## 웹표준과 리치웹

시도우 웹표준화 추진팀 팀장 신현석



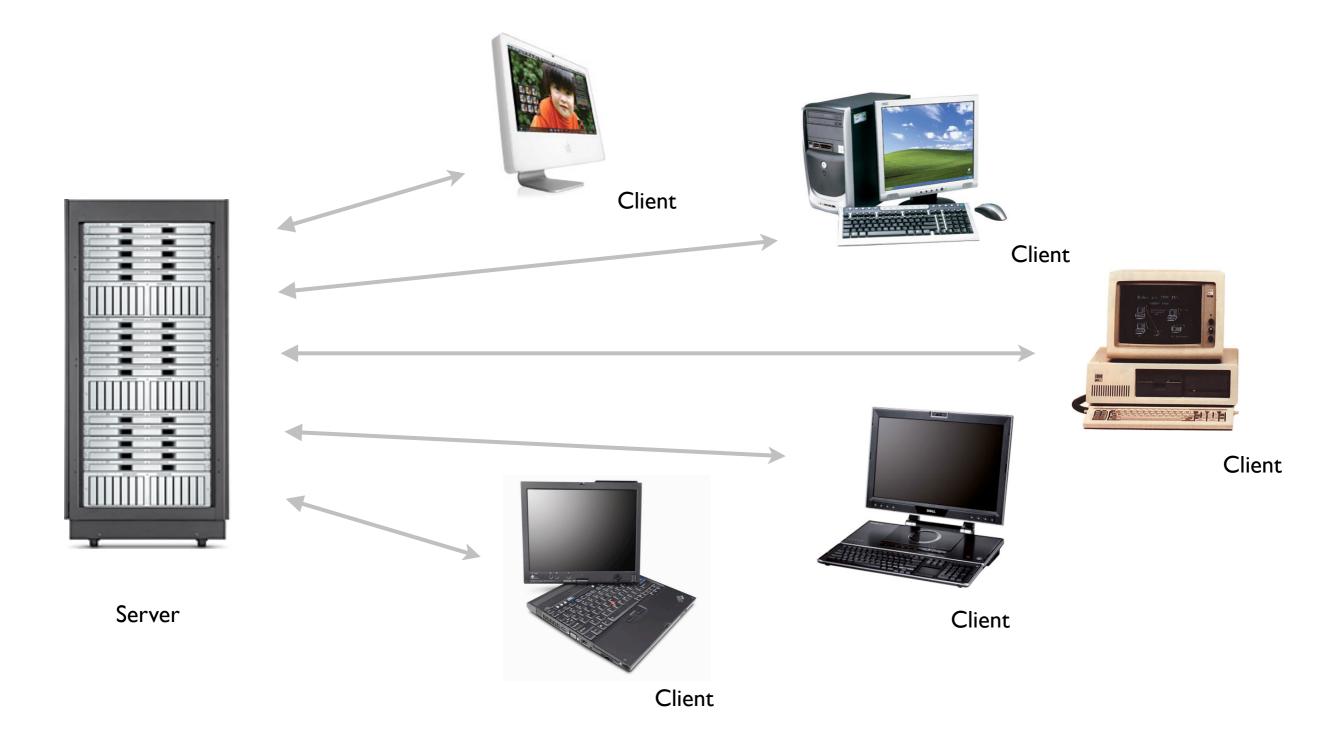


## 웹에서 RIA의 위치





## 서버와클라이언트





## 다양한 클라이언트















Spider



Device



## 레이아웃엔진

• Trident:





Gecko :







• Presto:



WebCore :





• KHTML:



XHTML, CSS, DOM, ECMAScript, XML, XSLT, SVG 등 표준 기술들일 브라우저 에서 구현하는 중요 한 구성요소

## 플러그인













## 웹과 다양한 사용자



## 다양한유저에이전트

- 다양한 유저에이전트 간의 호환성을 항 상 염두에 두어야 함
- 컨텐츠가 기기, 때와 장소에 상관없이 소비될 수 있음
- 웹브라우저에서만 웹을 이용하는 시대 는 지나고 있음





http://www.adobe.com/cfusion/knowledgebase/index.cfm?id=tn\_14159

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Adobe - TechNote: A comp...



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## **TechNote**

## A comprehensive list of supported Adobe Flash features, specific to each browser

## Adobe Flash Player Browser Support Matrix

The following is a list of browser versions and platforms, and the Adobe Flash features that each supports.

## Internet Explorer 7

Platform	Script-based Player detection	loadMovie	JavaScript*	External Interface
Windows XP	YES	YES	YES : Not functioning: GetVariable, TCallFrame, TCallLabel, TotalFrame	YES
Windows Vista	YES		YES : Not functioning: TCallFrame, TCallLabel, TotalFrame	YES

## Internet Explorer 6

Platform	Script-based Player detection	loadMovie	JavaScript*	External Interface
Windows XP	YES	YES	YES : Not functioning: GetVariable, TCallFrame, TCallLabel, TotalFrame	YES
Windows Vista	N/A	N/A	N/A	N/A

## TechNote Details

| Your Account | Contact | United States (Change)

ID: tn\_14159 Product(s): Flash Player

Platform: All

## Give Us Your Feedback How useful was this TechNote?

Not Useful

How can this TechNote be improved?

Maximum of 300 characters.

Send

Take a quick survey







http://forms.real.com/real/player/blackjack.html?src=realhome\_spmac\_bb\_0\_1\_1\_0\_0\_2\_0,011504in 🗖 🔍 Google

Real Legacy Software Archi...



## Real Legacy Software Archive

Welcome to the free player software archives. Some users have computers that do not meet system requirements for our current player and only older versions will work on their systems.

Note: These are old versions of our player software and in most cases they are no longer supported. For our latest RealPlayer, click here.

## Windows NT4.0 / 98 /ME / XP / 2000

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RealPlayer 10 system requirements RealOne Player Version 2 system requirements RealOne Player Version 1 system requirements RealPlayer 8 system requirements

RealPlayer 7 system requirements

Real Player G2 (version 6) system requirements

RealPlayer 5 system requirements

RealPlayer 4 system requirements

RealAudio Player 3 system requirements

RealJukebox 2 system requirements

RealJukebox 1 system requirements

## Windows 95

### Recommended

RealPlayer 8 system requirements

RealJukebox 2 system requirements

## Other Options

RealPlayer 7 system requirements

Real Player G2 (version 6) system requirements

RealPlayer 5 system requirements

RealPlayer 4 system requirements

RealAudio Player 3 system requirements

RealJukebox 1 system requirements

## Windows 3.1

### Recommended

RealPlayer 5 (16-bit) system requirements

Other Options

RealAudio Player 3 (16-bit) system requirements

**OS/2** 

## Mac OSX

## Recommended

RealPlayer 10 for Mac OSX system requirements

## Other Options

RealOne Player for Mac OSX system requirements

## Mac OS8 or OS9

## Recommended

RealPlayer 8 for Mac system requirements

## Other Options

RealPlayer 7 system requirements

Real Player G2 (version 6) system requirements

RealPlayer 5 system requirements

RealPlayer 4 system requirements

RealAudio Player 3 system requirements

## Mac OS7

## Recommended

RealPlayer 7 for Mac system requirements

### Other Options

Real Player G2 (version 6) system requirements

RealPlayer 5 system requirements

RealPlayer 4 system requirements

RealAudio Player 3 system requirements

## LOCALIZED PLAYERS

## RealPlayer 10

RealPlayer 10 (German) system requirements RealPlayer 10 (French) system requirements



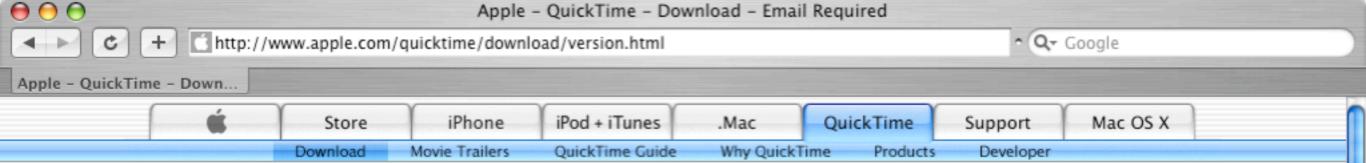


Mhttp://www.microsoft.com/windows/windowsmedia/player/10/readme.aspx#System

• Q+ Google

Readme for Windows Media...

Processor	A 233 megahertz (MHz) processor, such as an Intel Pentium II or Advanced Micro Devices (AMD) processor	A 1.5 gigahertz (GHz) processor or faster, especially if you intend to synchronize video files to your portable device
RAM	64 megabytes (MB)	512 MB or higher
Free hard disk space	100 MB	60 gigabytes (GB)
Optical drive	CD or DVD drive	CD drive for playing audio CDs  CD-RW drive for burning CDs  DVD drive for playing DVDs
Modem	28.8 kilobits per second (Kbps)	Active broadband connection
Sound card	16-bit sound card	24-bit sound card for playing High Definition Compatible Digita (HDCD) content  Compatible 5.1 multichannel audio sound card (for example, Creative Sound Blaster Live! or M-Audio Revolution 5.1) for playing multichannel audio content
Monitor	Super VGA (800 x 600) resolution	Same as required configuration or higher resolution
Video card	Video card with 64 MB of RAM (video RAM or VRAM) and DirectX generation	Video card with 256 MB of RAM or higher and DirectX 9.0b or later generation  For more information about DirectX, see the Microsoft DirectX Web site.
Sound output device	Speakers or headphones	5.1 multichannel speakers  For more information about device compatibility, see the documentation for your sound card.
Software	Microsoft ActiveSync (required only if you are using a Windows Mobile-powered Pocket PC or Smartphone)  For more information about the version of ActiveSync required for your device, see your portable device documentation.	Same as minimum configuration
Internet browser	Microsoft Internet Explorer 6 or Netscape 7.1	Microsoft Internet Explorer 6 Service Pack 2 or Netscape 7.1



## **QuickTime Version Availability**

Use this table to determine what version of QuickTime is currently available for your operating system and then check the system requirements.

Language	Mac OS 10.3.9 - 10.4.x	Windows 2000 Service Pack 4 or XP Service Pack 2	iTunes + QuickTime Windows 2000 Service Pack 4 or XP Service Pack 2
English	7.1.6	7.1.6	iTunes 7.1 + QuickTime 7.1.6
Chinese-Simplified	7.1.6	7.1.6	iTunes 7.1 + QuickTime 7.1.6
Chinese	7.1.6	7.1.6	iTunes 7.1 + QuickTime 7.1.6
Danish	7.1.6	7.1.6	iTunes 7.1 + QuickTime 7.1.6
Dutch	7.1.6	7.1.6	iTunes 7.1 + QuickTime 7.1.6
English(UK)	7.1.6	7.1.6	iTunes 7.1 + QuickTime 7.1.6
Finnish	7.1.6	7.1.6	iTunes 7.1 + QuickTime 7.1.6
French	7.1.6	7.1.6	iTunes 7.1 + QuickTime 7.1.6
German	7.1.6	7.1.6	iTunes 7.1 + QuickTime 7.1.6
Italian	7.1.6	7.1.6	iTunes 7.1 + QuickTime 7.1.6
Japanese	7.1.6	7.1.6	iTunes 7.1 + QuickTime 7.1.6
Korean	7.1.6	7.1.6	iTunes 7.1 + QuickTime 7.1.6
Norwegian	7.1.6	7.1.6	iTunes 7.1 + QuickTime 7.1.6
Russian	7.1.6	7.1.6	iTunes 7.1 + QuickTime 7.1.6
Spanish	7.1.6	7.1.6	iTunes 7.1 + QuickTime 7.1.6
Swedish	7.1.6	7.1.6	iTunes 7.1 + QuickTime 7.1.6







Mhttp://www.microsoft.com/silverlight/faq.aspx

~ Q- Google

Microsoft Silverlight: Light ...



## FREQUENTLY ASKED QUESTIONS



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## Silverlight

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FAO



By clicking Get Microsoft Silverlight you accept the Silverlight license agreement.

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## General questions

- What is Silverlight?
- Is Silverlight free?
- Is Silverlight the official name for "WPF/E"?
- What is the long-term goal or vision for Silverlight?
- What are the main features and benefits of Silverlight?
- How do Silverlight 1.0 Beta and Silverlight 1.1 Alpha differ?
- Can I deploy Silverlight-based applications with the CTP?
- Is there an expiration date for the Beta?
- Is Microsoft on schedule to ship Silverlight in the first half of this year?
- What features are available in the Silverlight 1.0 Beta?
- What features are available in the Silverlight 1.1 Alpha?
- Which platforms and browsers will Silverlight support?

Silverlight will support all major browsers on both Mac OS X and on Windows. Particular care is being taken to account for differences in platform and browser capabilities to ensure a consistent experience including experiences on FireFox, Safari, and Internet Explorer.

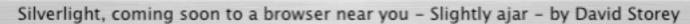
— What Macintosh OS versions and hardware will be supported?

Macintosh OS X 10.4.8 or later will be supported for both Power PC-based and Intel-based hardware via a Universal Binary.

- How will Silverlight be distributed by Microsoft?
- Is the installation experience of the Beta representative of what customers will see when released?
- Will I need more memory, a faster processor, or a better Graphics Processing Unit (GPU)?
- Is Microsoft considering support for additional operating systems?
- Which devices will be supported?

## Silverlight installation and Web site issue

Where can I go to install Silverlight?









http://my.opera.com/dstorey/blog/silverlight-coming-so-to-a-browser-near-you



RSS • Q- Google

Silverlight, coming soon to ...

OPERA @ POWERED

SIGN UP

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Opening the Web 1 site @ a time



開いた 열려있는 不限 Geöffnet Открыть の Ouvert Aperto Ope

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## Silverlight, coming soon to a browser near you

Thursday, 3. May 2007, 16:45:15 OpentheWeb, Apollo, Widgets, Silverlight

hings are hotting up in the rich media arms race. In the red corner we have Adobe, with Apollo (web technologies, Flash and Flex), while in the blue corner we have the new entrant from the Redmond Giant,

Silverlight (web technologies, XAML, .Net et al) — wow, these names really do sound like American Wrestlers. The W3C is also somewhere there in the mix with SVG and widgets 1.0. it could potentially be a bloody battle, and it is quite worrying for the web, as each of the two main players use their own propitiatory technologies, runtimes, codecs and developer tools. One has to use Visual Studio, or Expression studio on Windows to develop for Silverlight for example. Is this another example of the big guys trying to take control of the web again. After Mix, Ex-Microsoft Employee, Robert Scoble, posted about Silverlight, claiming Microsoft "rebooted the web".

As Silverlight runs in a browser, it is very important that Opera supports it.

We must be compatible with the web sites out there that will use this technology. I also think that it is important that Adobe have strong competition, so that it doesn't run away with a monopoly on rich media interfaces on the web, tying everyone to their own technologies and products. Silverlight has also already been demoed on Windows Mobile. Maybe this is the kick that Adobe needs to start pushing its development of Flash on mobiles and embedded devices. If Flash isn't there (or gets too outdated) maybe Microsoft will get there first.

I don't want to announce too much just vet, but as can be seen from this





Name: Location: Occupation: David Storey Norway Chief Web Opener More »

## May 2007

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Apr 2007

Jun 2007 🕏

Tans

- 사용성은 사용자의 경험을 바탕으로 하고 있음
- 리치웹이 모든 사용자에게 좋은 경험을 주는 것은 아님
- 사용자에게 익숙한 오래된 인터페이스 는 변화에 신중을 기해야 함

- Windows XP SP2, IE
- MAC OS X, Firefox
- MAC OS X, Safari
- MAC OS X, Opera
- Kubuntu, Konqueror

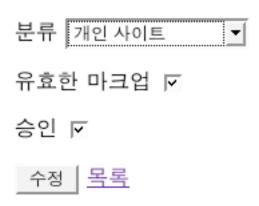
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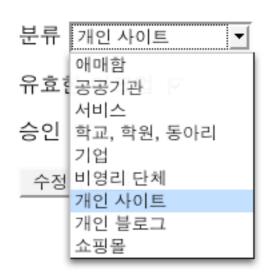
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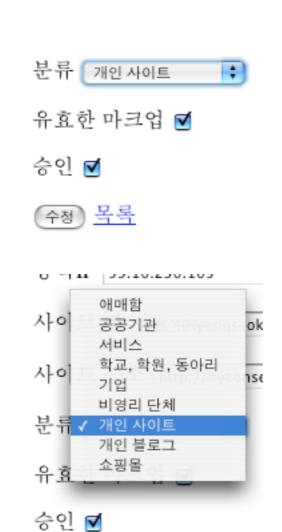
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•		







**Firefox** 



Safari

수정 목록



서비스 승인 학교, 학원, 동아리

비영리 단체

개인 블로그

기업

수정 개인 사이트

쇼핑몰

Opera









MAC OS X

Windows XP

Kubuntu



# 사용자 환경에 최적화된 인터페이스



## 플러그인과 웹

- 플러그인은 웹이 아님
- 웹은 기계가 이해할 수 있는 형태 제공 되어야 함 ex) google bot
- 사용자에게 선택할 수 있는 최대한의 경 로를 제공

## Graceful Degradation

- 최종 결과물을 먼저 달성한 후 이를 보완 하는 방법으로 단점을 극복하는 방법
- 대체 텍스트, 대체 콘텐츠 제공과 같은 방법이 대표적임



## Object 요소

## <object>는 하위의 컨텐츠를 대체 컨텐츠로 인식

## Hixie method (ie conditional comment)



## Progressive Enhancement

- 구성요소를 분리하여 기본 콘텐츠에 대한 접근성을 향상 시키는 방법
- 모든 사용자 다양성을 충족시킬 수 있도
   록 고안되어 있음
- 높은 접근성,검색엔진 최적화를 달성

## Progressive Enhancement

- 모든 기본 콘텐츠는 모든 브라우저로 접 근 가능해야 함
- 모든 기본 기능은 모든 브라우저에서 사용 가능해야 함
- 시멘틱 마크업으로 모든 콘텐츠를 표현
- 외부 CSS, 외부 Javascript로 부가적인 풍 부한 디자인/기능 표현



## 구조, 표현, 동작

ECMAScript (behavior)

**DOM Method** 

CSS (Presentation)

id/class, CSS Selector

Full functional XHTML (Structure)



## 구조, 표현, 동작

ECMAScript (behavior)

AJAX

**DOM Method** 

XML, DOM Method

Other RIAs

CSS (Presentation)

id/class, CSS Selector

**XML** 

Full functional XHTML/XML (Structure)







http://xtech06.usefulinc.com/schedule/detail/29





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XTech 2006: Hijax: Progres...











XTech 2006: "Building Web 2.0" – 16-19 May 2006, Amsterdam, The Netherlands

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## Hijax: Progressive Enhancement with Ajax

Jeremy Keith (Clearleft)

11:45 Tuesday May 16

→ Ajax day St. John 2

Progressive enhancement is a widely accepted methodology in CSS circles. By applying a presentation layer on top of an existing markup structure, developers can rest assured that content will still be accessible, even if CSS is disabled.

This same thinking is now being applied to JavaScript. Using a technique called unobtrusive JavaScript, event handlers are taken out of the markup and applied in external JavaScript files. This creates a behaviour layer that, similar to the presentation layer, can be removed without preventing access to the core content. The JavaScript, like the CSS, degrades gracefully.

Progressive enhancement can also be applied to Ajax. Unfortunately, most Ajax applications are built without any thought for graceful degradation: no Ajax, no functionality. At best, a separate, dumbeddown version is provided but that increases development time and cost.

It sounds paradoxical, but the best way to build an Ajax application is to build an old-fashioned website that uses guery strings and form data to transmit information to the server, which then returns an entire page. Then, using unobtrusive event handlers, intercept those links and form submissions and route them through the XMLHttpRequest object. The server can then return just a portion of the page instead of the whole page. This page fragment can then be inserted into the currently loaded page without the need for a page refresh.

By hijacking the regular functionality and replacing it with an enhanced Ajax version, you can be assured that your website will work with or without Ajax. In order for this technique - called Hijax - to work, your server-side architecture will need to be guite modular, capable of returning entire pages or

## XTech Schedule

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## Days

Tuesday May 16 Wednesday May 17 Thursday May 18 Friday May 19

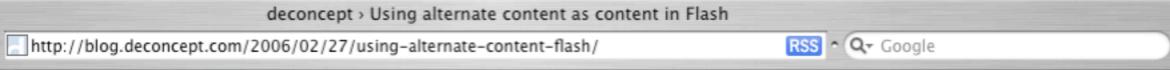
## **Topics**

Ajax day Applications Browser technology Core technologies Keynote Open data Tutorial

## Download schedule

iCal users Other users





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deconcept > Using alternate...

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## deconcept

## < FlashObject mailing list

A modern approach to Flash SEO >

February 27, 2006

## Using alternate content as content in Flash

Filed under: flash javascript flashobject @ 8:34 am

I've been going on and on about using progressive enhancement on your pages that use Flash ever since I released <a href="#FlashObject">FlashObject</a>. The idea is that you build your pages without Flash, then add in the Flash parts later using Javascript if the user has the correct version of the Flash player. One of the really cool side effects of doing this is that Google will then index your alternate content (Google doesn't know Javascript).

<u>Today I saw somone taking this a bit further</u>: They were using <u>sIFR</u> to embed a Flash movie on the page, and then passing in the replaced HTML content into the Flash movie as a flashvar.

Now this is nothing new - Claus Wahlers created <u>SEFFS</u> a while back that does just this (I think in his example he loaded the entire XHTML document), and sIFR does this but on a very small scale.

Up until today I never really saw much of a benefit to doing something like this. Usually your site would be run from a database anyway, so you could output your navigation and page content from your database as alternate content, and then use that same data again for the XML file that your Flash movies would read. But today I think I finally realized how cool this might be: Imagine removing all the server calls from your Flash movies when they request their XML configuration files, or imagine saving the user's bandwidth by not loading all that content twice.

## My Stuff

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## Nerds

Brandon Stone retards.org

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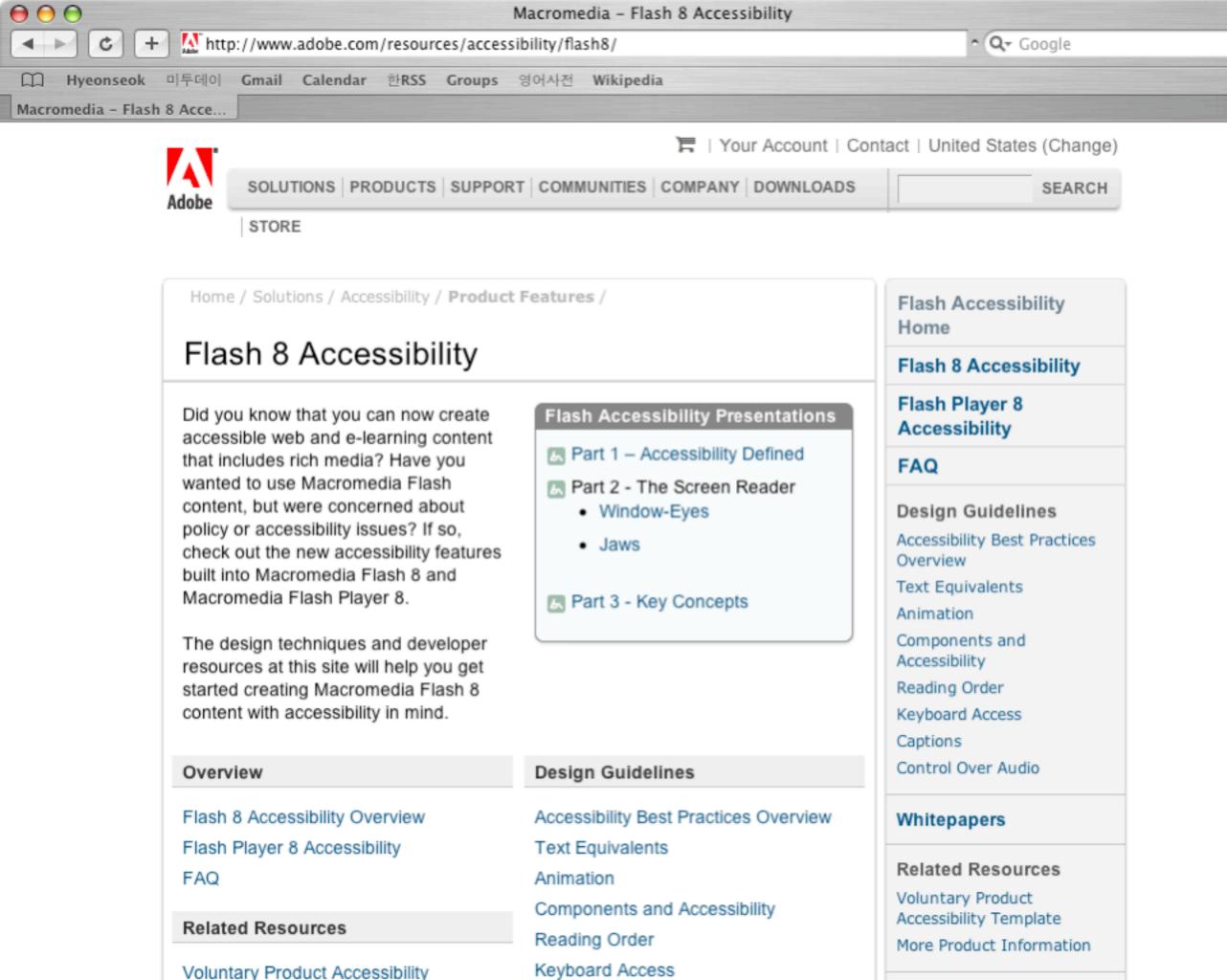
## UX와 함께 고려해야 할 접근성

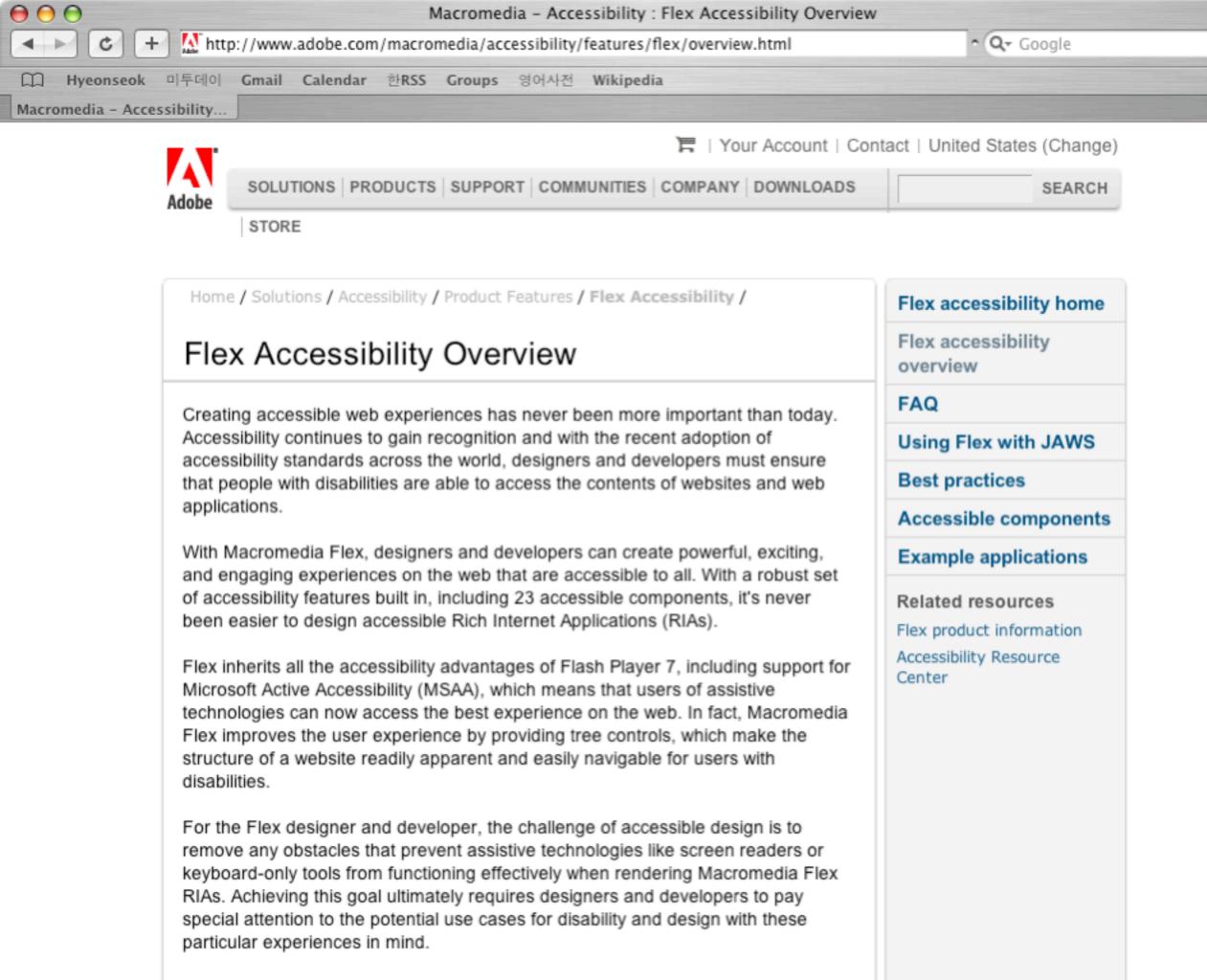


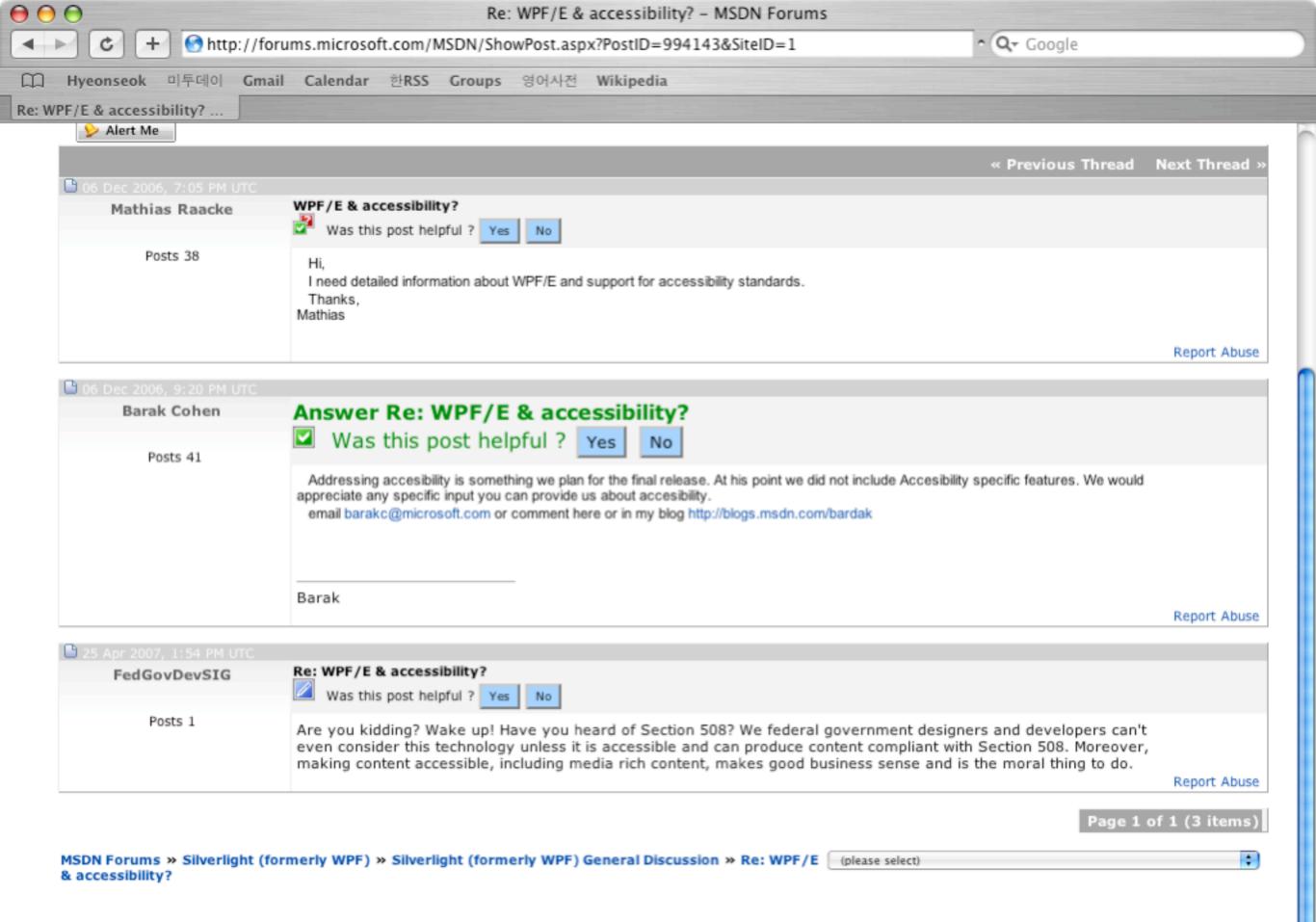


## 사용성과 접근성

- 사용성은 대상과 범위에 한계가 있음
- 접근성은 모든 대상,모든 범위를 포괄하 는 개념
- 웹은 접근성이 높아야 함
- 웹은 개방되어야 함







## 웹표준

- 웹표준은 웹의 접근성, 상호 운용성, 기기 독립성, 상위/하위 호환성 등을 높이기 위해서 고안 되었음
- 높은 품질을 가지고 있는 제품을 만들기 위한 가장 효율적인 수단

## RIA와 웹

- RIA가 웹을 대체할 수는 없음
- 현재까지의 웹과 같이 공존하는 방향을 모색해야 함
- 상황과 환경에 맞는 선택이 중요함

## http://hyeonseok.com hyeonseok@gmail.com



