

Let's analyze that template. The `page` variable is an instance of something called a JavaScript generator—a Rails class that knows how to create JavaScript on the server and have it executed by the browser. Here, we tell it to replace the content of the element on the current page with the id `cart` with...something. The remaining parameters to `replace_html` look familiar. They should—they're the same ones we used to render the partial in the store layout. This simple `.rjs` template renders the HTML that represents the cart. It then tells the browser to replace the content of `<div>` whose `id="cart"` with that HTML.

Does it work? It's hard to show in a book, but it sure does. Make sure you reload the index page in order to get the `form_remote_tag` and the JavaScript libraries loaded into your browser. Then, click one of the [Add to Cart](#) buttons. You should see the cart in the sidebar update. And you *shouldn't* see your browser show any indication of reloading the page. You've just created an AJAX application.

Troubleshooting

Although Rails makes AJAX incredibly simple, it can't make it foolproof. And, because you're dealing with the loose integration of a number of technologies, it can be hard to work out why your AJAX doesn't work. That's one of the reasons you should always add AJAX functionality one step at a time.

Here are a few hints if your Depot application didn't show any AJAX magic.

- Did you delete the old `add_to_cart.rhtml` file?
- Did you remember to include the JavaScript libraries in the store layout (using `javascript_include_tag`)?
- Does your browser have any special incantation to force it to reload everything on a page? Sometimes browsers hold local cached versions of page assets, and this can mess up testing. Now would be a good time to do a full reload.
- Did you have any errors reported? Look in `development.log` in the logs directory.
- Still looking at the log file, do you see incoming requests to the action `add_to_cart`? If not, it means your browser isn't making AJAX requests. If the JavaScript libraries have been loaded (using View → Source in your browser will show you the HTML), perhaps your browser has JavaScript execution disabled?
- Some readers have reported that they have to stop and start their application to get the AJAX-based cart to work.