Web Application Architectures

Module 6: Presentation/User Interface Lecture 8: Ajax



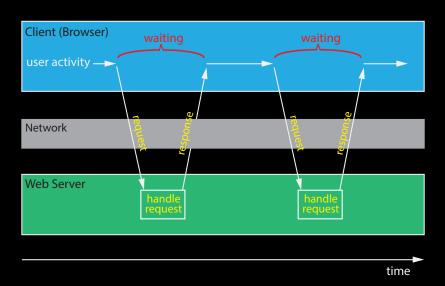
Ajax



- Ajax was originally an acronym that stood for Asynchronous JavaScript and XML (AJAX).
- Ajax deals with how various technologies come together in order to provide a more interactive web browsing experience – it's not a single technology, but a group of them working together.
- XMLHttpRequest (XHR) is an API available to the browser via JavaScript. It's used to send asynchronous HTTP requests to a web server and then load the server response data back into the script.
- In spite of the name, any text data can be retrieved from the server, not just XML. Nowadays, it's common to retrieve JavaScript Object Notation (JSON), HTML, JavaScript or plain text data.
- The data in the script can then be used to alter the current document shown in the browser (through the DOM), without loading a new web page.

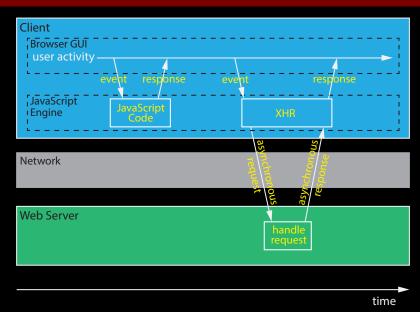
Before Ajax – Web 1.0





Ajax – Web 2.0 & 3.0





Ajax, jQuery & Rails



- The jQuery library provides a full suite of Ajax capabilities (see: http://api.jquery.com/category/ajax/).

 The \$.ajax() method is used to initiate an asynchronous HTTP (Ajax) request.
- An unobtrusive javascript adapter for jQuery, called jquery_ujs, is automatically provided in Rails.
- Using this adapter, forms and links that have the attribute:
 data-remote="true"
 will be submitted using jQuery's ajax method, i.e., using \$.ajax().
- In Rails, you set this attribute using remote :true Ex.

```
<%= form_for([@post, Comment.new], remote: true) do |f| %>
```