

Open and accessible!

Hi, I am Chris.



Today I want to talk to you about my idea of accessibility.

I've been dealing with accessibility ever since I started web development.

And I am very much amazed about how many wrong ideas about accessibility are floating around.



Accessibility is not about complying with a law not to be sued.



Accessibility is also not about making sure you follow a standard and tick all the boxes.

Accessibility is about allowing access.



Accessibility is about not confusing people.



Accessibility is about warning people of dangers.



Accessibility is about seeing disabilities or technical constraint as an opportunity to enhance experiences for everybody.

When I talk to developers and designers about accessibility I hear one sentence a lot.

"Why should we do something for people with disabilities, how many users are we going to have that are blind anyways?"

One of my answers is:

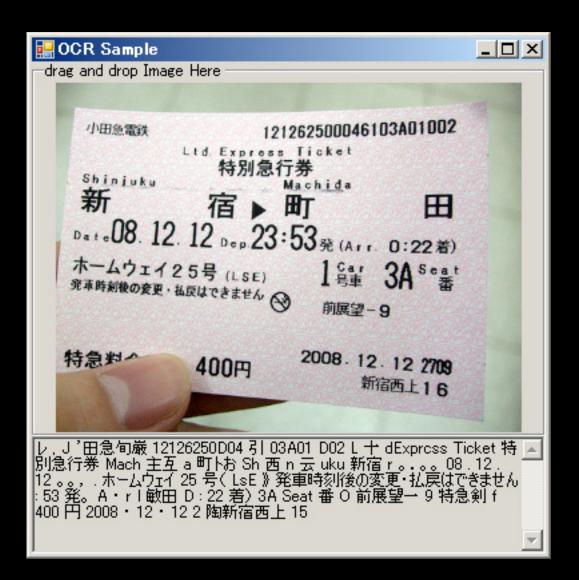
"Every day of your life you are using a product that was built for a disabled person and it makes your life much easier."

Can you guess what that is?



There are many more examples.

OCR scanning



Subtitles/Captions



Wheelchair ramps for luggage transport.



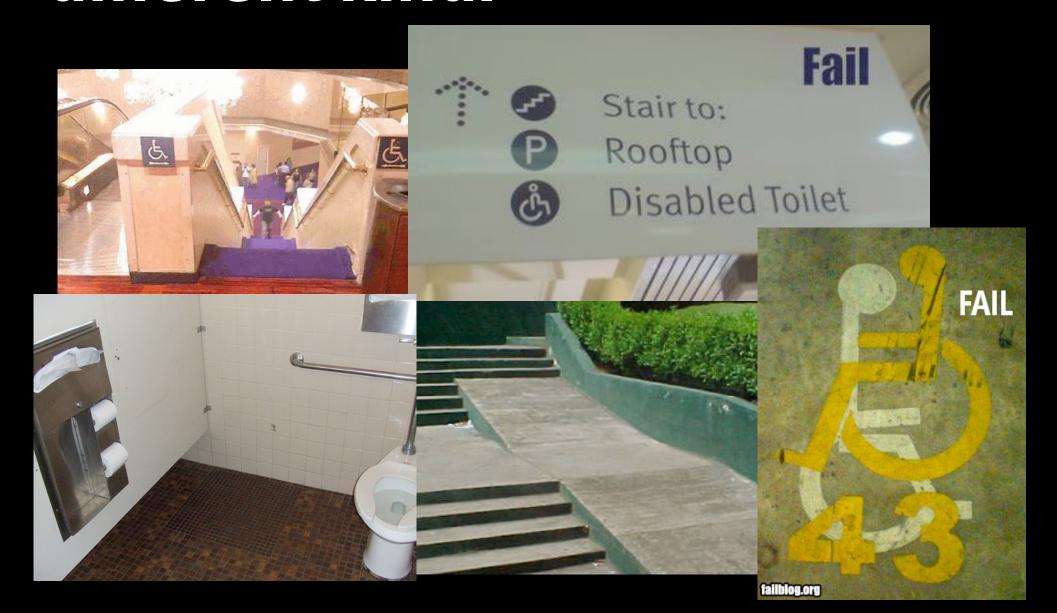
Would your life not be much harder without these?

Instead of seeing accessibility as this chance to build something great for everybody...

We normally tend to see it as an extra effort...

...something that needs to be done rather than something we want to do.

Which leads to results of a different kind.



We all are here to celebrate the idea of open software and practices.

Think Linux 🔄

Yet not many of us use our skills to *really* open the web to all.

When it comes to accessibility, we get confused and misguided.



So I am here today to tell you to first and foremost to not forget to have fun making things accessible.



Open source means collaborating and constantly improving.

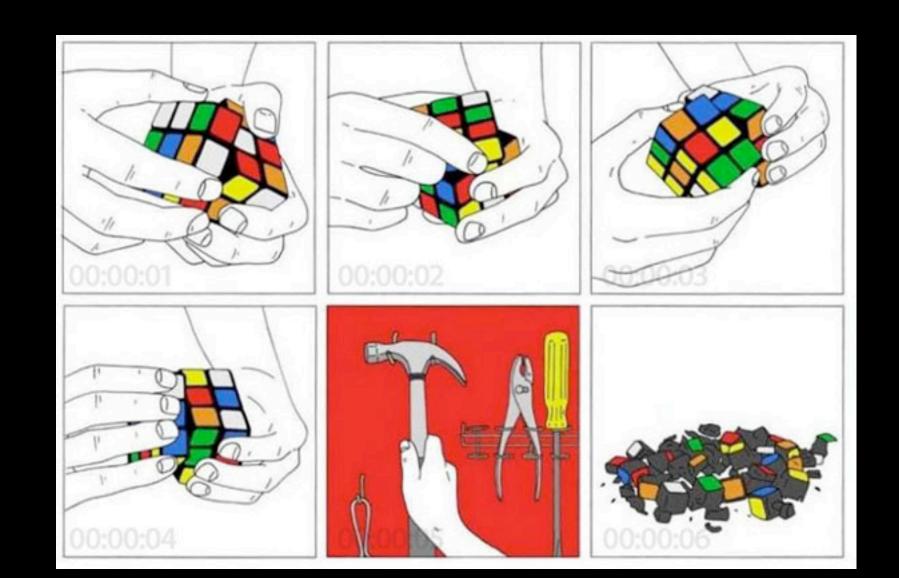
Something that is pretty alien to the accessibility world and guidelines right now.

A lot of guidelines and even laws get stuck talking about technical problems.



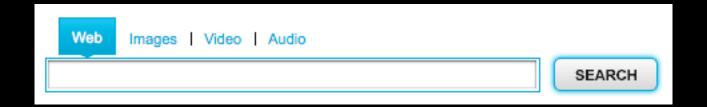


And fixing technical problems is what we do.

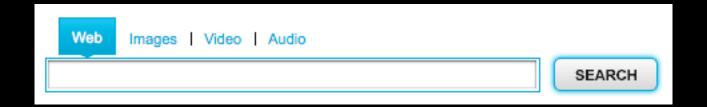


Let me show you some examples of making things more accessible.

One way: Keeping things simple



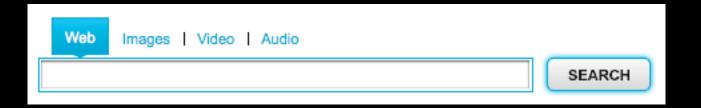
Search box on a Yahoo site.



JavaScript dependent links changing the action of the form.



How did we change this to work without JavaScript?



We analysed what users want to do here:

Define type of search, enter search term, submit form.



And used what allows them to do exactly that (and CSS to make it pretty)



How about this one?

Analyse what data you display, and find the easiest way to show it.

Then make it look the way you want it to.

TV Tonight

What's on Now

Find a channel

Switch display mode

- Grid
- Hourly table

Times shown here:

- 1, 20:00 3 hours earlier
- 2.21:00
- 3. 22:00 3 hours later

BBC 1

- 20:00-20:30 Rogue Traders
- 20:30-21:00 Traffic Cops
- 3. 21:00-22:00 The Hottest Place on Earth
- 4. 22:00-22:25 BBC News at Ten
- 22:25-22:35 Regional News and Weather
- 22:35-23:35 Question Time

BBC 2

- 1. 20:00-20:50 Natural World
- 2. 20:50-21:00 The Rabbits of Skomer
- 3. 21:00-22:00 Oil Spill The Exxon Valdez Disaster
- 4. 22:00-22:30 The Graham Norton Show
- 5. 22:30-23:20 Newsnight

ITV1

- 20:00-21:00 The Bill
- 21:00-22:00 The Truth about Super Skinny Pregnancies
- 3. 22:00-22:35 News at Ten and Weather
- 4. 22:35-23:40 Dexter

Channel 4

- 1, 20:00-21:00 10 Years Younger
- 2. 21:00-22:00 Cutting Edge
- 3. 22:00-23:05 Ramsay's Kitchen Nightmares USA

Five

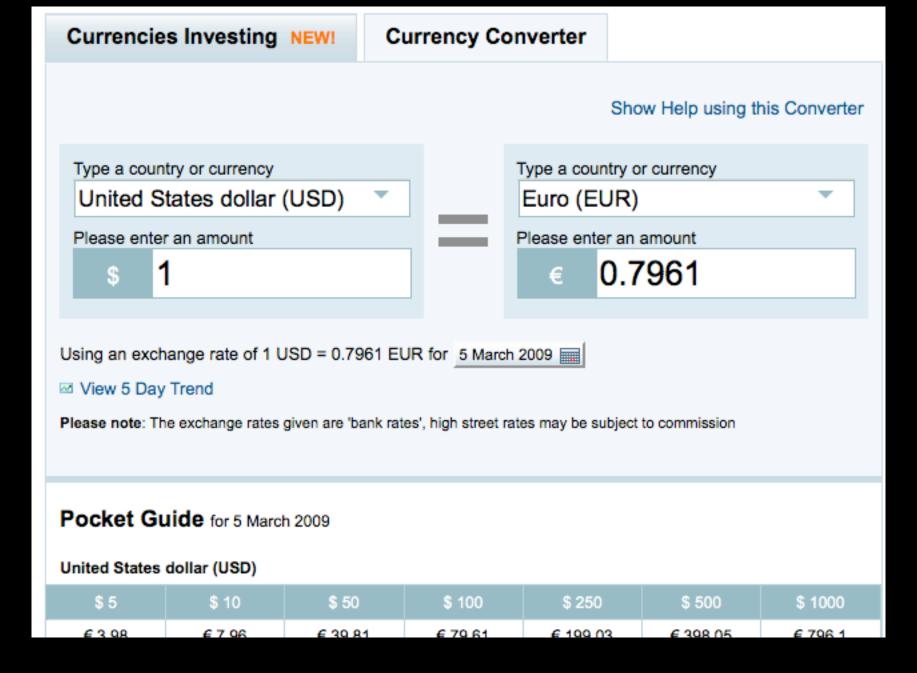
- 20:00-21:00 I Own Britain's Best Home 2009
- 2. 21:00-22:00 The Mentalist
- 3. 22:00-23:00 Law & Order: Criminal Intent

Sky Movies Premiere

- 1. 20:00-21:45 Semi-pro
- 21:45-23:30 I Am Legend

Another way:

Showing dedication to build an excellent accessible solution.



http://finance.yahoo.com/currency-converter? u#from=USD;to=EUR;amt=1

Yahoo! Developer Network Blog

JANUARY 21, 2009

Making the new Yahoo! Currency Converter accessible

When my fellow coworker, the user experience designer **Graham Beale**, and I started thinking about the new **Yahoo! Currency Converter** we had a few clear objectives:

- make it as easy as possible to use
- · make it work without page reloads
- make it fast
- make it accessible to everyone

For the last, but not at all least, point we were lucky and very happy to have **Artur Ortega** on our team. Artur is not only a brilliant backend engineer but also a screenreader user himself. Without his endless testing and suggesting workarounds, this application would not have been possible.

Currencies Center **Javascript** off Currencies Investing NEW Currency Converter Type a country or currency Type a country or currency US Dollar (USD) Euro (EUR) British Pound (GBP) Euro (EUR) convert US Dollar (USD) Japanese Yen (JPY) Chinese Yuan (CNY) ities", high street rates may be subject to commission Australian Dollar (AUD) Swiss Franc (CHF) Canadian Dollar (CAD) Thai Baht (THB) Indian Rupee (INR) Indonesian Rupiah (IDR) Hong Kong Dollar (HKD)

To arrive at the application you can use today, we went through an intense prototyping and user testing phase with many different iterations. Some of those iterations are still in the converter as parts of our progressive enhancement concept and all of them are based.

http://developer.yahoo.net/blog/archives/ 2009/01/accessible_converter.html

Another way:

Build with things that have accessibility features.

Web applications can be built using existing lego bricks of controls.

We've already created all of these bricks in libraries: Dojo, YUI, jQuery...



And now more and more of those get ARIA support for accessibility.

ARIA Plugins for YUI Widgets

October 2, 2008 at 8:12 am by Todd Kloots | In Accessibility, Development | 3 Comments

For YUI 2.6, a handful of widgets have examples illustrating how to use new YUI ARIA plugins. These plugins make it easy to use the WAI-ARIA Roles and States to make each widget more interoperable with assistive technologies (AT), such as screen readers, and in turn, more accessible to users with disabilities. For example, the following video illustrates how the YUI ARIA Plugin for Carousel improves the user experience of the new Carousel widget for users of screen readers:

Expert Health Advice



Using the Carousel ARIA Plugin @ Yahoo! Video

http://yuiblog.com/blog/category/accessibility/

Another way: Re-think your idea of the web.

Users see the web as an interface.







•

Developers have x-ray vision and see code

```
<label for="p"><input class="plong inputtext" type="text" id="p" name="p" accesskey="s"></label>
<cite></cite>
<div id="ySrchResult"></div>
<input type="hidden" name="fr" id="fr" value="yfp">
<input type="hidden" id="ySrchEi" name="ei" value="utf-8">
<input type="hidden" id="ySrchV" name="v" value="0">
<span class="srchwrap"><input type="submit" id="searchsubmit" class="srchbtn" value="網頁搜尋"></span>
</span>
</fieldset></form>
<div class="sboxbtm">
<div id="srchkw"><h3>熱門: </h3><a href="srchkw/1/01/*http://tw.search.yahoo.com/sear
<span class="srchpromo"><span class="kp">
<a href="srchkw/kp/01/*http://tw.lifestyle.yahoo.com/search/srp combo.html?p=%E9%A3%BE%E5%93%81&addr=%E5%8F%
</span>|<a href="srchkw/buzz/*http://tw.buzz.yahoo.com/">搜尋榜</a></span>
</div><div id="yoptions"><div class="panel off">
<span class="trigger">頁面選擇</span>
<div class="panelin">
<span class="shadow1"><span class="shadow2">
<div class="bd">
<h3>顏色</h3>
ul>
class="def"><a href="#">藍色系</a>
class="tasteful"><a href="#">紫色系</a>
class="sweet"><a href="#">粉紅系</a>
class="fresh"><a href="#">綠色系</a>
class="sunny"><a href="#">黄色系</a>
class="cool"><a href="#">灰色系</a>
<a class="pgswitch" href="page/w/*http://tw.yahoo.com/goto.php?i=ss&t=1555455391">寬窄頁面切換</a>
</div>
</span></span>
```

I moved even further and found my own idea of the web.



Companies provide us with APIs and web services to get to the data behind the interface.

We can use these to build accessible interfaces to these systems.





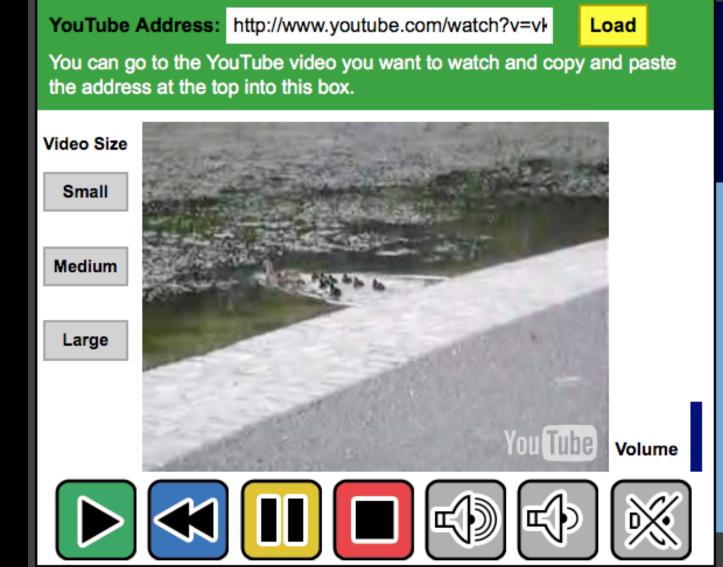
Statistics & Data

Video Responses (0)

Sporing Duck

Post a Video Response

camomanbg



Use this box to search for videos on YouTube you are interested in, or choose a video from your playlist.

Search

Go

Search Results / Your Playlist

Officer Stops Rush Hour Traffic for Ducks Crossing

Duck and 9 ducklings

It had to be done, and I am sorry

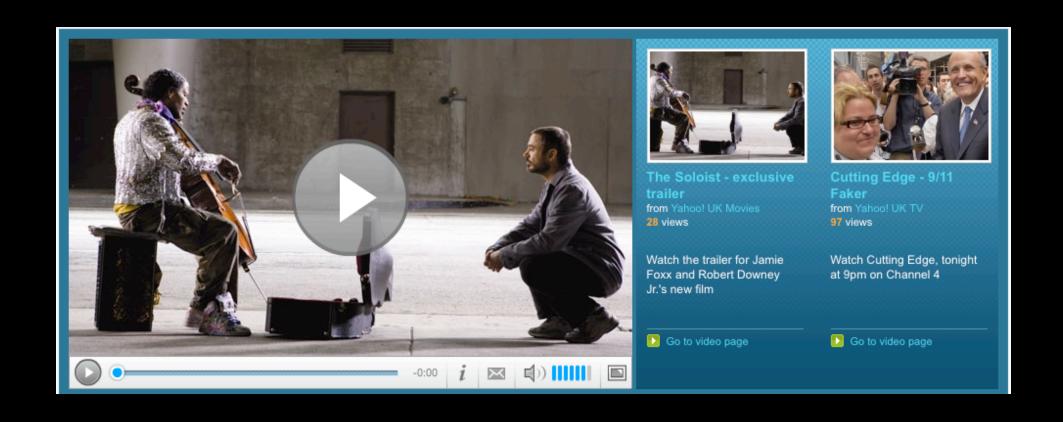
Panda Cubs On A Slide

A deaf choir singing a song in sign language

© 2008 by Chris Heilmann, documentation and help is here.

http://icant.co.uk/easy-youtube/?http://
www.youtube.com/watch?v=vkdZmi85gxk

What we learn there we can feed back to other people who have similar interfaces...



http://uk.video.yahoo.com/

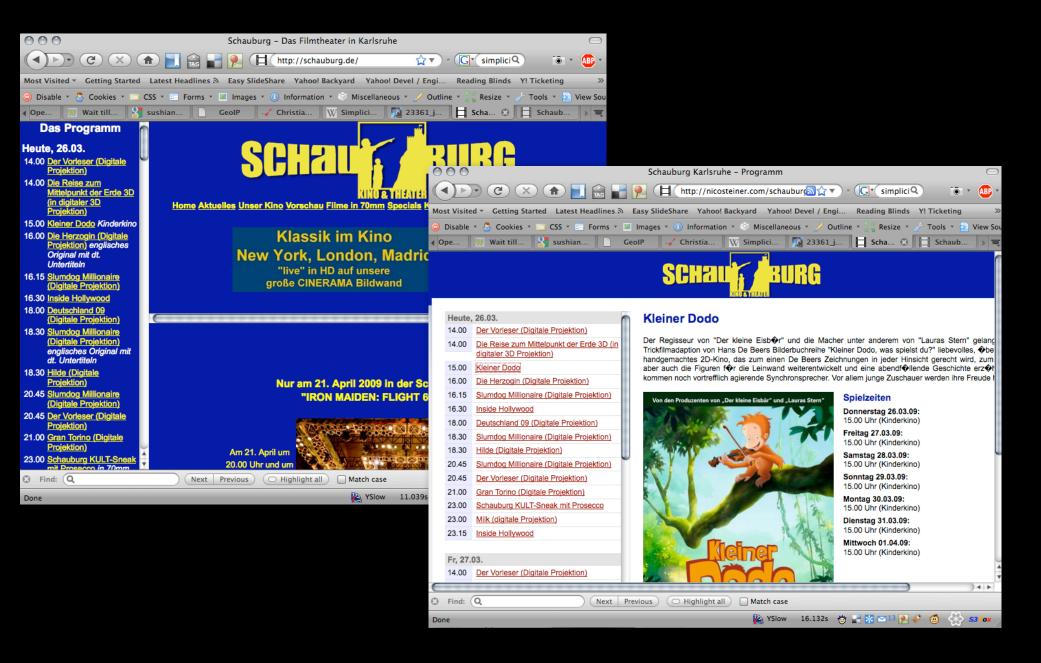
...which results in much more accessible new versions.



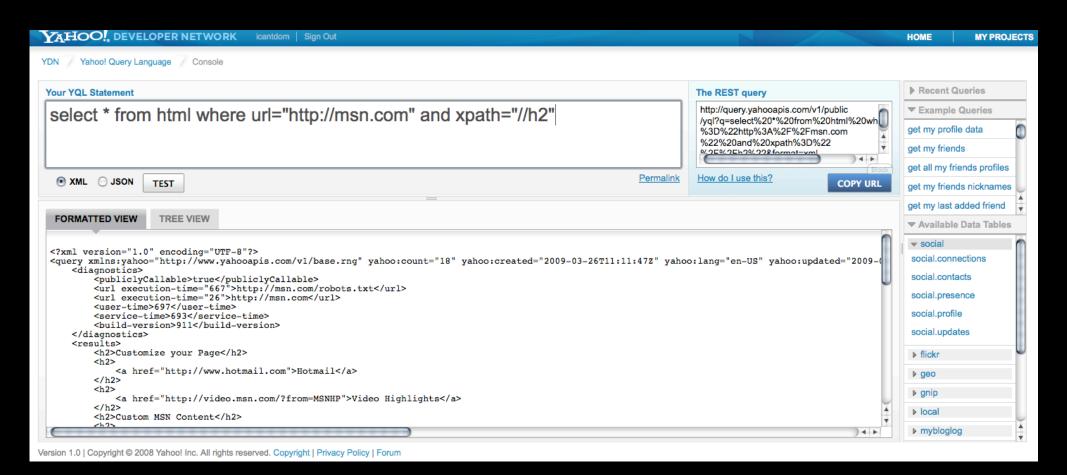
Player Controls

- Play/Pause Video
- Seek Reverse
- Seek Forward
- Replay Video
- Volume Down
- Volume Up

This can be done even with sites that do not have APIs.



http://www.nicosteiner.de/archives/118-YQL,-YUI-und-Yahoo!-Pipes.html



http://developer.yahoo.com/yql/console/

What we need is real information about what barriers people face when going online.

And I have started collecting this information...

http://scriptingenabled.org/presentations/

Antonia Hyde on learning disabilities

Antonia Hyde explained to the audience the impact of web design on people with learning disabilities. There is not enough data out there on user testing covering learning disabilities – this was a very welcome exception. Antonia also pointed out the necessity of collaboration as the first and foremost mean of building systems that work, going into detail about our collaboration on building easy-youtube.



Online Content for People with Learning Disabilities: Opening Doors

Read "Online Content for People with Learning Disabilities: Opening Doors" with Easy SlideShare

Watch "Online Content for People with Learning Disabilities: Opening Doors" right here, right now

Jonathan Hassell on Dyslexia



Jonathan Hassell of the BBC did a joint presentation with Phil Teare on the impacts and symptoms of dyslexia on web design and usability. Jonathan goes through the results of a BBC research and gives some tips on how to not block out dyslexic users completely.



Scripting Enabled - Ionathan Hassell on Dyslexia

Jonathan Hassell, head of the BBC accessibility on Dyslexia, its numbers and the effects on web design. Read "Scripting Enabled – Jonathan Hassell on Dyslexia" with Easy SlideShare

Kath Moonan - Why I hate the interweb



Kath Moonan of Abilitynet showed in her presentation user research with users with disabilities and how frustrated people can get by barriers that just are not necessary. There is a lot of good content in this one, make sure to go through all of it.



Why I Hate The Interweb - Kath Moonan at Scripting Enabled

Kath Moonan's presentation at Scripting Enabled in London, September 2008. She covers the outcome of research done by Abilitynet with people with visual impairments and web sites.

Read "Why I Hate The Interweb - Kath Moonan at Scripting Enabled" with Easy SlideShare

Denise Stephens at Scripting Enabled



Denise Stephens did a wonderful presentation on how the world is in her eyes and senses and what problems she encounters online suffering from MS. There are some good tips there but in general we got a great insight into good interfaces being about adaptability more than anything else.

Enabled by Design meets Scripting Enabled: Technology + Good Dasign ... Scripting Enabled

Enabled by Design meets Scripting Enabled

Denise Stephen's presentation at http://scriptingenabled covering the symptoms of MS and how inclusive web design can help make it easier to surf the web.

Read "Enabled by Design meets Scripting Enabled" with Easy SlideShare

...and invited friends to use it to build more examples of alternative, accessible interfaces.



Scripting Enabled Hacking the web to be more accessible

The conference itself is an open idea, you can do one here if you want:

http://scriptingenabled.org/host-your-own-scripting-enabled/

Things that need much more fixing is rich content: music and videos.

Especially video needs more solutions for captioning.

What we need are simple interfaces that make sense and are fun to use.



You have the tools available for you.





version 2.77a.20080901

Audio for Javascript

Plain English Web 2.0-speak ZOMG WEB 3.0

SoundManager 2 is an attempt at providing the sound API which Javascript has been missing. It's a Javascript library which wraps and extends Flash's sound capabilities, bringing cross-platform audio functionality to Javascript.

Demos

Less Talk, More Show.

Some examples of Javascript-driven sound, and applications implementing SoundManager 2:

"Page as a playlist" Playlist w/debug output

Muxtape.com-style UI example, list of playable links with loading/progress/timing display and controls

"Make MP3 links playable in-place"

A simple way to play MP3 links "in-place" on a page, easily skinned with CSS.

isAMP MP3 Player Alpha isAMP w/debug output

Experimental MP3 player demo app / API test suite.

Discussion / Support

buffering timeout 5 days

SoundManager2 and 2 days
beforeunload

How do I preload a song? 29 days
implement a download ~ 1 month
link/button

Sound for Bookflip 8 days

Get Satisfaction support network

Shortcuts

Demos
Getting Started
Basic Use
Download
Requirements
Limitations
Debug Output
Revision History

http://www.schillmania.com/projects/soundmanager2/

People played already with this – pointing to a possible great solution. 0:19.596 - 0:22.400

Ano toki wa

mienakatta

Ima dakara

mieru mono

Tsukameba

kiete shimau

Fukasugite

susumenai mama

For video, there's the JW FLV Media Player.



JW FLV MEDIA PLAYER 4.1



last update: 21.08.2008 | print this page

Download Now	A word to RTMP users:
Your email address (No spam):	The 4.1 player introduces a new streamer flashvar, which must be set t your RTMP application. The file flashv should be set to only your FLV/MP4/M path (including the extension). Here's example.
I agree to the <u>noncommercial license</u> .	
Download JW FLV Media Player	For HTTP streaming, the streamer flashvar replaces streamscript. No functional changes.

Search this Site

	Go

.. or check the sitemap

Monetize your video



Using this, you can embed FLV videos easily into web sites and have an API to control them.

Using the right meta data, you can also add audio descriptions and captions.

Accessibility example

So a properly accessible video should contain captions and an audio description. Let's see how this works in a real-life example. The video below shows an excerpt from ITV's *Coronation Street*, as shown on the <u>RNIB website</u>:



http://www.jeroenwijering.com/?item=JW_FLV_Player

So here we are.

You can build accessible web applications.

You need the right communication.



Creativity and patience.



Dedication to get down to the source of things.



And other eager people to work with.



Thanks. Any questions?

Christian Heilmann

http://icant.co.uk

http://wait-till-i.com

http://scriptingenabled.org

http://twitter.com/codepo8



