

Web 2.0 & Ajax

高偉格

自我介紹

- 高偉格 (othree)
- <http://blog.othree.net>
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- 興趣：大部份能用瀏覽器開的東西
- OpenVanilla Bookmarklet版

Outline

- Web 2.0 **beta**
- Ajax

數位時代 15分鐘搞懂Web 2.0

- 15分鐘 → Web 2.0
- 20分鐘 → Web 2.0 & Ajax

什麼是 Web 2.0 ？

要瞭解 Web 2.0

我們需要先瞭解

Web 8.0

Web 8.0

Resurgence of The Web

- A new and improved Web emerges and it looks almost exactly like the one that was predicted at the 1st Annual Web 8.0 Conference, which was held in 2007

Web 2.0 是什麼？

- 新技術？
- 行銷名詞？
- Ajax？
- Blog？
- RSS？
- Wiki？



SELECT * FROM JOBS

WHERE JOB_TYPE = "

AND JOB_CITY = "

AND JOB_SATISFACTION = "HIGH";

Find great jobs.

RUN QUERY

Look to the Te

advertisement

What Is Web 2.0

Design Patterns and Business Models for the Next Generation of Software

by [Tim O'Reilly](#)
09/30/2005

Print

Discuss

Subscribe to tim.oreilly.com

The bursting of the dot-com bubble in the fall of 2001 marked a turning point for the web. Many people concluded that the web was overhyped, when in fact [bubbles and consequent shakeouts appear to be a common feature of all technological revolutions](#). Shakeouts typically mark the point at which an ascendant technology is ready to take its place at center stage. The pretenders are given the bum's rush, the real success stories show their strength, and there begins to be an understanding of what separates one from the other.

The concept of "Web 2.0" began with a conference brainstorming session between O'Reilly and MediaLive International. Dale Dougherty, web pioneer and O'Reilly VP, noted that far from having "crashed", the web was more important than ever, with exciting new applications and sites popping up with surprising regularity. What's more, the companies that had survived the collapse seemed to have some things in common. Could it be that the dot-com collapse marked some kind of turning point for the web, such that a call to action such as "Web 2.0" might make sense? We agreed that it did, and so the [Web 2.0 Conference](#) was born.

In the year and a half since, the term "Web 2.0" has clearly taken hold, with more than 9.5 million citations in Google. But there's still [a huge amount of disagreement about just what Web 2.0 means](#), with some people decrying it as a meaningless marketing buzzword, and others accepting it as the new conventional wisdom.

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- [Japanese](#)
- [Korean](#)
- [Spanish](#)

Web 2.0 的20件事

- 一件事講一分鐘剛剛好

一言難盡

Web 2.0 是

- Web使用方式的改變
- Web商業模式的改變

Web使用方式的改變

- Reader to writer
 - blog
- Web OS
 - Google Docs
- Store data on Web
 - Gmail

Web商業模式的改變

- 長尾理論
 - Google
- C2C
 - ebay
- Open API
- 使用者提供內容

使用者提供內容

- del.icio.us
- flickr
- 使用者↑ → 內容↑

所以 Web 2.0 是

所以 Web 2.0 是

- 網路行為模式的改變
- 與技術無關

所以 Web 2.0 是

- 網路行為模式的改變
- 與技術無關
- 商業口號

Tim Berners-Lee on Web 2.0

nobody even knows what it means

見人說人話
見鬼說鬼話

Ajax

Asynchronous Javascript + XML

Ajax: A New Approach to Web Applications



by **Jesse James Garrett**

February 18, 2005

If anything about current interaction design can be called "glamorous," it's creating Web applications. After all, when was the last time you heard someone rave about the interaction design of a product that wasn't on the Web? (Okay, besides the iPod.) All the cool, innovative new projects are online.

Despite this, Web interaction designers can't help but feel a little envious of our colleagues who create desktop software. Desktop applications have a richness and responsiveness that has seemed out of reach on the Web. The same simplicity that enabled the Web's rapid proliferation also creates a gap between the experiences we can provide and the experiences users can get from a desktop application.

That gap is closing. Take a look at [Google Suggest](#). Watch the way the suggested terms update as you type, almost instantly. Now look at [Google Maps](#). Zoom in. Use your cursor to grab the map and scroll around a bit. Again, everything happens almost instantly, with no waiting for pages to reload.

Jesse James Garrett is President and a founder of Adaptive Path. He is the author of the widely-referenced book [The Elements of User Experience](#). Jesse's other essays include [The Nine Pillars](#)

Recent Essays

[Case Study: Soundflavor](#)
October 2, 2006

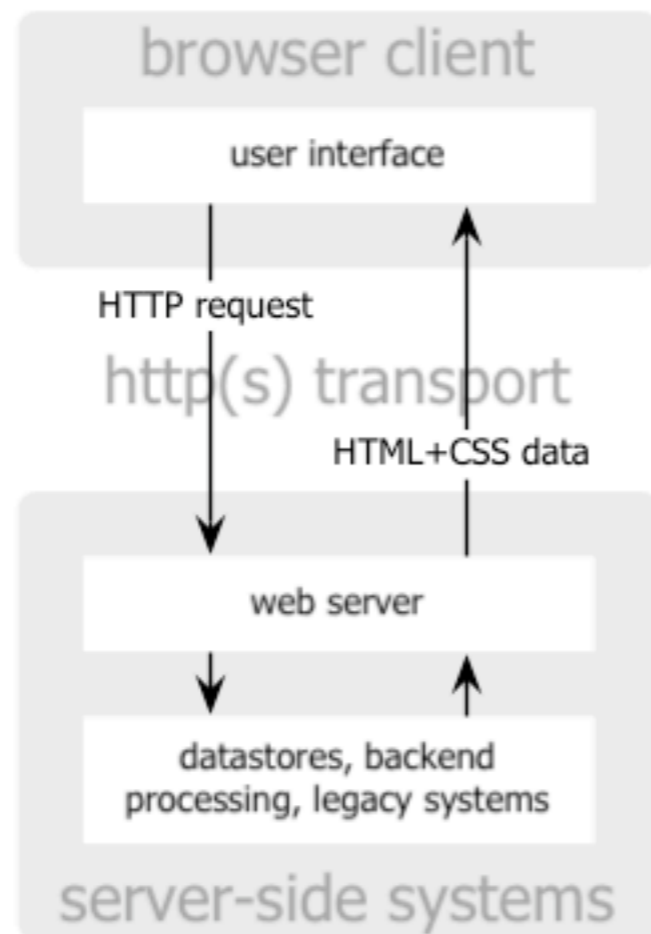
[So You Want to Be an Interaction Designer 2006](#)
August 29, 2006

[Business Case Modeling for Design](#)
August 28, 2006

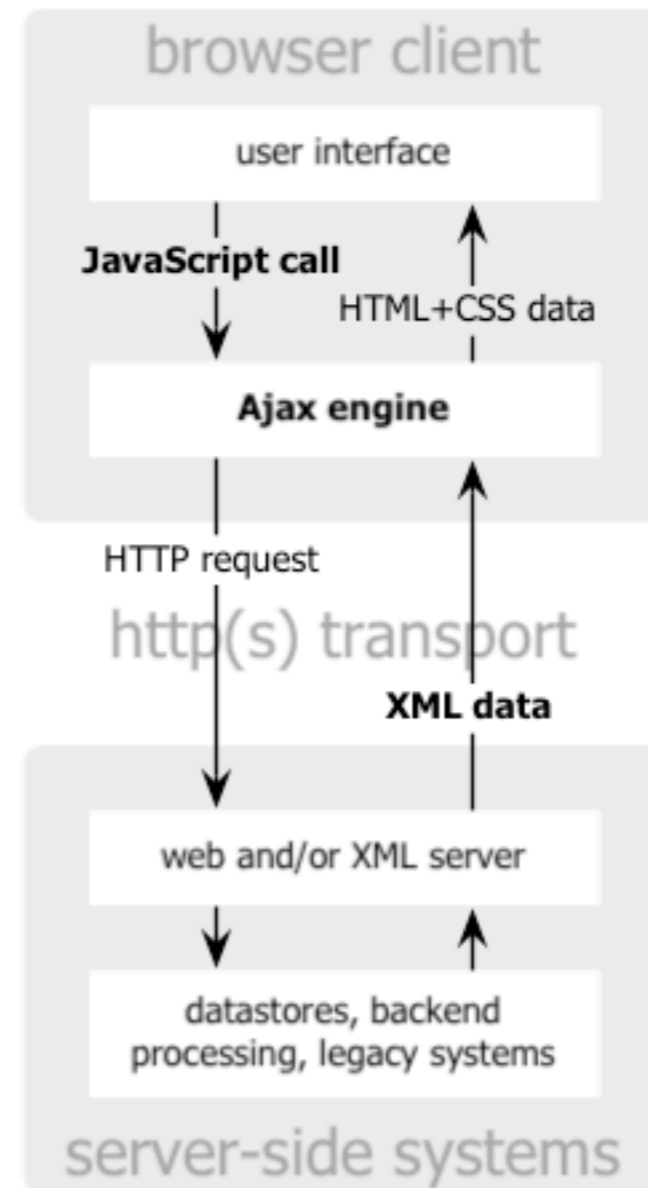
[A Conversation with Steven Johnson](#)
August 8, 2006

[A Conversation with Michael Bierut](#)
August 7, 2006

[Essay Archives](#) »



classic
web application model

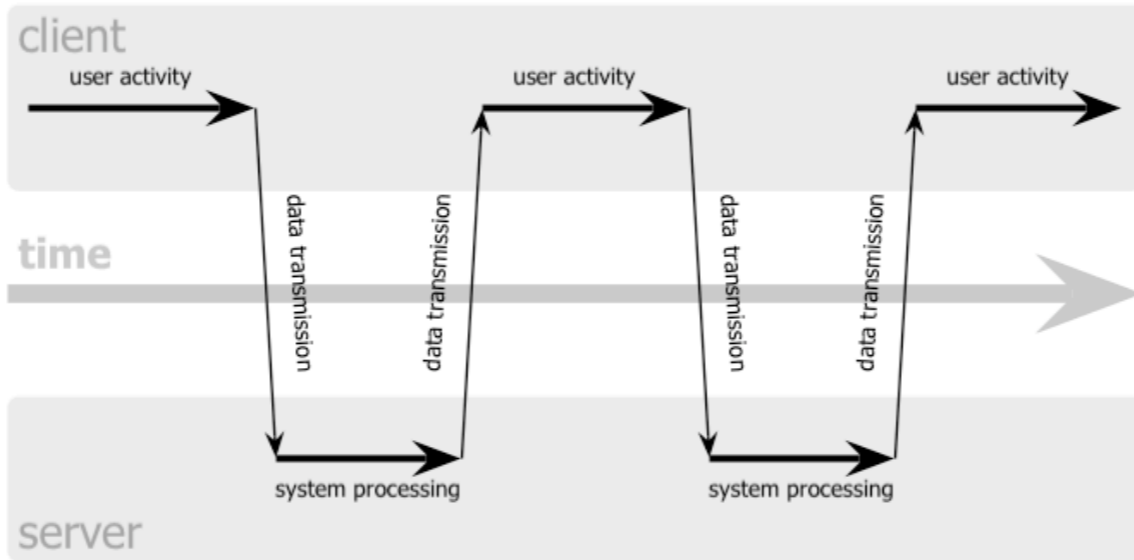


Ajax
web application model

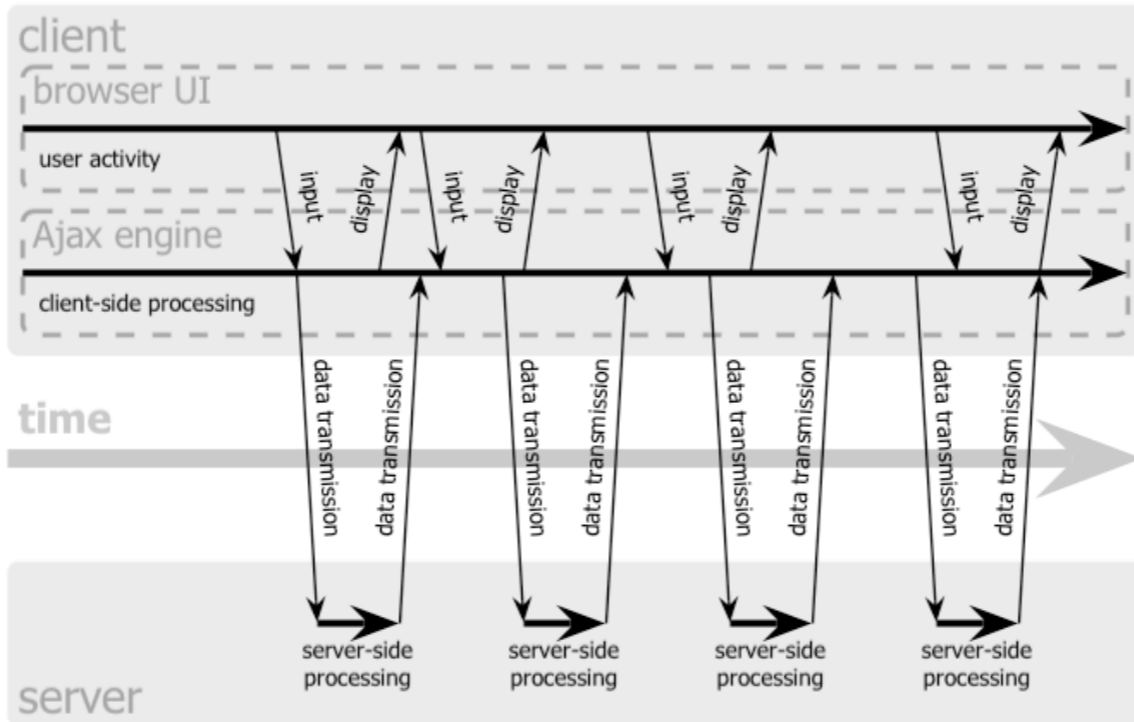
web application model
classic

web application model
Ajax

classic web application model (synchronous)



Ajax web application model (asynchronous)



Ajax 是 ...

- Web Application Model
 - XHTML & CSS
 - DOM
 - XML & XSLT
 - XMLHttpRequest
 - JavaScript

`XMLHttpRequest`

XMLHttpRequest

- Microsoft Internet Explorer 5 @ 2000
- An ActiveX object
- `var req = new ActiveXObject(Microsoft.XMLHTTP);`
- `var req = new ActiveXObject(Msxml2.XMLHTTP);`

<http://en.wikipedia.org/wiki/XMLHttpRequest>

<http://www.xml.com/pub/a/2005/02/09/xml-http-request.html>

XMLHttpRequest

- Firefox, Safari, Opera ...etc after 2002
- `req = new XMLHttpRequest();`
- W3C Working Draft @ 2006

<http://en.wikipedia.org/wiki/XMLHttpRequest>

<http://www.xml.com/pub/a/2005/02/09/xml-http-request.html>

<http://www.w3.org/TR/XMLHttpRequest/>

Ajax Showcase


```
<?PHP
```

```
if ($_GET['arg'] == 1) echo "滑鼠成功移進來了";  
else if ($_GET['arg'] == 2) echo "有點到喔";  
else echo "冏";
```

```
?>
```

```
?>
```

```
    height: 100px;
    border: 4px solid black;
    margin: 10px;
    text-align: center;
}
</style>
<script language="javascript">
function call (arg) {
    http = new XMLHttpRequest();
    http.onreadystatechange=update;
    http.open("GET", "http://127.0.0.1/~mac/ajax.php?arg="+arg, true);
    http.send(null);
}
function update() {
    if (http.readyState == 4) {
        if (http.status == 200) {
            document.getElementById('showbox').innerHTML = http.responseText;
        }
    }
}
</script>
</head>
<body onresize="call(3);">

<div id="showbox"></div>
<div id="event1" class="event" onmouseover="call(1);">滑鼠移過來</div>
<div id="event2" class="event" onclick="call(2);">在這點一下</div>

</body>
</html>
```

```
</p>
</div>
```

```
<div id="event1" class="event" onmouseover="call(1);">滑鼠移過來</div>
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Ajax Technologies

原始方案	替代方案
XML	JSON HTML
XMLHttpRequest	hidden iframe
JavaScript	VBScript

困難

- 瀏覽器戰爭
- More and more codes
 - Ajax Frameworks
- 網站親和力

Ajax Frameworks

- 非常多....

For PHP

Contents[hide]

- 1 AJASON (added November 2005)
- 2 AjaxAC (From April, 2005)
- 3 Ajax Agent (From February, 2006)
- 4 Cajax (added December 2005)
- 5 DutchPIPE - Avatar worlds on websites
- 6 HTS Web Application Framework
- 7 JPspan
- 8 My-BIC
- 9 HTML_AJAX PEAR Package
- 10 NanoAjax (added July 2006)
- 11 Pipeline
- 12 Qcodo (added April 2006)
- 13 Stratos PHP Framework
- 14 Symfony
- 15 XAJAX
- 16 XOAD (formerly NAJAX)
- 17 phpAjaxTags
- 18 Guava
- 19 PAJAX - Remote (a)synchronous PHP objects in JavaScript
- 20 PAJAJ - PHP Asynchronous Javascript and JSON
- 21 Flexible Ajax Framework
- 22 TinyAjax
- 23 Claw
- 24 Zephyr
- 25 SimpleJax
- 26 PHPWebBuilder
- 27 Novulo (added August 2006)
- 28 Tigermouse (added October 2006)

For PHP

- 真的很多
- My-BIC
 - 最深 @ digg.com
 - Firefox、IE、Opera、Safari
 - Debug介面

http://phpshot.org/blog/archives/2006/10/phpajax_1.html

<http://www.litfuel.net/mybic/>

For ASP.NET

- Ajax ASP.NET
- 微軟出品



For

- JavaScript
- C++, C#, ColdFusion, Eiffel, .Net, Java, Lisp, Lotus, Perl, Python, Ruby, Smalltalk

網站親和力

- 上一頁、下一頁、書籤
- Screen Reader不會注意到網頁的更改

上一頁 下一頁 與 書籤

- windows.location
- # (fragment identifier)
 - <http://mail.othree.net/#inbox>
 - <http://mail.othree.net/#sent>
- Really Simple History framework (RSH)

Screen Reader

- 讓使用者知道網頁更新了
 - alert
 - location
 - focus
 -

Ajax的未來

- OpenAjax Alliance
- XMLHttpRequest

OpenAjax Alliance



Standardizing Ajax Development

- Apple、Mozilla、Google...等63家公司
- 沒有Microsoft
 - Atlas

JSONRequest

- XML
 - 複雜、資料量大、慢
- JSON (JavaScript Object Notation)
 - 簡單、資料量小、快
- 直接使用JSON作為資料傳輸格式

```
<menu id="file" value="File" >
  <popup>
    <menuitem value="New" onclick="CreateNewDoc()" />
    <menuitem value="Open" onclick="OpenDoc()" />
    <menuitem value="Close" onclick="CloseDoc()" />
  </popup>
</menu>
```

```
<\w6U7>
<\bobnb>
```

```
{"menu": {
  "id": "file",
  "value": "File:",
  "popup": {
    "menuitem": [
      {"value": "New", "onclick": "CreateNewDoc()"},
      {"value": "Open", "onclick": "OpenDoc()"},
      {"value": "Close", "onclick": "CloseDoc()"}
    ]
  }
}}
```

```
}}
}
]
```

“json sample.js”簡介



json sample.js

4 KB

修改日期：今天 上午 2:30

▶ Spotlight 註解：

▼ 一般：

種類：JavaScript file

大小：4 KB (185 位元組)

位置：/Users/mac/Desktop/Ajax

“json sample.xml”簡介



json sample.xml

4 KB

修改日期：今天 上午 2:31

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種類：XML file

大小：4 KB (193 位元組)

位置：/Users/mac/Desktop/Ajax

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▼ 一般：

種類：XML file

大小：4 KB (193 位元組)

位置： /Users/mac/Desktop/Ajax

JSONRequest

```
requestNumber = JSONRequest.post(  
    "https://json.penzance.org/request",  
    {  
        user: "doctoravatar@yahoo.com",  
        t: "vLIj",  
        zip: 94089,  
        forecast: 7  
    },  
    function (requestNumber, value, exception) {  
        if (value) {  
            processResponse(value);  
        } else {  
            processError(exception);  
        }  
    }  
);
```

```
);  
}  
}  
processResponse(value);  
} else {
```

JSONRequest

```
requestNumber = JSONRequest.post(  
    "https://json.penzance.org/request",  
    {  
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```

```
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} else {  
    processError(exception);  
}
```

感謝各位的聆聽

m(_ _)m

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