Lack of visual cues: Since the entire page doesn’t repaint, users may not perceive that anything has changed. Ultimately, this is why FAT was created, but you do have other options. For instance, Gmail uses a “Loading” icon to indicate that it is doing some work (see Figure 8-5). Depending on your application, you may have to add some sort of indication so your users know what is happening.

![Gmail's “Loading” icon](image)

**Figure 8-5.** Gmail’s “Loading” icon

The broken back button: Some Web applications deliberately disable the browser’s back button, but few Web sites do. Of course, with Ajax, clicking the back button isn’t going to do much of anything. If your users are expecting the back button to work, and you’re using Ajax to manipulate parts of the page, you may have some problems to solve.

Code bloat: Never forget that the JavaScript that powers Ajax applications runs locally on your client. While many developers have powerful machines with reams of random access memory (RAM), some users still have older machines that just don’t offer this horsepower. If you put too much JavaScript into your application, you may find sluggish response times on the client side. Even if the JavaScript runs fine, more JavaScript means larger and larger pages, which means longer download times. Until we all have broadband and dual-processor computers, keep JavaScript to a minimum.

Breaking established UI conventions: Ajax lets developers create far richer Web applications than they’ve created in the past. However, this doesn’t obviate the need to follow normal user interface guidelines. Just because you can do something doesn’t mean you should.

How will you know if you’ve run afoul of any of these gotchas? We can’t stress this enough: test your design with representative users. Before you role out some snappy new Ajax feature, do some paper mock-ups, and run them by a few users before you spend the time and effort developing it. An hour or two of testing can save you larger issues later.

### Learning Where to Go for More

This book is just a starting point—we can’t cover everything having to do with Ajax (if we wanted it to be shorter than, say, a printed copy of the federal budget, that is). In addition, this space is rapidly evolving. Luckily, some excellent resources can help keep you up-to-date on Ajax.

The first place we start nearly every day is Ajaxian (www.ajaxian.com). Billed as “Ben and Dion’s Ajax Mission,” Ajaxian spots pretty much everything that’s new in the Ajax world. (It’s not unusual for Ben or Dion to post several times a day.) Industry pundits Ben Galbraith and Dion Almaer, both frequent speakers at conferences such as No Fluff Just Stuff, maintain Ajaxian.com. Lest you doubt their credentials, both were attendees of the inaugural O’Reilly/Adaptive Path Ajax Summit, and having seen both present in person, we vouch for their knowledge and true passion for the field. Without a doubt, Ajaxian.com is the first stop for news and events in the Ajax space.