

Introduction to Web Design and Application Development

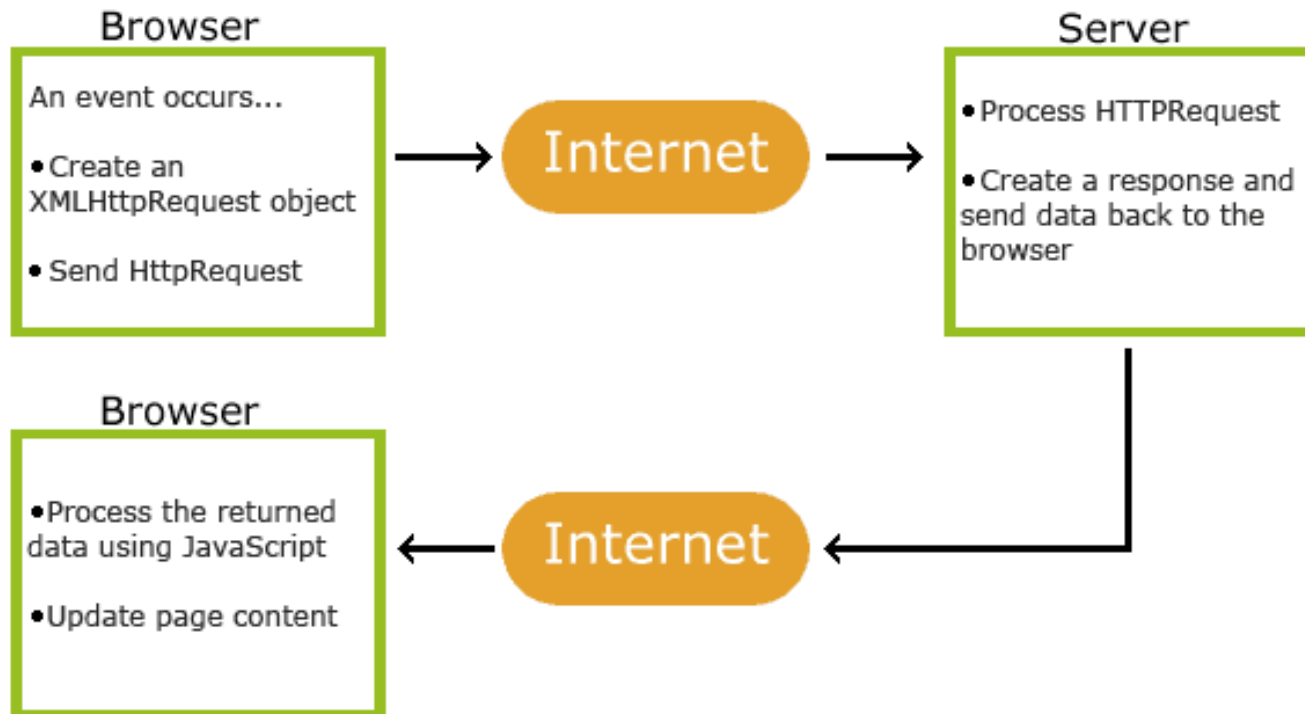
Lecture Overview

- Introduction to *AJAX*

Introduction to AJAX

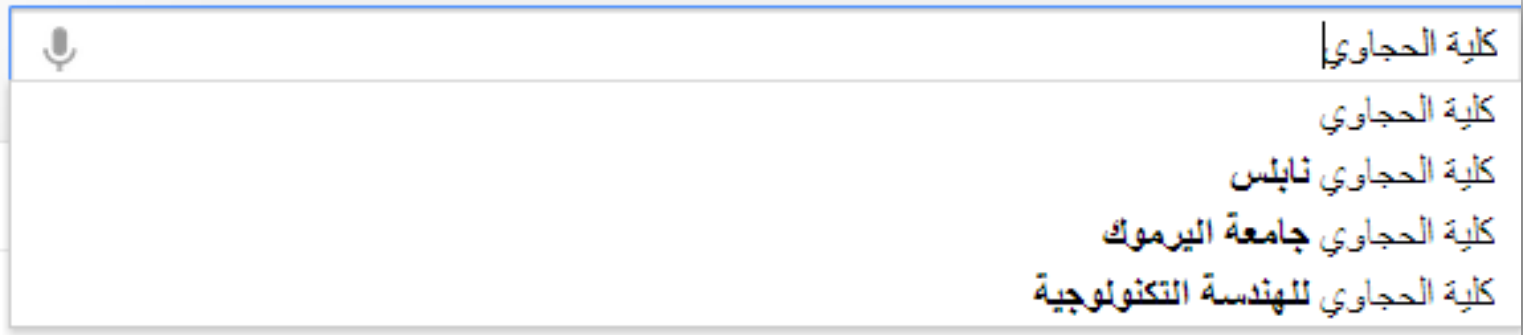
- *AJAX* = Asynchronous JavaScript and XML
- *AJAX* is not a new programming language, but a new way to use existing standards
- *AJAX* is the art of exchanging data with a server, and updating parts of a web page - without reloading the whole page

How AJAX Works



Examples of AJAX

- Google Suggest



A screenshot of a search engine's autocomplete feature. The search bar contains the text 'كلية الحجاوي' (Faculty of Hajjawi). Below the search bar, a list of suggestions is displayed in Arabic:

- كلية الحجاوي
- كلية الحجاوي نابلس
- كلية الحجاوي جامعة اليرموك
- كلية الحجاوي للهندسة التكنولوجية

- Login Forms / Form validation



A screenshot of a login form for the Digg website. The form is titled 'You've got to login. You Digg?' and includes the following elements:

- A heading: 'Login using any of these options'
- Two buttons for social login: 'Digg' and 'Facebook'
- Input fields for 'Digg Username' and 'Digg Password'
- A link for 'Lost username or password?'

Examples of AJAX

- Voting and Rating

MY REDDITS ▾ REDDIT.COM - PICS - POLITICS - WTF - FUNNY - PROGRAMMING - WORLDNEWS - SCIENCE - ATHEISM - TECHN

 **reddit** REDDIT.COM **comments** related

↑ **Me on The Daily Show :)** (youtube.com)
461 submitted 9 hours ago by PeterSchiff
↓ 360 comments · share · save · hide · report · watch

sort by: **hot** ▾ 200 ▾

enter a comment here

comment help

↑ **eonbt** 94 points 6 hours ago [-]

Examples of AJAX

- Updating with User Content



The image shows a screenshot of a Twitter profile for the user @holeycoww. The profile picture is a cartoon cow. The bio reads: "I make things that sparkle & gleam with my pc machine". The profile shows 248 following and 226 followers, with 1,625 updates. The tweet history shows three tweets, all replies to @rogieking, demonstrating user content updates:

- Tweet 1: "@rogieking cant dm people that are not following moi Rogie ;)" (about 7 hours ago from TwitterFox in reply to rogieking)
- Tweet 2: "@rogieking classic british car mate, Triumph Herald or Stag -" (about 2 hours ago from TwitterFox in reply to rogieking)
- Tweet 3: "@flawlesscowboy Ahh been there before bro, know exactly what your talking about!" (about 2 hours ago from TwitterFox in reply to flawlesscowboy)

On the left side of the screenshot, there is a vertical banner for "Gavin EATE signs" featuring a cartoon cow and a large exclamation mark.

jQuery.ajax(url [, settings]) Method

- The `.ajax()` method is used to perform an AJAX (asynchronous HTTP) request
- **url** A string containing the URL to which the request is sent
- **Settings** A set of key/value pairs that configure the Ajax request. All settings are optional

```
$("#button").click(function() {  
    $.ajax({url:"demo_test.txt",success:function(result) {  
        $("#div1").html(result);  
    }});  
});
```


ajaxStart and ajaxComplete

```
$("#txt").ajaxStart(function() {  
    $("#wait").css("display", "block");  
});  
$("#txt").ajaxComplete(function() {  
    $("#wait").css("display", "none");  
});
```

getScript (*filename.js*)

```
$("#button").click(function () {  
    $.getScript("demo_ajax_script.js");  
});
```

Basic Usage of AJAX

```
$(document).ready(function() {  
$.ajaxSetup ({cache: false});  
$("button").click(function() {  
    $('#div1').load('EnglishTextToLoad.txt');  
});  
});
```

Basic AJAX Methods

- **load()**: Load a piece of html into a container DOM
- **\$.getJSON()**: Load a JSON with GET method
- **\$.getScript()**: Load a JavaScript
- **\$.get()**: Use this if you want to make a GET call and play extensively with the response
- **\$.post()**: Use this if you want to make a POST call and don't want to load the response to some container DOM
- **\$.ajax()**: Use this if you need to specify ajax options (e.g. cache: true) on the fly (low level)

Basic AJAX Methods

jQuery function	API	GET	POST
load()	load(url, data, callback)	YES	YES
\$.getJSON()	\$.getJSON(url, data, callback)	YES	NO
\$.getScript()	\$.getScript(url, callback)	NO	NO
\$.get()	\$.get(url, data, callback, type)	YES	NO
\$.post()	\$.post(url, data, callback, type)	NO	YES
\$.ajax()	\$.ajax(options)	YES	YES

Resources

- <http://net.tutsplus.com/tutorials/javascript-ajax/5-ways-to-make-ajax-calls-with-jquery/>
- W3schools.com

Questions

