

AJAX and JSON – Lessons Learned

Jim Riecken, Senior Software Engineer, Blackboard® Inc.



About Me

- Jim Riecken
- Senior Software Engineer
- At Blackboard for 4 years.
- Work out of the Vancouver office.
- Working a lot with User Interface components of Blackboard Learn™.
 - Lots of JavaScript, CSS, JSP, Tag Libraries



About this presentation

- Goals
 - Quickly introduce AJAX and JSON.
 - Describe the approaches we've taken for implementing asynchronous behavior in Blackboard Learn.
 - Share some experiences and lessons we've learned in the following areas:
 - Performance
 - Security
 - Accessibility
 - Show “real-life” examples wherever possible from Blackboard Learn.

Quick Introduction to AJAX and JSON



What is AJAX?

- **Asynchronous JavaScript And XML**
 - Buzzword
 - Don't have to use XML.
 - Really just an asynchronous HTTP request.
 - Browser doesn't refresh the page.
 - Server-side, it's just a normal HTTP request.
 - Done via the XMLHttpRequest object built into modern browsers.
 - Various libraries are available that hide minor browser differences in how AJAX requests are constructed.
 - E.g. Prototype's Ajax.Request object, Direct Web Remoting (DWR)

```
new Ajax.Request( "/some/url", {
  method: 'get',
  parameters: { param1: 'value1', param2: 'value2' },
  onSuccess: function( req )
  {
    alert( req.responseText );
  }
});
```

[Click here to download full PDF material](#)