praise we know will come. Instead, she looks surprised. "You called me over to show me a bug?" she asks. "You click that button, and nothing happens."

We patiently explain that, in fact, quite a lot happened. Just look at the cart in the sidebar. See? When we add something, the quantity changes from 4 to 5.

"Oh," she says, "I didn't notice that." And, if she didn't notice the page update, it's likely our customers won't either. Time for some user-interface hacking.

9.3   Iteration D3: Highlighting Changes

We said earlier that the javascript_include_tag helper downloads a number of JavaScript libraries to the browser. One of those libraries, effects.js, lets you decorate your web pages with a number of visually interesting effects.[4] One of these effects is the (now) infamous Yellow Fade Technique. This highlights an element in a browser: by default it flashes the background yellow and then gradually fades it back to white. Figure 9.2, on the next page, shows the Yellow Fade Technique being applied to our cart: the image at the back shows the original cart. The user clicks the `Add to Cart` button, and the count updates to 2 as the line flares brighter. It then fades back to the background color over a short period of time.

Let's add this kind of highlight to our cart. Whenever an item in the cart is updated (either when it is added or when we change the quantity), let's flash its background. That will make it clearer to our users that something has changed, even though the whole page hasn't been refreshed.

The first problem we have is identifying the most recently updated item in the cart. Right now, each item is simply a *<tr>* element. We need to find a way to flag the most recently changed one. The work starts in the Cart model. Let's

---

4.   effects.js is part of the Script.aculo.us library. Have a look at the visual effects page at http://wiki.script.aculo.us/scriptaculous/show/VisualEffects to see the cool things you can do with it.