AJAX

Talking Behind the Browser’s Back
AJAX

• Asynchronous

• Javascript

• And

• XML
AJAX

- Fortunately, almost no one uses XML anymore
- JSON is far more popular now as the format for asynchronous data
- **JavaScript** Object **Notation**
XMLHttpRequest

- Concept First proposed by Microsoft

- First appeared in IE 5 as an ActiveX component

- Mozilla Adopted the idea and created a Javascript implementation of it as nsIXMLHttpRequest. Appeared in Gecko engine in 2002

- Became the *de facto* standard when WebKit implemented it in 2004

- W3C formally standardized it in 2006
XMLHttpRequest

• XMLHttpRequest forms the basis for almost all asynchronous browser communications

• Libraries such as jQuery and Prototype provide many convenience wrappers around the core API
AJAX

Initial Page Request

Browser

New Page Displayed

Web Server

No New Page Displayed!

Request made via Javascript using XMLHttpRequest()

PHP

MySQL

JSON Returned

HTML Returned

HTML Returned

HTML
AJAX Basic Example

• Basic Parts
• HTML Page
• Javascript Glue
• Remote Asset to Retrieve
AJAX Basic Example

http://www.cs.arizona.edu/classes/cs337/fall14/examples/ajax/
header()