

值錯、效能與品質

前端工程開發實務訓練 (6/8)

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要稱為一個「專業」的「工程師」，大多時候不是把東西做出來就算了，還是需要顧及程式的效能、品質、後續維護。這 20% 的細節、可能比完成功能還來得多很多。

顯示 Log

找問題最直覺的作法就是直接顯示訊息
可以很快地知道變數的值或有沒有跑到

alert();

過去在沒有良好 JavaScript 偵錯環境的唯一作法
不過現在還是很好用 XD

前端工程開發實務

f2eclass.com/#album

YUI User Guides 儲存到 F2E 相簿 F2E Wiki F2E PX F2E Charming F2E Gantt Bar Debugger » 其他書籤

檢閱器 媒體 顏色

影影 倒影

前端工程開發實務

We tell what to do. YAHOO!® Front-end Engineering

課程首頁 實作相簿 W3School 相簿

盤古開天 - Intro

- 載入投影片
- 投影片下載
- 軟體安裝

基本架構 - HTML

樣式之美 - CSS

賦予生命 - JavaScript

功力大增 - YUI

厚實內力 - Node.js

自我省視 - Debug / Performance

飛鴿傳書 - Node.js

放眼未來 - HTML5

正在等候 www.slideshare.net

位於 f2eclass.com 的網頁表示：
確定有執行到 JavaScript 吼！

確定

```

[mosh] Thanks for flying Vim
1 YUI({skin:"night", fetchCSS: false}).use(
2   "node-menunav",
3   "gallery-node-accordion",
4   "event-delegate",
5   function (Y) {
6
7     alert("確定有執行到 JavaScript 吼！");
8
9     var node = Y.one("#nav");
10    var iframe = Y.one("#slide_iframe");
11    node.plug(Y.Plugin.NodeMenuNav);
12    Y.one("#relate-link .bd").plug(Y.Plugin.NodeAccordi
13
14    Y.delegate("click", function (e) {
15      e.preventDefault();
16      iframe.set("src", "https://www.slideshare.net/s
javascript/class.js" [35%] 7,05 [javascript]
"javascript/class.js" 20L, 653C written
Session 0 | <- 4:class* [ master ] 2012-10-17 20:20:34

```

alert 的優缺點

- 優點：最直覺，不用安裝、通用。
- 缺點：干擾性太高。
 - ❖ 同步、需要點選才能取消。
 - 無法處理對快速 loop 模式。
 - ❖ 例如：音樂播放、拖拉、動畫...

console.log();

Firebug (Firefox Extension) 所提供的功能。
後來變成每個瀏覽器的標準、甚至在 Node.js 也可用

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Elements Resources Network Sources Timeline Profiles Audits Console

1 - 確定有執行到 JavaScript ?
2 - 是否順利跑完所有程式 ?

```

3   "gallery-node-accordion",
4   "event-delegate",
5   function (Y) {
6
7     console.log("1 - 確定有執行到 JavaScript ?");
8
9     var node = Y.one("#nav");
10    var iframe = Y.one("#slide_iframe");
11    node.plug(Y.Plugin.NodeMenuNav);
12    Y.one("#relate-link .bd").plug(Y.Plugin.NodeAccordion);
13
14    Y.delegate("click", function (e) {
15      e.preventDefault();
16      iframe.set("src", "https://www.slideshare.net/s
17      iframe.ancestor(".player").one(".site-link").se
18    }, "#relate-link", ".slide-link");
19
20    console.log("2 - 是否順利跑完所有程式 ?");
21  });

```

javascript/class.js [38%] 8,00-01 [javascript]
"javascript/class.js" 21L, 716C written
Session 0 | <- 4:class*> [master] 2012-10-17 20:35:48

console.log 的優缺點

- 優點：干擾性低，大多數情況都適用。
- 缺點：IE6, 7 不支援、會錯誤。
- 缺點：不是每個瀏覽器都直接可看。
 - ❖ Firefox 得安裝 Firebug。
- 缺點：沒辦法 Block 後續 Script 執行。
 - ❖ 此時用 alert 即可。
- 缺點：維護不易、寫多了反而一團亂。上線後不應該存在。

Y.log();

YUI 內建改良版的 console.log。

Developer Tools - http://apps.miilcasa.com/tv/channel/1

Elements Resources Network Sources Timeline Profiles Audits Console

```
Y.VideoParser: _getFileType() is execute, get video file type
Y.VideoParser: getVideoUrl is execute
Y.VideoParser: use the first url
Y.VideoParser: Has matched stream url
Y.VideoParser: _getFileType() is execute, get video file type
Y.VideoParser: getVideoUrl is execute
Y.VideoParser: use the first url
Y.VideoParser: Has matched stream url
Y.VideoParser: _getFileType() is execute, get video file type
Y.VideoParser: getVideoUrl is execute
Y.VideoParser: use the first url
Y.VideoParser: Has matched stream url
#channel-player: _parseCallback() is executed.
Y.Module: broadcast() is executed. The '#channel-player' module broadcasts a 'switch-video-info' message.
Y.ModuleManager: addBroadcaster() is executed. The 'switch-video-info' message by '#channel-player' module is walking through manager.
Y.ModuleManager: _match('#channel-player:switch-video-info', '#channel-player') is executed.
Y.ModuleManager: #channel-player:switch-video-info -> #channel-info
#channel-player: Resolution is 720 ;filetype is MP4 ; The parsed streaming URL is
'http://r14---sn-u2x76n7z.c.youtube.com/videoplayback?
upn=szqfft40Xhc&sparams=cp%2Cid%2Cip%2Cipbits%2Citag%2Cratebypass%2Csource%2Cupn%2Cexpire&fexp=9018%2C927104%2C922401%2C920704%2C912806%2C927201%2C913546%2C925109%2C919003%2C920201%2C9127%2C900816%2C911112&key=yt1&expire=1350502338&itag=22&ipbits=8&sver=3&ratebypass=yes&mt=1350479176&=218.211.33.134&mv=m&source=youtube&ms=au&cp=U0hURVVLUF9IUkNONF9NRVRE0jdxYjkxNWJGSmhN&id=b7897669be30f3&newshard=yes&type=video%2Fmp4%3B%20codecs%3D%22avc1.64001F%2C%20mp4a.40.2%22&fallback_host=tv16.cache1.c.youtube.com&signature=01ED0BDF5FBFFD6994C349283645832404E637C5.57116F5058AD849E142EB296DFF29D58DFE830'
Y.VLC: play() is executed.
Y.VLC: play() - The video URL is http://r14---sn-u2x76n7z.c.youtube.com/videoplayback?
upn=szqfft40Xhc&sparams=cp%2Cid%2Cip%2Cipbits%2Citag%2Cratebypass%2Csource%2Cupn%2Cexpire&fexp=9018%2C927104%2C922401%2C920704%2C912806%2C927201%2C913546%2C925109%2C919003%2C920201%2C9127%2C900816%2C911112&key=yt1&expire=1350502338&itag=22&ipbits=8&sver=3&ratebypass=yes&mt=1350479176&=218.211.33.134&mv=m&source=youtube&ms=au&cp=U0hURVVLUF9IUkNONF9NRVRE0jdxYjkxNWJGSmhN&id=b7897669be30f3&newshard=yes&type=video%2Fmp4%3B%20codecs%3D%22avc1.64001F%2C%20mp4a.40.2%22&fallback_host=tv16.cache1.c.youtube.com&signature=01ED0BDF5FBFFD6994C349283645832404E637C5.57116F5058AD849E142EB296DFF29D58DFE830'
Y.VLC: _create() is executed.
Y.VLC: _checkState() is executed (3).
Y.VLC: _defPlayFn() is executed
Y.VLC: _poll() is executed.
Y.Module: broadcast() is executed. The '#channel-player' module broadcasts a 'playing' message.
Y.ModuleManager: addBroadcaster() is executed. The 'playing' message by '#channel-player' module is walking through manager.
Y.ModuleManager: _match('#channel-player:playing', '#channel-player') is executed.
Y.Channel: getVideo() is executed.
Y.Module: broadcast() is executed. The '#channel-loading' module broadcasts a 'switch-view' message.
Y.ModuleManager: addBroadcaster() is executed. The 'switch-view' message by '#channel-loading' module is walking through manager.
Y.ModuleManager: _match('#channel-loading:switch-view', '#channel-loading') is executed.
channel-analytics: _handleSwitchView() is executed.
channel-analytics: _trackPageview() is executed. The '/video/743' p #channel-support-button: onmessage() switch-view.
Y.Channel: setActiveViewName() is executed
Y.ModuleManager: #channel-loading:switch-view -> *, #channel-welcom #channel-loading, #channel-info, #channel-player, #channel-playlist
Y.ModuleManager: #channel-player:playing -> #channel-loading, # > v.vif: null() is executed

```

miiCasa 歡樂台 | miicasa.com - Mozilla Firefox

檔案(F) 編輯(E) 檢視(V) 歷史(S) 書籤(B) 工具(I) 說明(H)

miicasa 歡樂台 | miicasa.com +

apps.miicasa.com/tv/channel/1

Google

主控台 ▾ HTML CSS Script DOM 網路 C... 搜尋

訊息

#channel-player: init() is executed. ?g=js (5553行)
#channel-player: onviewload() is executed. ?g=js (5553行)
#channel-player: _parseCallback() is executed. ?g=js (5553行)
#channel-player: Resolution is 720 ;filetype is MP4 ; The parsed streaming URL is 'ht u2x76n7z.c.youtube.com/videoplayback?upn=gXPawiMBSSQ& sparms=cp%2Cid%2Cip%2Cipbits%2Citag%2Cratebypass%2Csource%2Cupn%2Cexpire& fexp=920921%2C909711%2C925106%2C911305%2C914091%2C927104%2C922401%2C920704%2C912806%2C927201%2C913546%2C key=yt1&expire=1350502338&itag=22&ipbits=8&sver=3&ratebypass=yes&mt=1350479896&ip=218.211.33.134& mv=m&source=youtube&ms=au&cp=U0HURVVLUF9IUkNONF9NRVRE0i1TbGpJNDB6WXh3&id=b7897669bede30f3&newshard=yes& type=video%2Fmp4%3B%20codecs%3D%22avc1.64001F%2C%20mp4a.40.2%22& fallback_host=tco.v16.cache1.c.youtube.com& signature=8F361EA61D46671A9CAF2727FC8659380A78E010.2456587AA4BE3E83C37960317D164F716A062A3F'

Y.log(<訊息>, <等級>, <模組>);

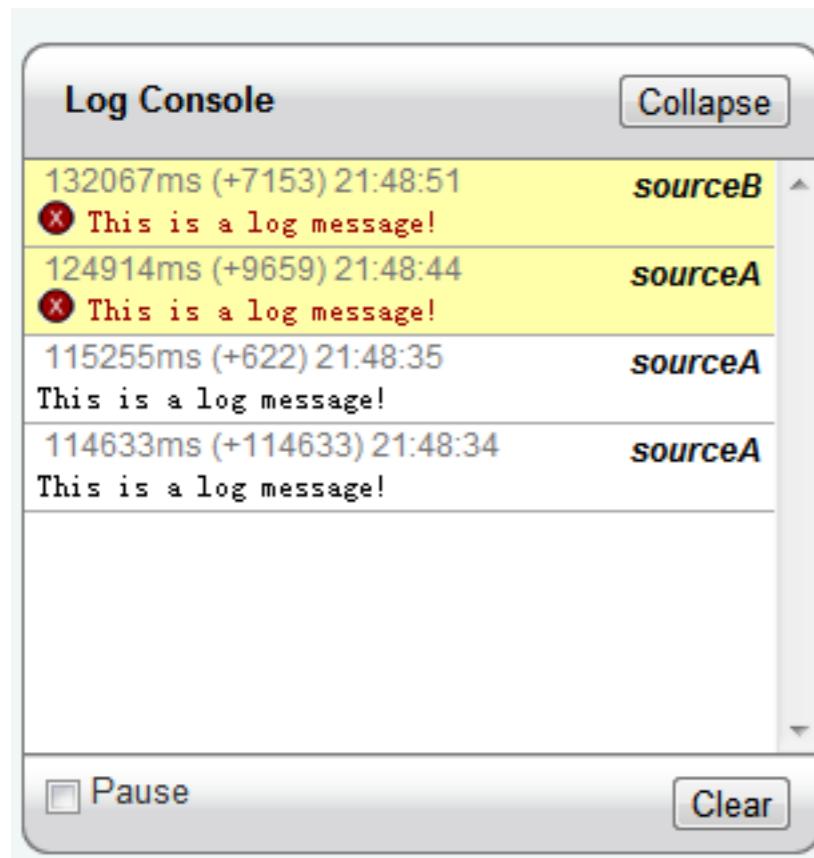
```
Y.log("hihi", "info",
      "#channel-player");
```

稍微設定一下！只看其中一個模組的訊息

```
YUI( {
    logInclude: {
        "#channel-player": true
    }
}).use()
```

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new Y.Console()



用程式生成一個顯示訊息的區塊
完全支援每一個瀏覽器

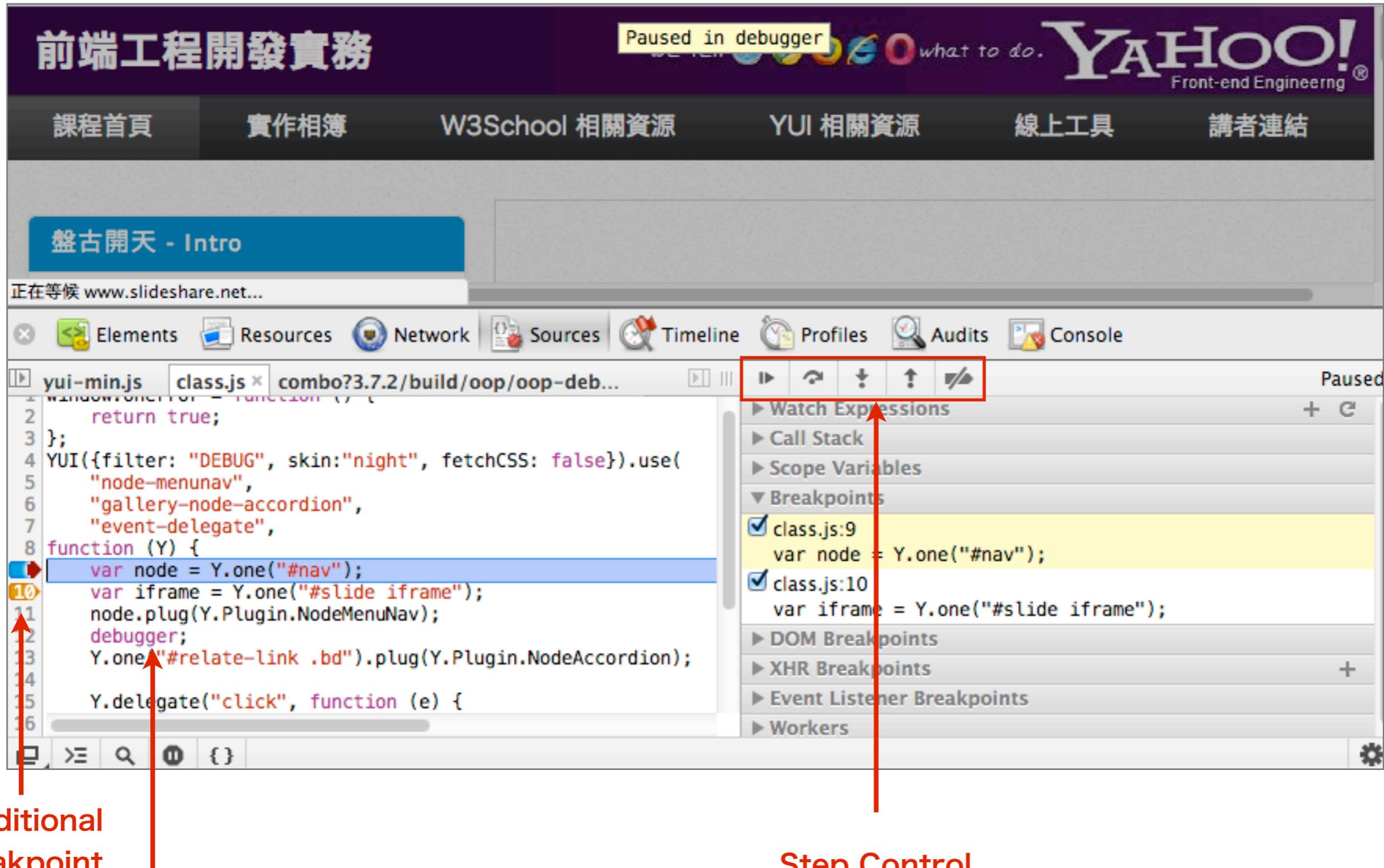
`(new Y.Console()).render();`

別忘了要在 `YUI().use` 中指定 `console` 喔！

善用除錯工具

現今的 Browser 都有更好的 Developer 工具了
很多時候或許不需要再手寫這些 Log 來找問題

Breakpoint 中斷點

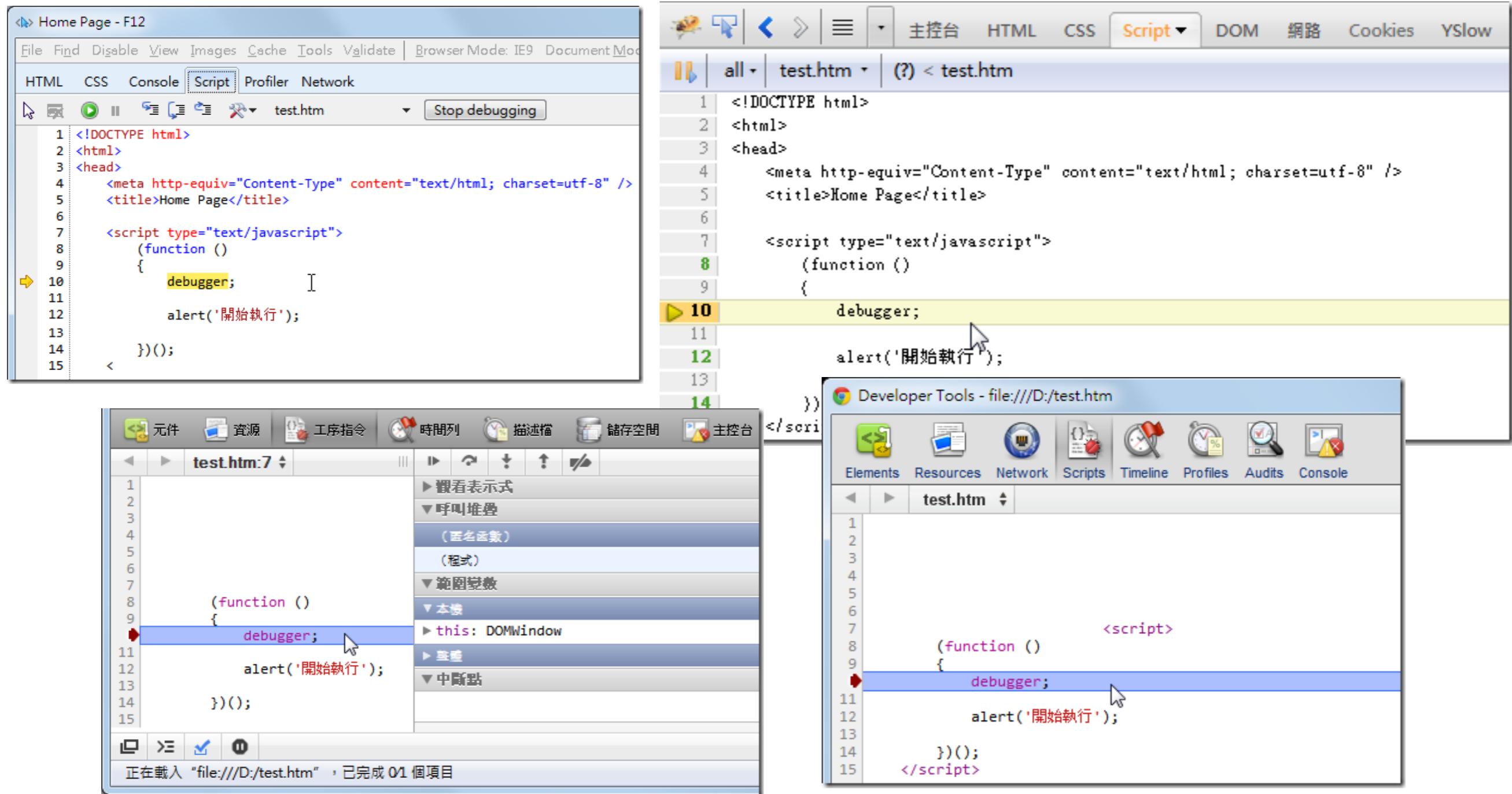


conditional
breakpoint

programming
breakpoint

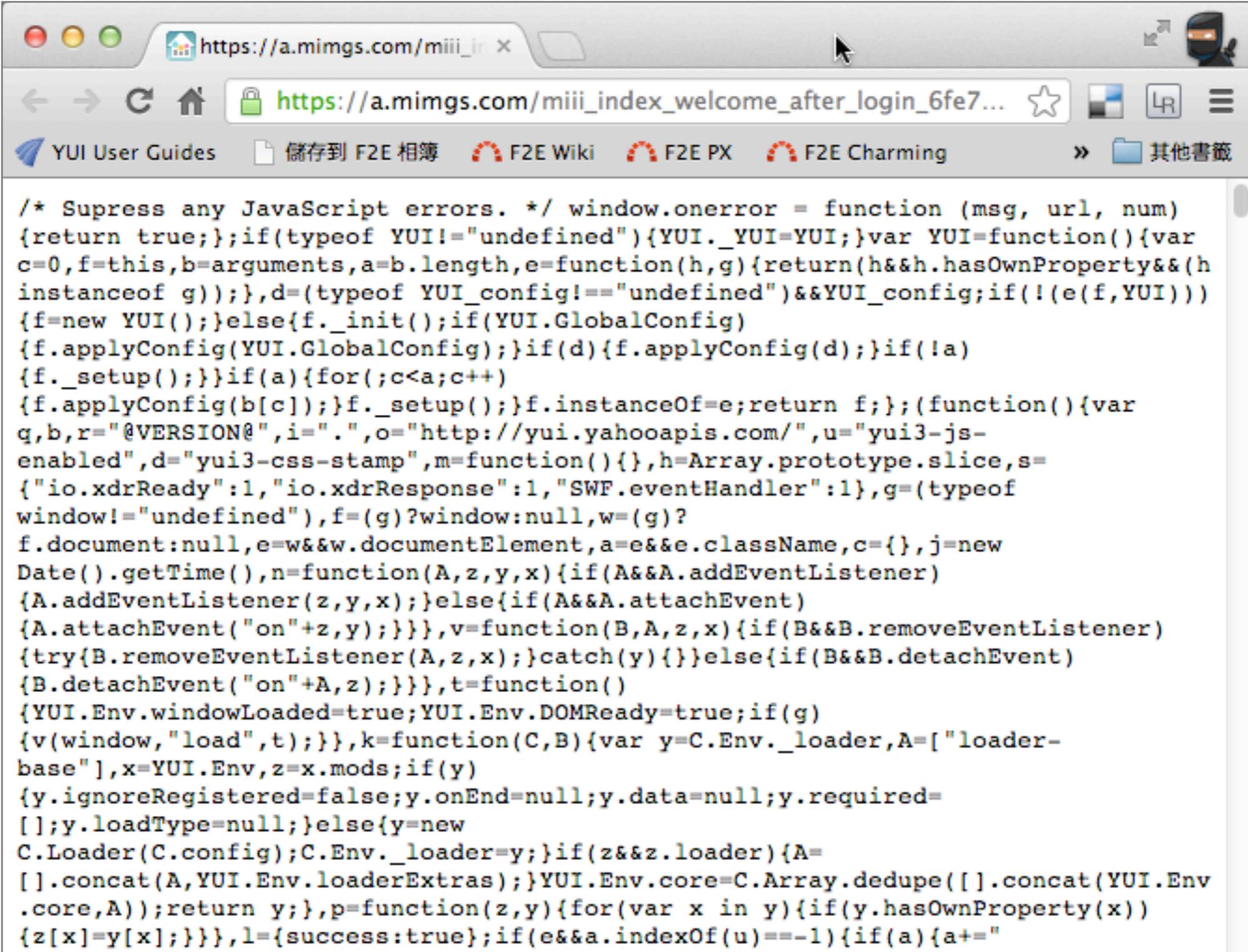
Step Control

debugger;



<http://blog.miniasp.com/post/2011/03/17/Using-JavaScript-debugger-statement-enter-breakpoints.aspx>

JavaScript 程式碼被最小化怎麼辦？



The screenshot shows a web browser window with the URL https://a.mimgs.com/miii_index>Welcome_after_login_6fe7.... The page content is a highly compressed JavaScript file. The code is minified, with many characters removed, such as spaces, newlines, and unnecessary semicolons. It includes comments like /* Suppress any JavaScript errors. */ and variable declarations for YUI and its components.

```

/* Suppress any JavaScript errors. */
window.onerror = function (msg, url, num)
{return true;};if(typeof YUI!="undefined"){YUI._YUI=YUI;}var YUI=function(){var
c=0,f=this,b=arguments,a=b.length,e=function(h,g){return(h&&h.hasOwnProperty&&(h
instanceof g))},d=(typeof YUI_config!="undefined")&&YUI_config;if(!(e(f,YUI)))
{f=new YUI();}else{f._init();}if(YUI.GlobalConfig)
{f.applyConfig(YUI.GlobalConfig);}if(d){f.applyConfig(d);}if(!a)
{f._setup();}if(a){for(;c<a;c++)
{f.applyConfig(b[c]);}f._setup();}f.instanceOf=e;return f;};(function(){var
q,b,r="@VERSION@",i=". ",o="http://yui.yahooapis.com/",u="yui3-js-
enabled",d="yui3-css-stamp",m=function(){},h=Array.prototype.slice,s=
{"io.xdrReady":1,"io.xdrResponse":1,"SWF.eventHandler":1},g=(typeof
window!="undefined"),f=(g)?window:null,w=(g)?
f.documentElement:e=w&&w.documentElement,a=e&&e.className,c={},j=new
Date().getTime(),n=function(A,z,y,x){if(A&&A.addEventListener)
{A.addEventListener(z,y,x);}else{if(A&&A.attachEvent)
{A.attachEvent("on"+z,y);}}},v=function(B,A,z,x){if(B&&B.removeEventListener)
{try{B.removeEventListener(A,z,x);}catch(y){}}else{if(B&&B.detachEvent)
{B.detachEvent("on"+A,z);}}},t=function()
{YUI.Env.windowLoaded=true;YUI.Env.DOMReady=true;if(g)
{v(window,"load",t);}},k=function(C,B){var y=C.Env._loader,A=[ "loader-
base"],x=YUI.Env,z=x.mods;if(y)
{y.ignoreRegistered=false;y.onEnd=null;y.data=null;y.required=
[];y.loadType=null;}else{y=new
C.Loader(C.config);C.Env._loader=y;}if(z&&z.loader){A=
[]}.concat(A,YUI.Env.loaderExtras);}YUI.Env.core=C.Array.dedupe([]).concat(YUI.Env
.core,A));return y;},p=function(z,y){for(var x in y){if(y.hasOwnProperty(x))
{z[x]=y[x];}}},l={success:true};if(e&&a.indexOf(u)==-1){if(a){a+="
"
}
}

```

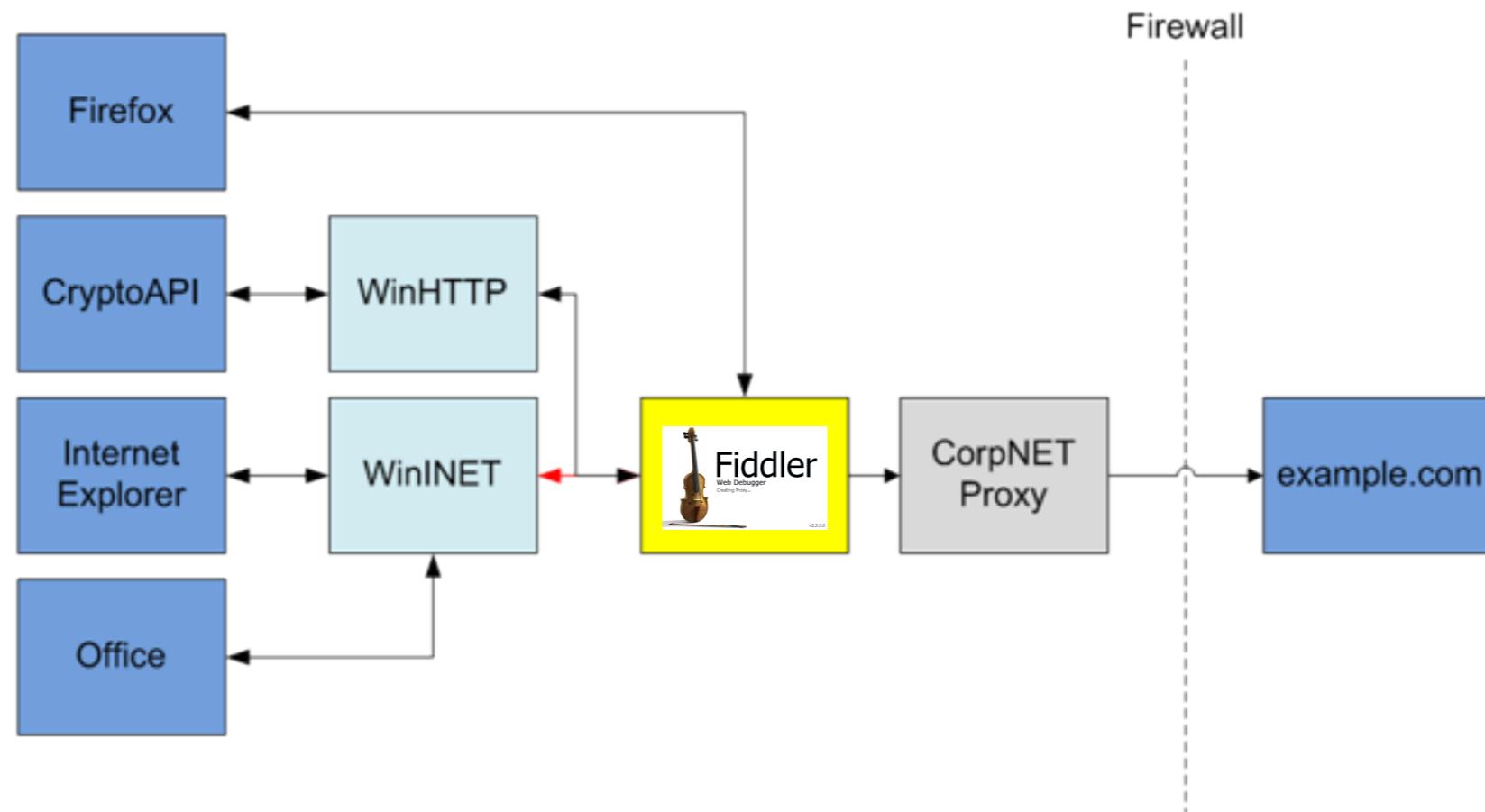
專業的網站都會壓縮程式碼，怎麼線上除錯？

F2E 必學 Fiddler



每個 F2E 都應該活用 Fiddler

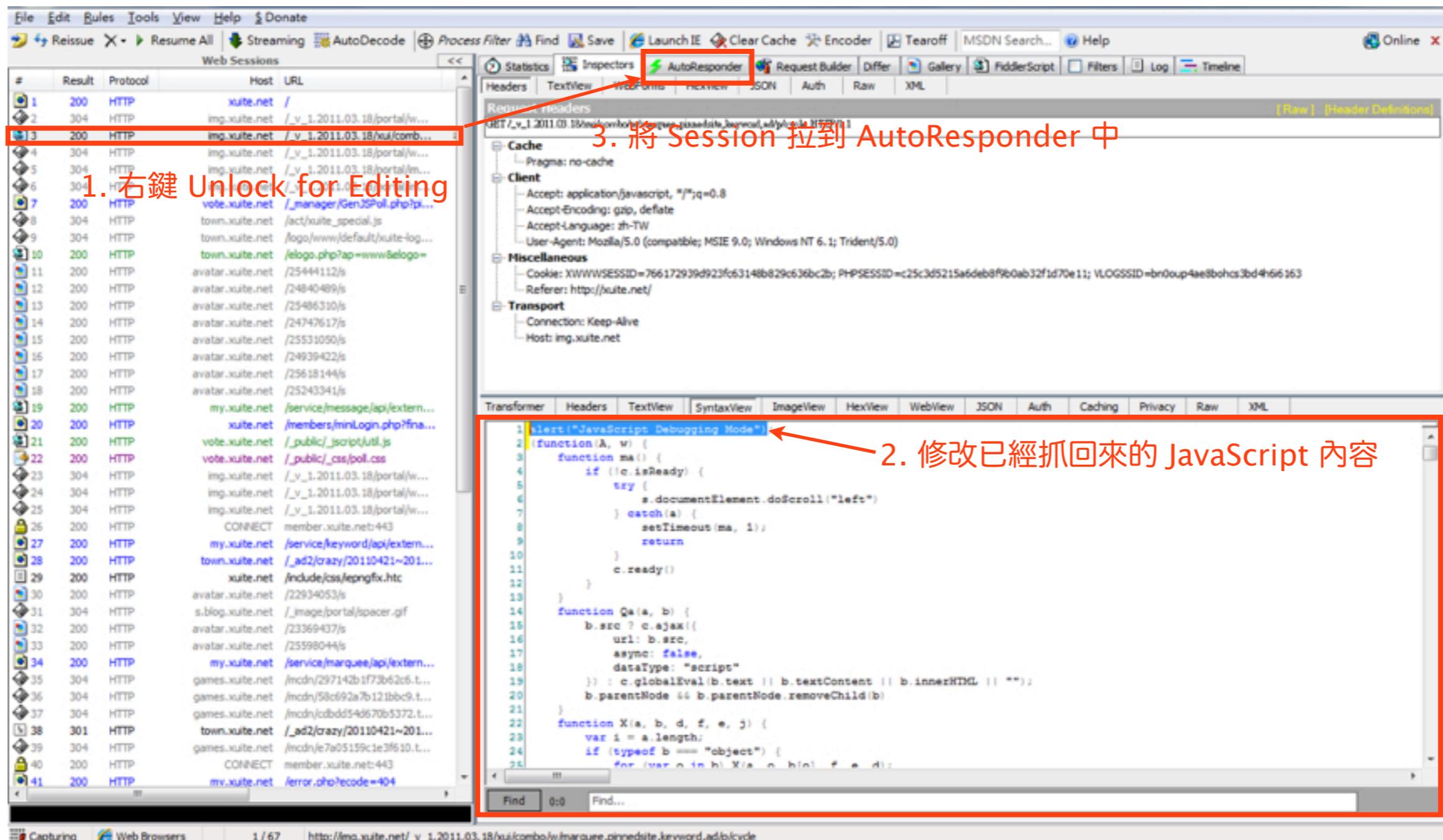
Fiddler 是什麼？



Fiddler 在你電腦上，相當於建立了虛擬的 Proxy Server、一但執行，所有的網路封包都會經由此 Proxy 進出 => 你可以對瀏覽的網頁做任何事！(只要會寫 JavaScript)

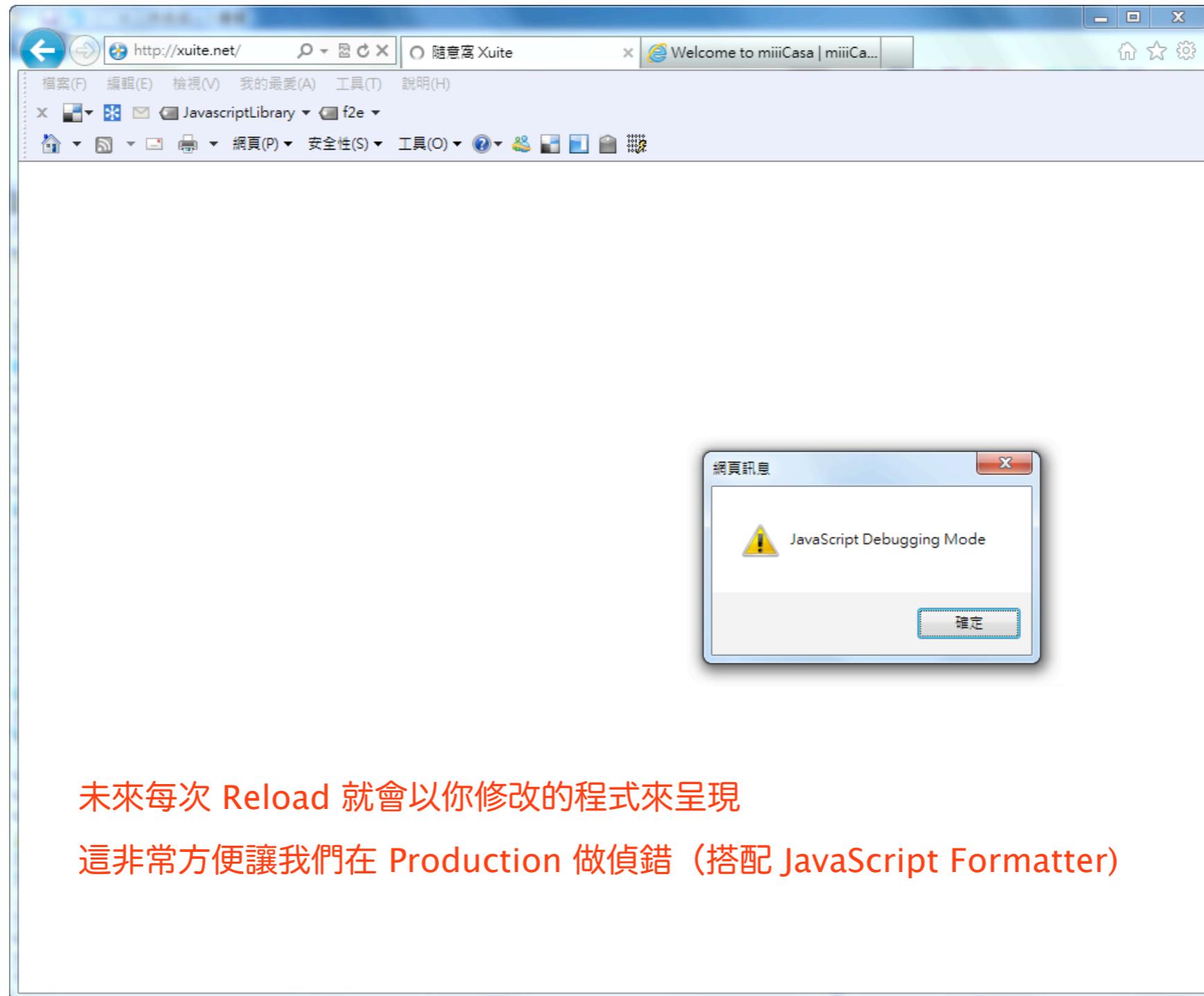
AutoResponder

竄改網站回傳的 Response



AutoResponder

顯示結果



AutoResponder

常用網站的樣式讓你不舒服？調整一下吧

The image shows a Mac OS X desktop with two browser windows open. Both windows are displaying the Baidu News homepage (<http://news.baidu.com/>). The left window shows the standard white-themed version of the site. The right window shows the same site with a solid yellow background applied across the entire content area, demonstrating the 'AutoResponder' feature.

Fiddler 的必備 Plugins

- JavaScript Formatter
- JSON Viewer
- Gallery

<http://www.fiddler2.com/fiddler2/extensions.asp>

JavaScript Formatter

整理壓縮過後的程式碼

The screenshot shows the Fiddler HTTP Debugging Proxy interface. In the center-right pane, a request for 'xuite.net/_v_1.2011.03.18/xuite/combo/w/marquee,pinnedsite,keyword,ad/p/cycle' is displayed. The 'Headers' tab is selected. A red arrow points from the 'Make JavaScript Pretty' option in the context menu of session 13 to the right-hand pane, where a large block of minified JavaScript code is shown. Another red box highlights this code area. The code is formatted with line numbers and syntax highlighting.

xuite 首頁最小化過後的 JavaScript

```

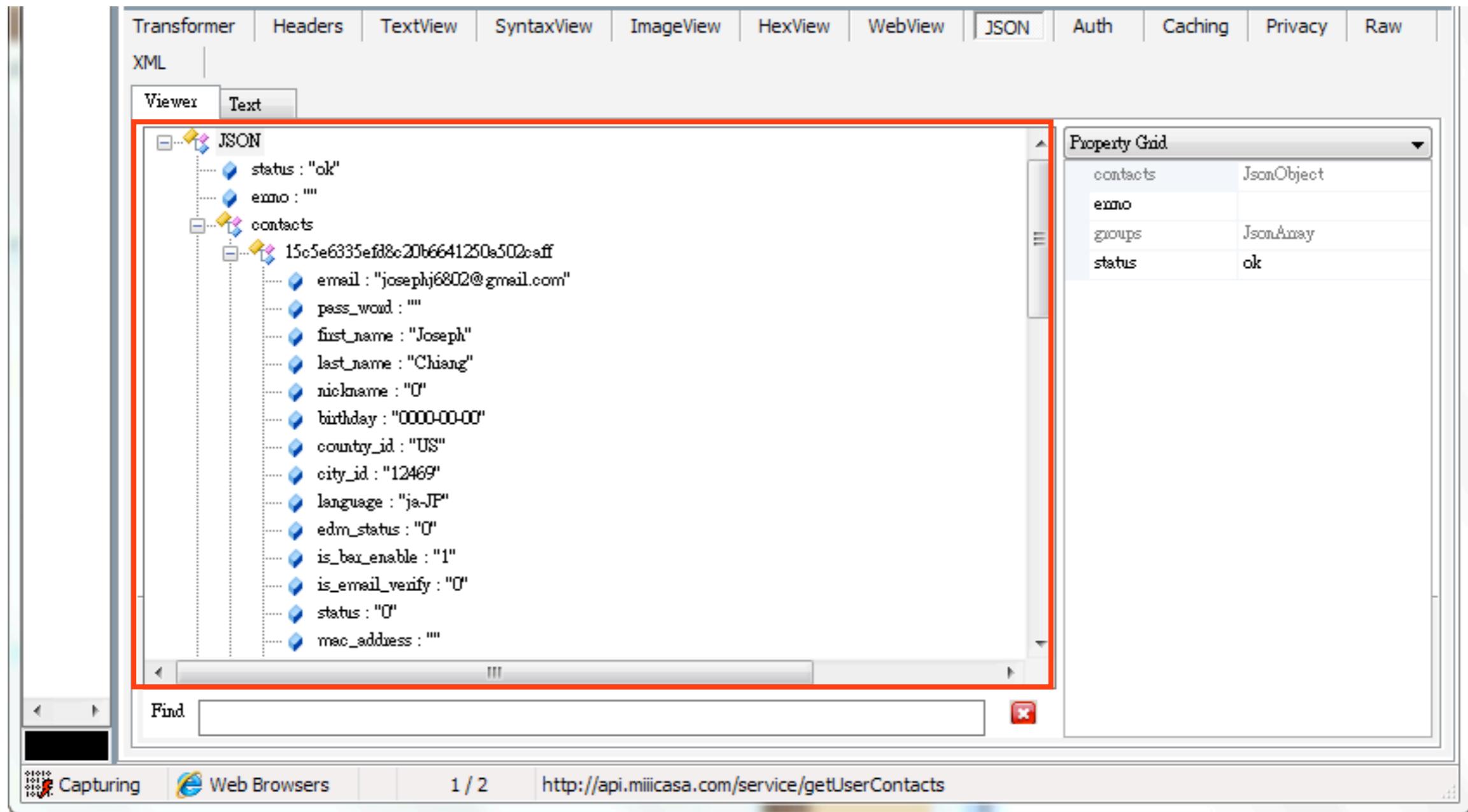
1 function(a, b) {
2     function ma() {
3         if (!c.isReady) {
4             try {
5                 a.documentElement.doScroll("left")
6             } catch(e) {
7                 setTimeout(ma, 1);
8                 return;
9             }
10            c.ready();
11        }
12    }
13    function Qa(a, b) {
14        b.src ? c.ajax({
15            url: b.src,
16            async: false,
17            dataType: "script"
18        }) : c.globalEval(b.text || b.textContent || b.innerHTML || "");
19        b.parentNode && b.parentNode.removeChild(b);
20    }
21    function X(a, b, d, f, e, j) {
22        var i = a.length;
23        if (typeof b === "object") {
24            for (var o in b) X(a, o, b[o], f, e, d);
25        }
26        return a;
27    }

```

本來只有一行的 JavaScript 被整裡的很漂亮

JSON Viewer

用樹狀圖觀看 Response 資料



Gallery

直接看 Session 中的圖片

The screenshot shows the Fiddler application interface. On the left, the 'Web Sessions' pane lists 41 sessions, mostly from 'xuite.net' with various URLs. On the right, the 'Gallery' tab is active, displaying a grid of small images. A red box highlights the top-left image, which is a character from a game. Below this, there are other images including a girl, a blue logo, a dog, SpongeBob SquarePants, a pink-haired anime girl, a black cat, a green dress, and a group of people.

有圖有真相、顯示目前選取的圖檔

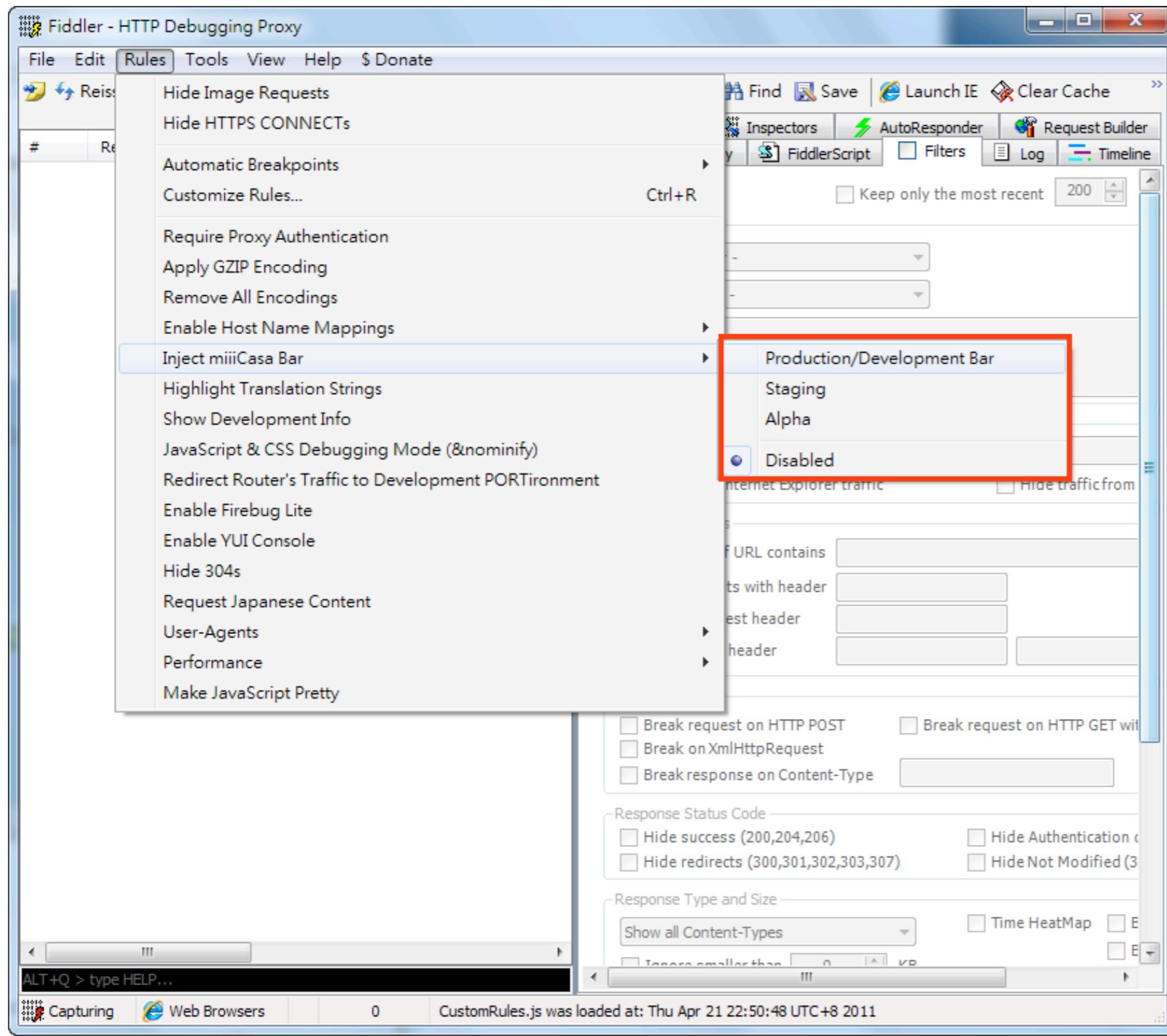
FiddlerScript

自訂新功能

1. 塞入 miiiCasa Bar
2. 不同環境的切換
3. 插入 Firebug Lite 或 YUI Console
等好用工具
4. 列出已翻譯、未翻譯的字串
5. 檢視模組資訊
6. JavaScript/CSS 壓縮與否的切換

Injection

快速選單 UI



1. 塞入 a.mimgs.com 的 Bar
2. 塞入 a.staging.mimgs.com 的 Bar
3. 塞入 img1.corp.miiicasa.com 的 Bar
4. 不塞 Bar

Injection

Injection 所須撰寫的 FiddlerScript

```

32     RulesString("&Inject miiiCasa Bar", true)
33     RulesStringValue(0, "Production/Development Bar", "a.mimgs.com")
34     RulesStringValue(1, "Staging", "a.staging.mimgs.com")
35     RulesStringValue(2, "Alpha", "img1.alpha.corp.miicasa.com")
36     public static var INJECTION_HOST: String = null;

```

製作選單，變數會存在 INJECTION_HOST

```

328     if (INJECTION_HOST) {
329         if (INJECTION_HOST === "a.mimgs.com")
330         {
331             var path = (null != PORT) ? "bar/seed/seed.js" : "i/toolbar.js";
332         } else {
333             var path = "i/toolbar.js";
334         }
335         aHtml.push([
336             '<div id="miii-root"></div>',
337             '<script>',
338             '(function () {',
339             '    if (typeof window.miii_url !== "undefined") {',
340             '        return;',
341             '    }',
342             '    window.miii_url = "http://" + INJECTION_HOST + '/' + path + "?frameset=0&m=6%2FlP8h2";
343             '    if (self !== top) {',
344             '        return;',
345             '    }',
346             '    var e, APP_URL, APP_MODE, counter, win;',
347             '    e        = document.createElement("script");',
348             '    e.id    = "miii-seed";',
349             '    e.src   = miii_url;',
350             '    e.async = true;',
351             '    document.getElementById("miii-root").appendChild(e);',
352             '})();',
353             '</script>'
354         ].join("\n"));
355     }

```

依據 INJECTION_HOST 的不同，會塞入不同環境的 miiiCasa Bar

Injection

實際顯示

2. 重新整理後，就會看到 miiiCasa Bar 出現在網頁左下方（此為點選後的狀況）

1. 選取顯示哪種環境的 miiiCasa Bar

3. 此時檢視原始碼就會看到我們剛塞入的內容

`<script src="http://img.xuite.net/_v_1.2011.03.18/portal/www/default/images/js/AL_RunActiveContent.js" type="text/javascript"></script>`

`<body><div id="miii-root"></div>`

`<script>(function () { if (typeof window.miii_url != "undefined") { return; } window.miii_url = "http://a.mimsgs.com/i/toolbar.js?frameset=0&m=6%2FIP8h27%2Fh%2FXDS28%2BEUf96fa2FbPN4U4CbzILoRTMYY&did=b2766e29a4a736a2487294041d058d2f"; if (self != top) { return; } var e, APP_URL, APP_MODE, counter, win; e = document.createElement("script"); e.id = "miii-seed"; e.src = miii_url; e.async = true; document.getElementById("miii-root").appendChild(e); })();</script>`

`<div id="doc2" class="yui-t4"><!-- 服務選單開始 --> <div id="hd-menu"> <div class="S-top-bg"> <div class="S-top-menu"> <div id="topmenu"></div> <!-- 其他服務下拉選單 --> <div class="S-an"><!-- 基本功能列 --> <div class="S-word"> <!-- 免費註冊 | --> <!-- 管理後台 | --> <!-- 個人名片 | -->`

Fiddler - HTTP Debugging Proxy

- File Edit Rules Tools View Help \$ Donate
- Reiss Hide Image Requests
- Automatic Breakpoints Hide HTTPS CONNECTs
- Customize Rules...
- Require Proxy Authentication
- Apply GZIP Encoding
- Remove All Encodings
- Enable Host Name Mappings
- Inject miiiCasa Bar
- Highlight Translation Strings
- Show Development Info
- JavaScript & CSS Debugging Mode (&nominify)
- Redirect Router's Traffic to Development PORTironment
- Enable Firebug Lite
- Enable YUI Console
- Hide 304s
- Request Japanese Content
- User-Agents
- Performance
- Make JavaScript Pretty

#	Re	Req	Res
261	2		
262	2		
263	3		
264	2		
265	2		
267	2		
275	3		
276	2		
277	3		
278	3		
279	3		
280	3		
281	2		
282	3		
283	3		
284	304	HTTP	8.blog.xuite.net /8/c/5/4/12911631/b
285	304	HTTP	8.blog.xuite.net /8/c/5/4/12911631/b
286	200	HTTP	img.xuite.net /portal/images/icons/
287	200	HTTP	maps.google.com /maps/vp?spn=0.117

Capturing Web Browsers 271 Bolding cleared

開發環境切換

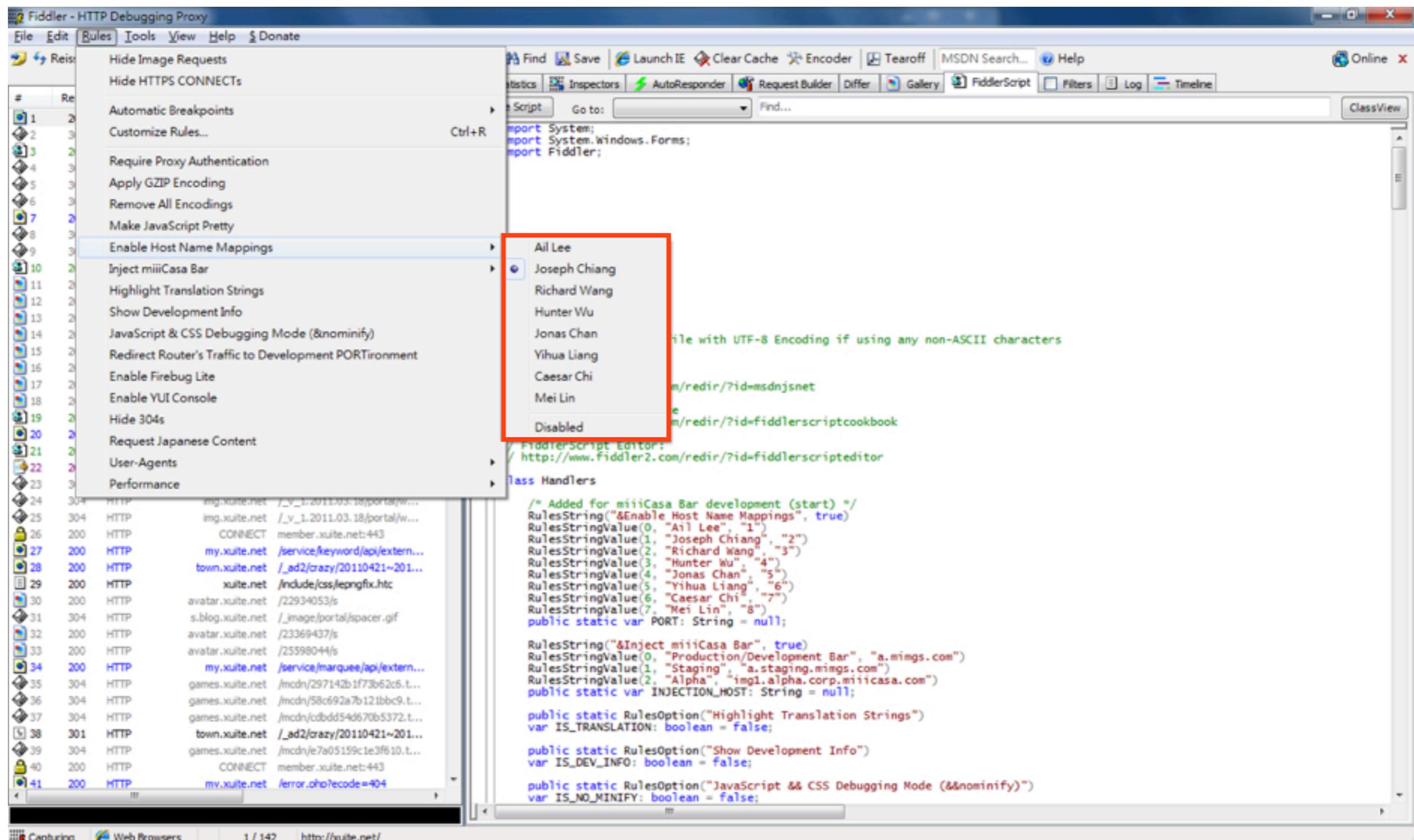
快速切換團隊中不同工程師的開發環境

The screenshot shows a web browser window titled "Engineering/NewhireEnvSetup - miiCasa". The address bar contains the URL "http://muchillla.corp.miiicasa.com/projects/miiicasa/wiki/Engineering/NewhireEnvSetup". The page content displays port mapping lists for four engineers:

- 1. Engineering & Port Mapping List
 - o Ail Lee
 - www.miiicasa.com => http://devml.corp.miiicasa.com:50010
 - apps.miiicasa.com => http://devml.corp.miiicasa.com:50011
 - api.miiicasa.com => http://devml.corp.miiicasa.com:50013
 - developer.miiicasa.com => http://devml.corp.miiicasa.com:50014
 - f.mimsgs.com => http://devml.corp.miiicasa.com:50016
 - comet.miiicasa.com => http://devml.corp.miiicasa.com:50017
 - a.mimsgs.com => http://devml.corp.miiicasa.com:50019
 - o Joseph Chiang
 - www.miiicasa.com => http://devml.corp.miiicasa.com:50020
 - apps.miiicasa.com => http://devml.corp.miiicasa.com:50021
 - api.miiicasa.com => http://devml.corp.miiicasa.com:50023
 - developer.miiicasa.com => http://devml.corp.miiicasa.com:50024
 - f.mimsgs.com => http://devml.corp.miiicasa.com:50026
 - comet.miiicasa.com => http://devml.corp.miiicasa.com:50027
 - a.mimsgs.com => http://devml.corp.miiicasa.com:50029
 - o Richard Wang
 - www.miiicasa.com => http://devml.corp.miiicasa.com:50030
 - apps.miiicasa.com => http://devml.corp.miiicasa.com:50031
 - api.miiicasa.com => http://devml.corp.miiicasa.com:50033
 - developer.miiicasa.com => http://devml.corp.miiicasa.com:50034
 - f.mimsgs.com => http://devml.corp.miiicasa.com:50036
 - comet.miiicasa.com => http://devml.corp.miiicasa.com:50037
 - a.mimsgs.com => http://devml.corp.miiicasa.com:50039
 - o Hunter Wu

A red box highlights the port mapping list for Joseph Chiang. To the right of this box, a red annotation in Chinese reads: "每個工程師都有自己的環境以 Port 做區隔, 像我是 5002*" (Each engineer has their own environment separated by port, like I am 5002*).

Fiddler 若是有個選單可隨時切換就太方便了！



Welcome to miiiCasa-Stay Connected with your Family | miiiCasa

<http://www.miicasa.com/>

實際上是被 Fiddler 自動對應到 devm1.corp.miicasa.com:50020

miiiCasa ID: josephj6802@gmail.com Password: *****

Remember me for 2 weeks [Forgot password?](#) [Sign in](#)

HOME GATEWAY INNOVATION

miiiCasa expands home gateway into home data management center

[Take the tour](#)

Don't have a miiiCasa account?
Join now! It's free and easy.

[Create New Account](#)

Welcome to miiiCasa
A new, fun and private way to store & share content with family and friends!
[Learn more](#)

What's new on miiiCasa
miiiCasa enabled router won 2011 CES innovation award.
[Learn more](#)

miiiCasa devices are available now!
Check out the devices in store and get one for you and your family.
[Learn more](#)

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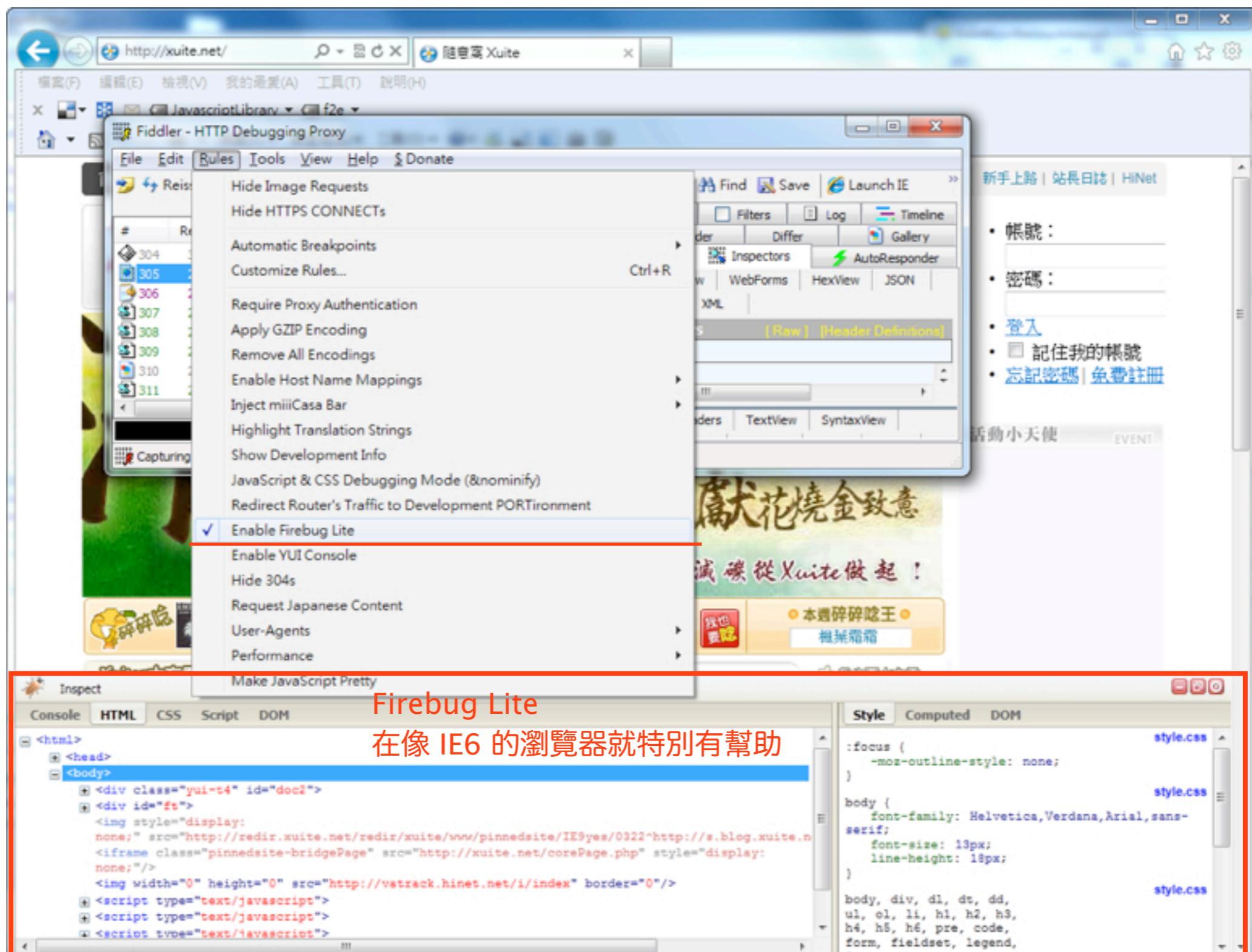
Language: [English](#) | [日本語](#)

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FITPI

Injection

插入 Firebug Lite 或 YUI Console



列出翻譯字串

當初設計多國語系有特殊的 Class Name

Space > D-Link DIR-685 > Photos > 2010-12-21 My Sweet ...

Album のインフォ

共有管理

シェア

あなたのシェアリストを管理する

Xをクリックすることで、このアルバムのシェアリストからコンタクトを削除することができます。またリストから Or すべてのコンタクトを削除するにはここをクリックしてください をクリックしてもできます。

これらはあなたの共有アルバムを見ることができる人たちです:

WWWWW 吳先生
夯哥哥aaaaaa

ビュー / ダウンロード

保存する
or you may cancel it

もっとシェア

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Language: [English](#) | [日本語](#)

列出翻譯字串

幾行程式碼就可以辦到 :)

```
359 if (IS_TRANSLATION) {
360     aHtml.push([
361         '<script src="http://code.jquery.com/jquery-1.4.3.min.js"></script>',
362         '<script>',
363         ' $(document).ready( function () {',
364         '     $(".intl-translatable").css({"border-bottom": "solid 3px #f00", "opacity": "0.6", "-',
365         '     $(".intl-translated").css({"border-bottom": "solid 3px #0c0", "opacity": "0.6", "-mo',
366         '     $(".intl-translated, .intl-translatable").attr("title", "Double click to modify tran',
367         '     $(".intl-translated, .intl-translatable").dblclick(function(e) {e.preventDefault();w',
368         '});',
369         ' ].join("\n"));
370         aHtml.push("</script>");
371     }
372 }
```

沒什麼了不起，就是加了 2 個樣式與 1 個事件

檢視模組資訊

列出有 id 屬性的 <div>/<div> 區塊，點兩下會出現 alert 視窗

The screenshot shows a web application interface with several UI components highlighted:

- #doc-web-readcrumbs**: A breadcrumb navigation bar at the top.
- miiCasa**: The main logo.
- Home**, **My miiCasa**, **Space**: Navigation tabs.
- Hi, 一二三四五六七八九十 | Sign Out | Help**: User account information.
- Space > D-Link DIR-685 > Photos > 2010-12-21 My Sweet**: Current page path.
- #folder-manage-menu**: A menu button.
- Album のインフォ**: Information about an album.
- 共有管理**: Share management section.
- シェア**: Share button.
- #share-manage**: A modal dialog box titled "網頁訊息" (Web Message) containing a warning icon and the text "codeigniter o space/_share_manage". It also contains the message "在開發環境打入此指令就會自動把相關檔案開好" (If you enter this command in development environment, it will automatically open related files) and a "確定" (Confirm) button.
- #mastfoot**: Footer text: "miiCasa © 2011 Cloud Connected Inc. All Rights Reserved." and links: "About miiCasa | Terms of Service | Privacy Policy | Copyright | Blog | Press | Contact us | Help". Language selection: "Language: English | 日本語".
- 保存する** (Save) and "or you may cancel it" (or you may cancel it)

切換壓縮與否

開發環境的 JS/CSS 預設都是動態合併多個小檔案並最小化過的。



The screenshot shows a browser window with the URL <http://a.mimsgs.com/mini?module=space&type=js>. The page content is a single, extremely long line of compressed JavaScript code. The code is highly obfuscated, with many lines of valid JavaScript being concatenated together without proper line breaks or whitespace. This is a common practice in production environments to reduce file size and improve load times.

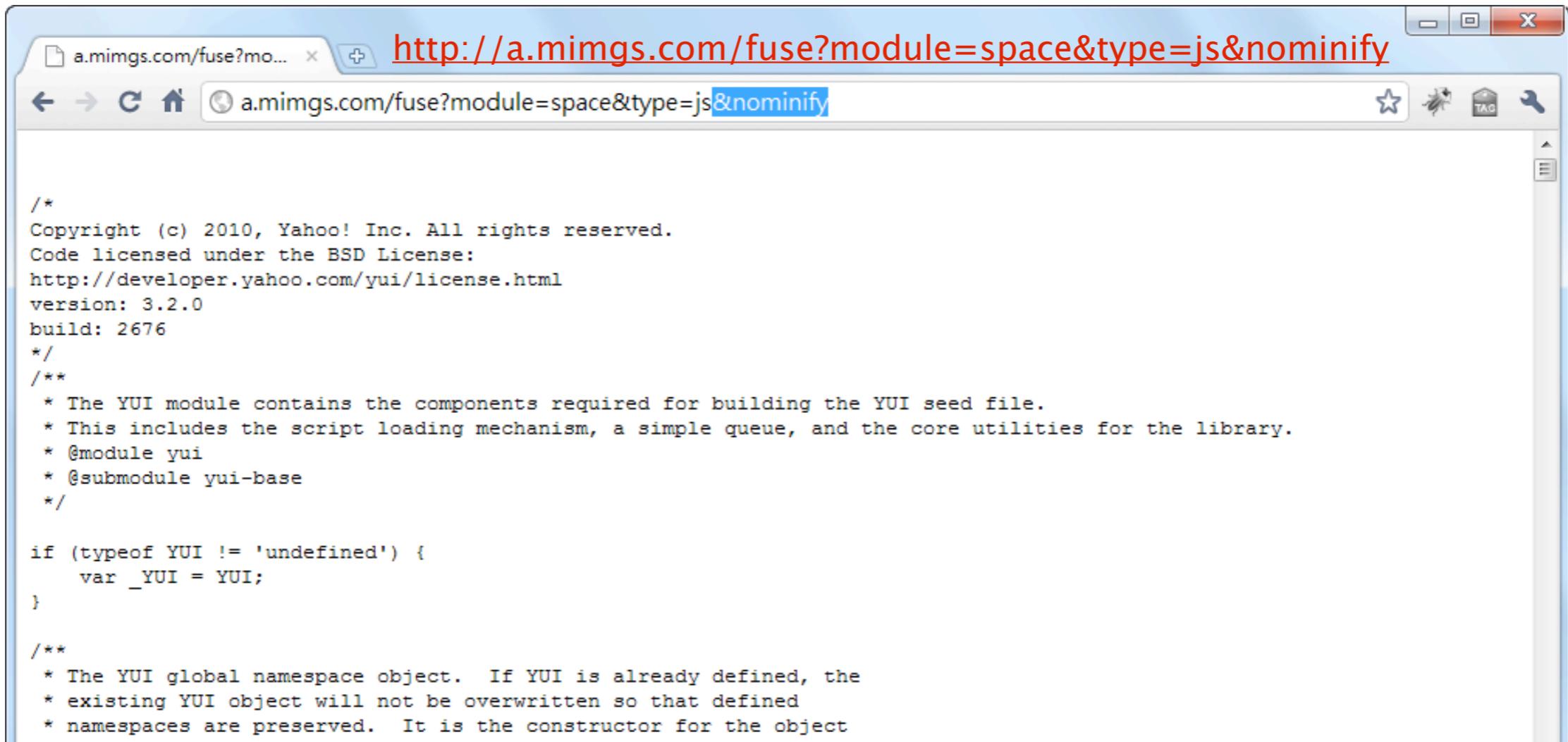
```

if(typeof YUI!="undefined"){var _YUI=YUI;}var YUI=function(){var c=0,e=this,b=arguments,a=b.length,d=(typeof YUI_config!="undefined")&&YUI_config;if(!(e instanceof YUI)){e=new YUI();}else{e._init();if(d){e.applyConfig(d);}if(!a){e._setup();}}if(a){for(;c<a;c++){e.applyConfig(b[c]);}e._setup();}return e;};(function(){var n,b,o="3.2.0",l="http://yui.yahooapis.com/",r="yui3-js-enabled",j=function(){},g=Array.prototype.slice,p={"io.xdrReady":1,"io.xdrResponse":1,"SWF.eventHandler":1},f=(typeof window!="undefined"),e=(f)?window:null,t=(f)?e.document:null,d=t&&t.documentElement,a=d&&d.className,c={},h=new Date().getTime(),k=function(x,w,v,u){if(x&&x.addEventListener){x.addEventListener(w,v,u);}else{if(x&&x.attachEvent){x.attachEvent("on"+w,v);}}},s=function(y,x,w,u){if(y&&y.removeEventListener){try{y.removeEventListener(x,w,u);}catch(v){}}else{if(y&&y.detachEvent){y.detachEvent("on"+x,w);}}},q=function(){YUI.Env.windowLoaded=true;YUI.Env.DOMReady=true;if(f){s(window,"load",q);}},i=function(w,v){var u=w.Env._loader;if(u){u.ignoreRegistered=false;u.onEnd=null;u.data=null;u.required=[];u.loadType=null;}else{u=new w.Loader(w.config);w.Env._loader=u;}return u;},m=function(w,v){for(var u in v){if(v.hasOwnProperty(u)){w[u]=v[u];}}};;if(d&&a.indexOf(r)==-1){if(a){a+=r;d.className=a;}if(o.indexOf("@")>-1){o="3.2.0pr1";}n=applyConfig:function(B){B=B||j;var w,y,x=this.config,z=x.modules,v=x.groups,A=x.rls,u=this.Env._loader;for(y in B){if(B.hasOwnProperty(y)){w=B[y];if(z&&y=="modules"){m(z,w);}else{if(v&&y=="groups"){m(v,w);}else{if(A&&y=="rls"){m(A,w);}else{if(y=="win"){x[y]=w.contentWindow||w;x.doc=x[y].document;}else{if(y=="_yuid"){;}else{x[y]=w;}}}}}}}};if(u){u._config(B)},_config:function(u){this.applyConfig(u)},_init:function(){var x,y=this,u=YUI.Env,v=y.Env,z,w;y.version=o;if(!v){y.Env={mods:{},versions:{},base:1,cdn:1+o+"/build/,_idx:0,_used:{}},_attached:{},_yidx:0,_uidx:0,_guidp:"y",_loaded:{},getBase:u&&u.getBase||function(F,E){var A,B,D,G,C;B=t&&t.getElementsByTagName("script")||[];for(D=0;D<B.length;D=D+1){G=B[D].src;if(G){C=G.match(F);A=C&&C[1];if(A){x=C[2];if(x){C=x.indexOf("js");if(C>-1){x=x.substr(0,C);}C=G.match(E);if(C&&C[3]){A=C[1]+C[3];}break;}}}};return A||v.cdn;};v=y.Env;v._loaded[o]={};if(u&&y!=YUI){v._yidx++u._yidx;v._guidp=("yui_"+o+"_"+v._yidx+"_"+h).replace(/\./g,"_");}else{if(typeof _YUI!="undefined"){u=_YUI.Env;v._yidx+=u._yidx;v._uidx+=u._uidx;for(z in u){if(!(z in v)){v[z]=u[z];}}}}}};
```

但是最小化會造成 Debugging 很困難

切換壓縮與否

其實只要多一個 `&nominify` 的參數即可回復正常



The screenshot shows a web browser window with the URL `http://a.mimgs.com/fuse?module=space&type=js&nominify` in the address bar. The page content displays the source code of a YUI module. The code includes a copyright notice, license information, and various comments explaining the module's purpose and structure. The code is written in JavaScript and includes parts for handling the YUI global namespace object.

```
/*
Copyright (c) 2010, Yahoo! Inc. All rights reserved.
Code licensed under the BSD License:
http://developer.yahoo.com/yui/license.html
version: 3.2.0
build: 2676
*/
/**
 * The YUI module contains the components required for building the YUI seed file.
 * This includes the script loading mechanism, a simple queue, and the core utilities for the library.
 * @module yui
 * @submodule yui-base
 */

if (typeof YUI != 'undefined') {
    var _YUI = YUI;
}

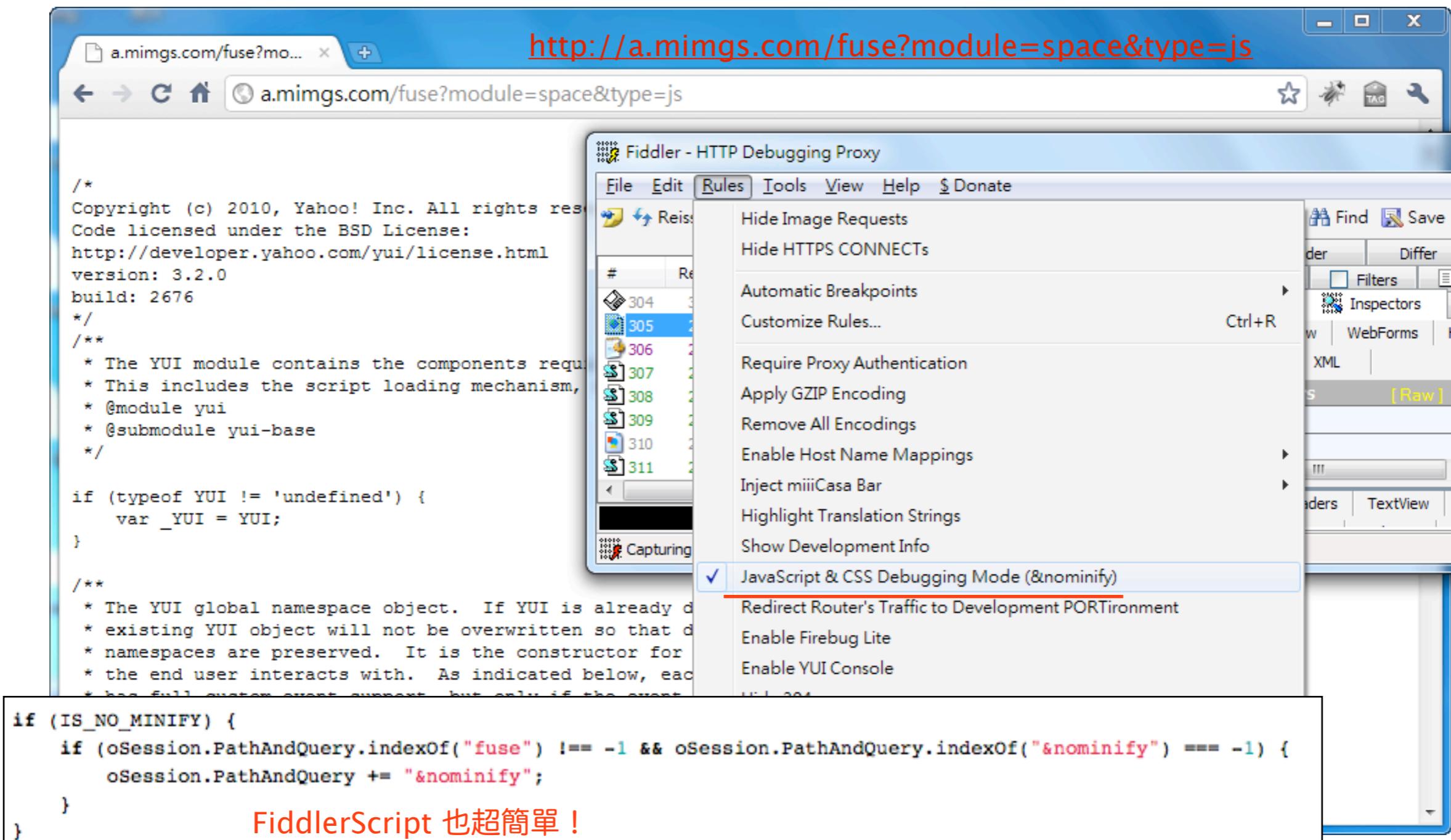
/**
 * The YUI global namespace object. If YUI is already defined, the
 * existing YUI object will not be overwritten so that defined
 * namespaces are preserved. It is the constructor for the object

```

但是每次都要手動改或動程式實在很麻煩！

切換壓縮與否

有 Fiddler 真好！點選一下不用改 Code 就可以看到沒最小化的



標準很重要！

回想起來，能夠有效率基於 Fiddler 建置一些好用的工具，得歸功於有制定 Guidelines 且要求實行，全部開發人員都需要基於標準框架來做事，不然也沒基準點去做出這些好用的功能。

效能

- 伺服器設定 - CDN、Cache、GZip
- 減少 HTTP 請求
- 將 CSS/JavaScript 最小化
 - ❖ FUSE / PHP Minify
- 無堵塞載入 JavaScript
- ImageLoader 工具

效能檢測工具

Page Speed 與 YSlow

伺服器端設定

- GZip - 針對文字類型的檔案可以大量減少 Size。
- Client Cache - 可以透過 Web 伺服器設定 Cache Header、瀏覽器就會遵守。
- Server Cache - Content Delivery Network。

合併與最小化

用工具一次解決兩個效能問題

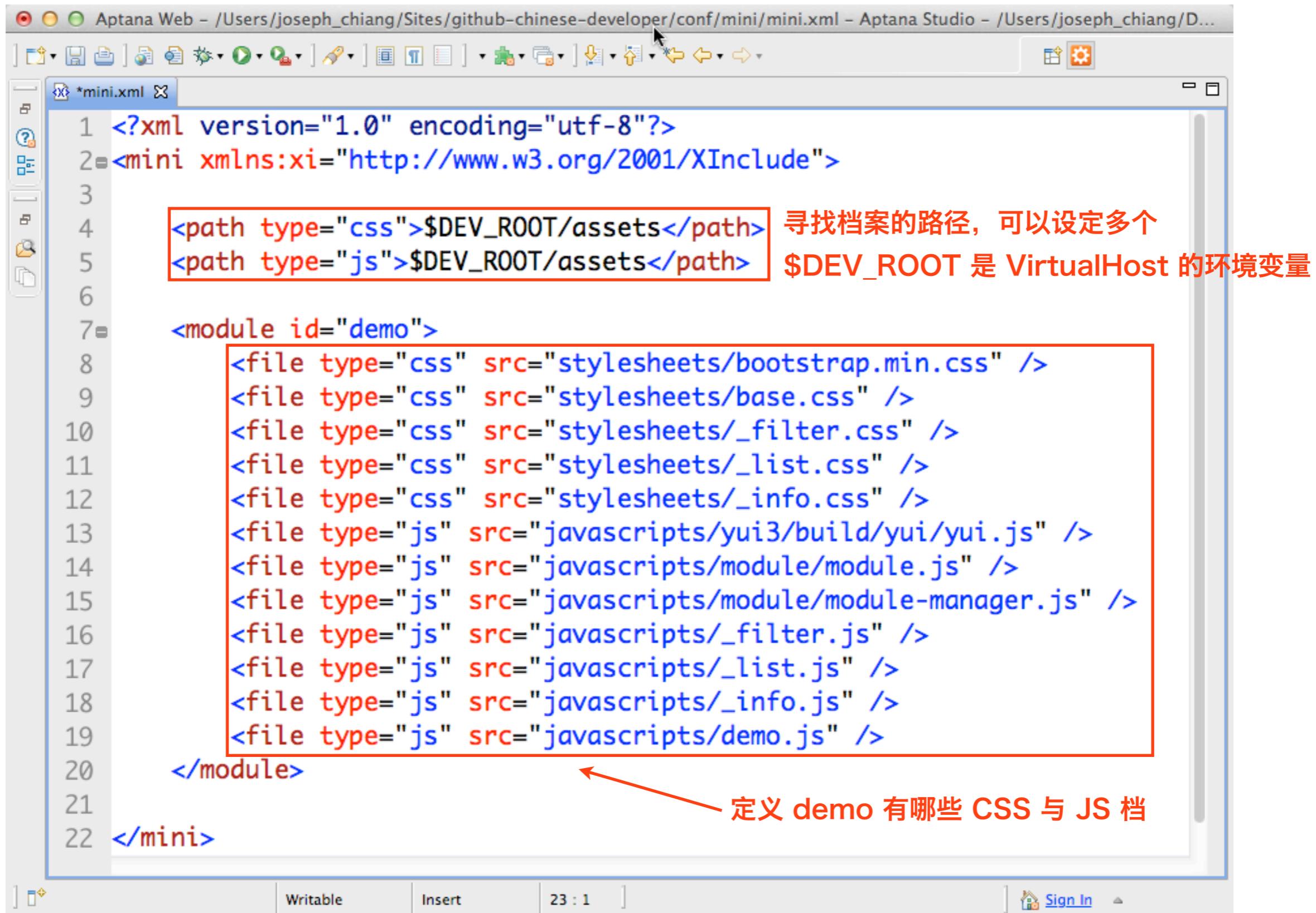
MINI



透过**设定档**
将多个档案**合并、最小化**
的开发环境工具

<https://github.com/josephj/mini>

Mini 的设定档, 十分容易设定



The screenshot shows the Aptana Studio interface with the file `*mini.xml` open. The code defines a `mini` configuration with a `module` named `demo` containing multiple `file` and `path` entries.

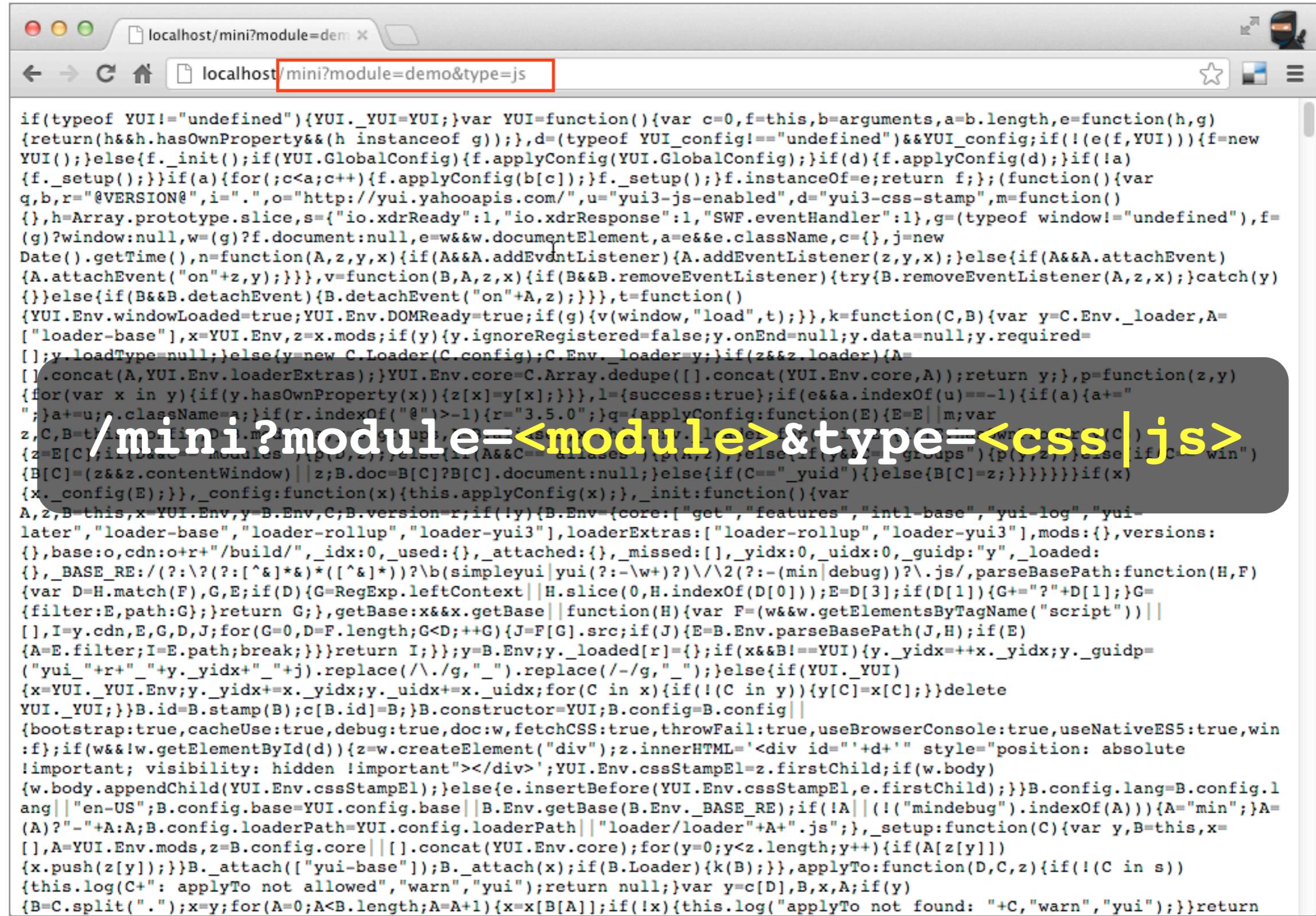
```

1 <?xml version="1.0" encoding="utf-8"?>
2 <mini xmlns:xi="http://www.w3.org/2001/XInclude">
3
4   <path type="css">$DEV_ROOT/assets</path> 寻找档案的路径, 可以设定多个
5   <path type="js">$DEV_ROOT/assets</path> $DEV_ROOT 是 VirtualHost 的环境变量
6
7   <module id="demo">
8     <file type="css" src="stylesheets/bootstrap.min.css" />
9     <file type="css" src="stylesheets/base.css" />
10    <file type="css" src="stylesheets/_filter.css" />
11    <file type="css" src="stylesheets/_list.css" />
12    <file type="css" src="stylesheets/_info.css" />
13    <file type="js" src="javascripts/yui3/build/yui/yui.js" />
14    <file type="js" src="javascripts/module/module.js" />
15    <file type="js" src="javascripts/module/module-manager.js" />
16    <file type="js" src="javascripts/_filter.js" />
17    <file type="js" src="javascripts/_list.js" />
18    <file type="js" src="javascripts/_info.js" />
19    <file type="js" src="javascripts/demo.js" />
20  </module>
21
22 </mini>

```

A red box highlights the `<path type="css">` and `<path type="js">` lines, with a note explaining they can be set multiple times and `$DEV_ROOT` is a environment variable for VirtualHost. Another red box highlights the entire `<module id="demo">` block, with an arrow pointing to the text "定义 demo 有哪些 CSS 与 JS 档" (Define what CSS and JS files are included in the demo module).

指定 type 与 module 即可自动合并且最小化



The screenshot shows a web browser window with the URL `localhost/mini?module=demo&type=js` highlighted by a red box. The page content is a large block of minified JavaScript code for the YUI library, demonstrating the result of the specified module and type parameters.

/mini?module=<module>&type=<css|js>

```

if(typeof YUI!="undefined"){YUI._YUI=YUI;}var YUI=function(){var c=0,f=this,b=arguments,a=b.length,e=function(h,g)
{return(h&&h.hasOwnProperty&&(h instanceof g));},d=(typeof YUI_config==="undefined")&&YUI_config;if(!(e(f,YUI))){f=new
YUI();}else{f._init();}if(YUI.GlobalConfig){f.applyConfig(YUI.GlobalConfig);}if(d){f.applyConfig(d);}if(!a)
{f._setup();}if(a){for(;c<a;c++){f.applyConfig(b[c]);}f._setup();}f.instanceOf=e;return f;};(function(){var
q,b,r="@VERSION@",i=".,";o="http://yui.yahooapis.com/";u="yui3-js-enabled",d="yui3-css-stamp",m=function()
{},h=Array.prototype.slice,s={"io.xdrReady":1,"io.xdrResponse":1,"SWF.eventHandler":1},g=(typeof window!="undefined"),f=
(g)?window:null,w=(g)?f.documentElement:e=w&&w.documentElement,a=e&&e.className,c={},j=new
Date().getTime(),n=function(A,z,y,x){if(A&&A.addEventListener){A.addEventListener(z,y,x);}else{if(A&&A.attachEvent)
{A.attachEvent("on"+z,y);}},v=function(B,A,z,x){if(B&&B.removeEventListener){try{B.removeEventListener(A,z,x);}catch(y)
{}}else{if(B&&B.detachEvent){B.detachEvent("on"+A,z);}}},t=function()
{YUI.Env.windowLoaded=true;YUI.Env.DOMReady=true;if(g){v(window,"load",t);}},k=function(C,B){var y=C.Env._loader,A=
["loader-base"],x=YUI.Env,z=x.mods;if(y){y.ignoreRegistered=false;y.onEnd=null;y.data=null;y.required=
[];y.loadType=null;}else{y=new C.Loader(C.config);C.Env._loader=y;}if(z&&z.loader){A=
[].concat(A,YUI.Env.loaderExtras);}YUI.Env.core=C.Array.dedupe([].concat(YUI.Env.core,A));return y;},p=function(z,y)
{for(var x in y){if(y.hasOwnProperty(x)){z[x]=y[x];}}}},l={success:true};if(e&&a.indexOf(u)==-1){if(a){a+="
";}a+=u;s.className=a;}if(r.indexOf("@")>-1){r="3.5.0";}q=applyConfig:function(E){E=E||m;var
z,C,B=t.isPlainObject,E.isPlainObject;var y=YUI.Env;if(y.loader){var r=y.loader.getModulePath(C)
{z=E[C];if(!z){var modules=p(B,z);}}else{if(A&&C=="aliases"){p(A,z);}}else{if(f,y&&f.groups){p(y,z);}}else{if(C=="win")
{B[C]=(z&&z.contentWindow)||z;B.doc=B[C]?B[C].document:null;}else{if(C=="_yuid"){}}else{B[C]=z;}}}}});if(x)
{x._config(E);},_config:function(x){this.applyConfig(x);},_init:function(){var
A,z,B=this,x=YUI.Env,y=B.Env,C=B.version;r;if(!y){B.Env.core:["get","features","intl-base","yui-log","yui-
later","loader-base","loader-rollup","loader-yui3"],loaderExtras:["loader-rollup","loader-yui3"],mods:{},versions:
{}},base:o,cdn:o+r"/build/",_idx:0,_used:{},_attached:{},_missed:[],_yidx:0,_uidx:0,_guidp:"y",_loaded:
{},_BASE_RE:/(?:\?(\?:[^&]*&)*([^\&]*))?\b(simpleyui|yui(?:-\w+)?)/\2(?:-(min|debug))?\.\js/,parsebasePath:function(H,F)
{var D=H.match(F),G,E;if(D){G=RegExp.leftContext||H.slice(0,H.indexOf(D[0]));E=D[3];if(D[1]){G+="?" +D[1];}G=
{filter:E,path:G};}return G;},getBase:x&&x.getBase||function(H){var F=(w&&w.getElementsByTagName("script"))||
[],I=y.cdn,E,G,D,J;for(G=0,D=F.length;G<D;++G){J=F[G].src;if(J){E=B.Env.parsebasePath(J,H);if(E)
{A=E.filter;I=E.path;break;}}}}return I;};y=B.Env;y._loaded[r]={};if(x&&B!==YUI){y._yidx++&&x._yidx;y._guidp=
("yui_"+r+"_"+y._yidx+"_"+j).replace(/\./g,"_").replace(/-/g,"_");}else{if(YUI._YUI)
{x=YUI._YUI.Env;y._yidx++&&x._yidx;y._uidx++&&x._uidx;for(C in x){if(!(C in y)){y[C]=x[C];}}delete
YUI._YUI;}}B.id=B.stamp(B);c[B.id]=B;B.constructor=YUI;B.config=B.config||
{bootstrap:true,cacheUse:true,debug:true,doc:w,fetchCSS:true,throwFail:true,useBrowserConsole:true,useNativeES5:true,win
:f};if(w&&!w.getElementById(d)){z=w.createElement("div");z.innerHTML='<div id="'+d+'" style="position: absolute
!important; visibility: hidden !important"></div>';YUI.Env.cssStampEl=z.firstChild;if(w.body)
{w.body.appendChild(YUI.Env.cssStampEl);}else{e.insertBefore(YUI.Env.cssStampEl,e.firstChild);}}B.config.lang=B.config.l
ang||"en-US";B.config.base=YUI.config.base||B.Env.getBase(B.Env._BASE_RE);if(!A||!("mindebug").indexOf(A)){A="min";}A=
(A)?"-"+A:A;B.config.loaderPath=YUI.config.loaderPath||"loader/loader"+A+".js";,_setup:function(C){var y,B=this,x=
[],A=YUI.Env.mods,z=B.config.core||[].concat(YUI.Env.core);for(y=0;y<z.length;y++){if(A[z[y]])
{x.push(z[y]);}}B._attach(["yui-base"]);B._attach(x);if(B.Loader){k(B);},applyTo:function(D,C,z){if(!(C in s))
{this.log(C+": applyTo not allowed","warn","yui");return null;}var y=c[D],B,x,A;if(y)
{B=C.split(".");x=y;for(A=0;A<B.length;A=A+1){x=x[B[A]];if(!x){this.log("applyTo not found: "+C,"warn","yui");}}return
}}
```

没有 Mini 时的情况

两岸三地的 GitHub 開發者 地區: 中國大陸 語言: 全部 Find

Elements Resources Network Sources Timeline Profiles Audits Console

Name Path	Method	Status Text	Type	Initiator	Size Content	Time Latency	Timeline	3.53s	5.29s	7.06s	8.82s	10.59s
bootstrap.min.css /github-chinese-developer	GET	200 OK	text/css	/github-chinese-developer Parser	93.69KB 93.34KB	549ms 507ms						
base.css /github-chinese-developer	GET	200 OK	text/css	/github-chinese-developer Parser	491B 137B	544ms 506ms						
_filter.css /github-chinese-developer	GET	200 OK	text/css	/github-chinese-developer Parser	675B 320B	545ms 526ms						
_list.css /github-chinese-developer	GET	200 OK	text/css	/github-chinese-developer Parser	2.12KB 1.77KB	545ms 518ms						
_info.css /github-chinese-developer	GET	200 OK	text/css	/github-chinese-developer Parser	651B 296B	543ms 503ms						
yui-min.js yui.yahooapis.com/3.6.0/l	GET	200 OK	application/javascript	/github-chinese-developer Parser	25.32KB 81.98KB	547ms 480ms						
module.js /github-chinese-developer	GET	200 OK	application/javascript	/github-chinese-developer Parser	7.82KB 7.46KB	936ms 931ms						
module-manager.js /github-chinese-developer	GET	200 OK	application/javascript	/github-chinese-developer Parser	12.90KB 12.54KB	634ms 569ms						
demo.js /github-chinese-developer	GET	200 OK	application/javascript	/github-chinese-developer Parser	593B 226B	858ms 853ms						
_filter.js /github-chinese-developer	GET	200 OK	application/javascript	/github-chinese-developer Parser	2.02KB 1.66KB	635ms 628ms						
_list.js /github-chinese-developer	GET	200 OK	application/javascript	/github-chinese-developer Parser	6.01KB 5.65KB	634ms 587ms						
_info.js /github-chinese-developer	GET	200 OK	application/javascript	/github-chinese-developer Parser	1.19KB 848B	634ms 569ms						

Documents Stylesheets Images Scripts XHR Fonts WebSockets Other

透过 Mini 可以大幅减少请求数量

兩岸三地的 GitHub 開發者 地區：中國大陸 語言：全部 Find

The screenshot shows a GitHub developer website interface. On the left, there's a large profile picture of Jeffrey Zhao. To the right, there are several smaller profile cards:

- Jeffrey Zhao**: 20 repos / 524 followers
- lifesinger**: 3 repos / 374 followers
- kissyteam**: 9 repos / 322 followers
- Jackson Tian**: 49 repos / 280 followers
- sofish**: 7 repos / 272 followers
- fengmk2**: 61 repos / 253 followers
- Caleb Troughton**: 12 repos / 227 followers
- Shaofei Cheng**: 17 repos / 206 followers

Below the profiles, a browser's developer tools Network tab is visible, showing network requests. Two requests for files named 'mini' are highlighted with a red box:

Name	Method	Status	Type	Initiator	Size	Time	Timeline
Path		Text			Content	Latency	
/github-chinese-developer	GET	200 OK	text/html	Other	4.33KB 4.06KB	49ms 48ms	3.88s
mini	GET	200 OK	text/css	/github-chinese-developer	95.12KB 94.83KB	4.30s 4.30s	5.83s
mini	GET	200 OK	text/javascript	/github-chinese-developer	345.07K 344.77K	89ms 80ms	7.77s

The 'Timeline' column shows the sequence of requests. The first 'mini' request (4.30s) is followed by the second 'mini' request (4.30s), which is then followed by the third 'mini' request (89ms). The total time from the first request to the last is 11.65s.

问题：寻找 Combo 机制的替代品

雅虎的 Combo 仅供内部使用、还好有人写了替代品！
我选择的是 Minify 这个工具，一样会帮我做**伺服器端的缓存、合并与档案最小化**

Minify (PHP5)

`http://<your host>/minify?f=`
`<模块 1 的对应路径>,`
`<模块 2 的对应路径>,`
`...`
`<模块 n 的对应路径>`

<http://code.google.com/p/minify/>

<https://github.com/mrclay/minify>

無阻塞載入

不用 <script/>、讓 JavaScript 載入的更順暢

ImageLoader

待捲動到再顯示圖檔

品質

- JSLint - 確認你的 JavaScript 程式碼是符合規範的。
- CSSLint - 確認你的 CSS 程式碼是符合規範的。