DO THE RIGHT THING

ACCESSIBILITY AND INCLUSIVE DESIGN (WITH DRUPAL)

WELCOME

WELCOME

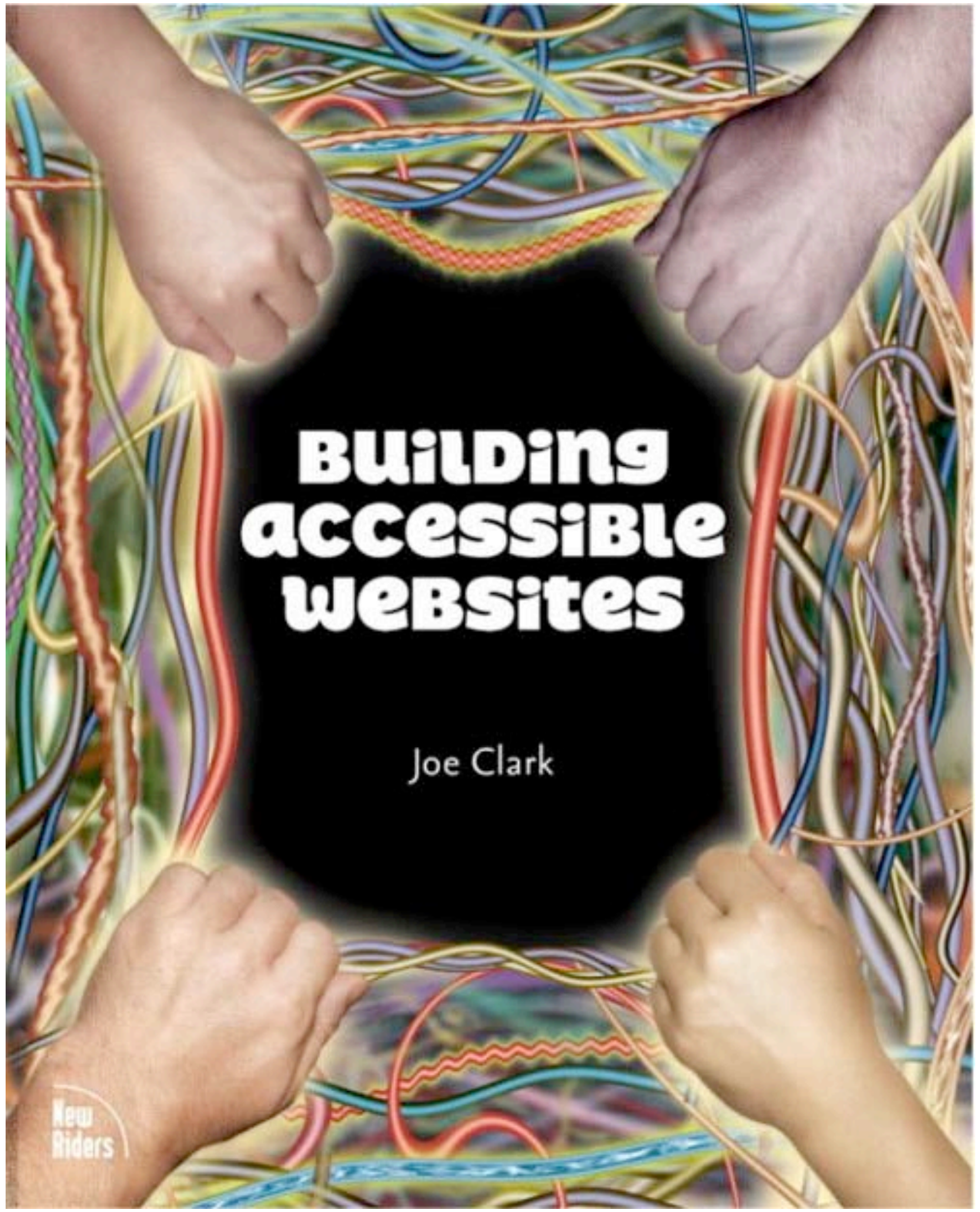
THANK YOU

Therefore

We specialize in adaptive designs, cross device content accessibility and open source technologies, such as Drupal CMS.

My name is Crispin Bailey.

I've been interested in Web Accessibility for over a decade.


Building accessible websites
Joe Clark
New Riders

@cspin

#a11y

#DAX

#D7AX/#D8AX

These slides will be posted online

And the video will be captioned

OVERVIEW

- What is Accessibility & Inclusive Design?
- Why should I care?
- How much is this gonna cost?
- Where do I start?
- What about Drupal?
- Where can I get more info?

The power of the Web is in its universality.
Access by everyone regardless of disability is an essential aspect.

- Tim Berners-Lee, W3C

Director and inventor of the World Wide Web

Accessibility

Accessibility is the degree to which a product, device, service, or environment is available to as many people as possible.

- Wikipedia

Inclusive design is design that is inclusive of the full range of human diversity with respect to ability, language, culture, gender, age and other forms of human difference.

- Inclusive Design Research Centre
at OCAD University

WHO ARE WE DOING THIS FOR?

- Anyone with a vision disability
- Anyone with a hearing disability
- Anyone with a mobility disability
- Anyone with a cognitive disability

WHO ELSE?

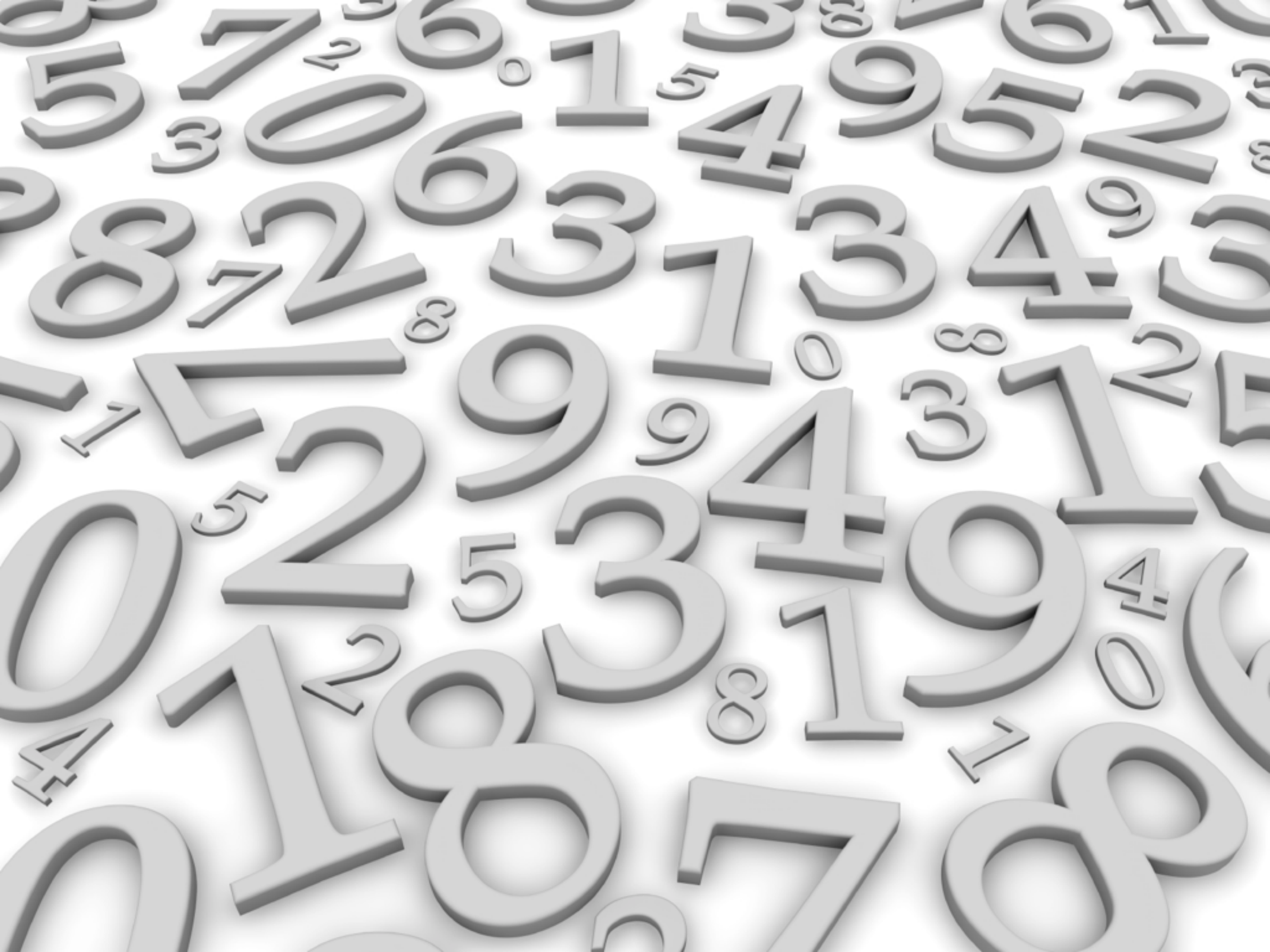
- older people
- people with low literacy or not fluent in the language
- people with low bandwidth connections or using older technologies
- new and infrequent users
- future generations of connected devices

SENSE

NaturalPoint

SAMSUNG
12:03
12:03
Wed, 29 Aug
Swipe screen to unlock
9:41 AM
Messages
Calendar
Photos
Camera
Videos
Maps
Weather
Passbook
Notes
Reminders
Clock
Stocks
Newsstand
iTunes
App Store
Game Center
Settings
Phone
Mail
Safari
Music

Google



SOME NUMBERS

About **4.4 million Canadians** (14.3%) reported having a disability in 2006.

Over 20% of them have a mobility or agility disability

5% of have a hearing disability

4.5% have a learning or memory disability

Over 3% have a vision disability

IT'S WORTH IT

In the United Kingdom, 75 per cent of the companies of the FTSE 100 Index on the London Stock Exchange do not meet basic levels of web accessibility, **thus missing out on more than $147 million in revenue**.

- UN Factsheet on Persons with Disabilities

WHY NOW?

Accessibility for Ontarians with Disabilities Act (2005)

Requirements for Websites for Public sector organizations, businesses and non-profit organizations (50+ staff):

- **by Jan 1, 2014**: New public websites and web content must conform with **WCAG 2.0 Level A**.
- **by Jan 1, 2021**: All public websites and web content posted after January 1, 2012, must conform with **WCAG 2.0 Level AA** *other than criteria 1.2.4 (captions) and 1.2.5 (pre-recorded audio descriptions).*

Penalties for major contraventions in both severity and history:

- corporations can be fined **up to $100,000 a day**
- individuals or unincorporated organizations can be fined **up to $50,000 a day**

DON’T BE A TARGET

In May 2005 the National Federation of the Blind (NFB), a non-profit organization representing blind people in the United States, notified Target Corporation that its website, **Target.com**, was not accessible to blind and visually impaired users.

Key issues cited were:

- a lack of alternative (alt) text on the site
- online purchases could not be completed without the use of a mouse
- image maps to show store locations were inaccessible
- many headings important to navigating the site were missing

Target Corporation would not commit to any action to remedy this.

In January 2006, the NFB filed a class action lawsuit.

In August 2008 Target Corporation settled the suit for **$6 million**.

The NFB was also awarded nearly **$4 million** to cover their legal fees and costs in addition to Target’s own legal costs.

Total cost to Target Corporation:

$10,000,000+

THE COST OF NOT DOING IT:

- Frustrating and alienating experience
- Brand damage
- Legal fees, fines and/or settlement payments
- Cost of retrofitting accessibility into your site

WHAT DOES DOING IT RIGHT COST?

It depends.

SOME ESTIMATES

Developing sites that meet WCAG 2.0 AA increases development costs by:

- **1% to 3% on simple sites** built with html and css (and little to no javascript)
- **3% to 6% on intermediate sites** built with html, css and an intermediate level of javascript
- **6% to 10% on heavy javascript sites** or flash sites

DON’T WAIT

Retrofitting costs 2 to 3 times more.

WHERE DO I START?

STEPS TO ACCESSIBILITY

1. Determine requirements (audio? video? images?)
2. Develop some rules (style guides and best practices)
3. Train staff (including design/dev partners)
4. Start implementing

WHERE THERE'S A WILL

THERE'S A WAI

WEB ACCESSIBILITY INITIATIVE (W3C/WAI)

http://www.w3.org/WAI/

WAI-WCAG 2.0 (Web Content Accessibility Guidelines)

60+ Guidelines affecting

- Content owners
- Designers
- Developers
- Business stakeholders

WAI-WCAG 2.0

4 Major Categories:

- Perceivable
- Operable
- Understandable
- Robust

WAI-WCAG 2.0

3 Levels of Compliance:

- A
- AA
- AAA

WAI-WCAG 2.0

An example:

1.2.1 Prerecorded Audio-only and Video-only

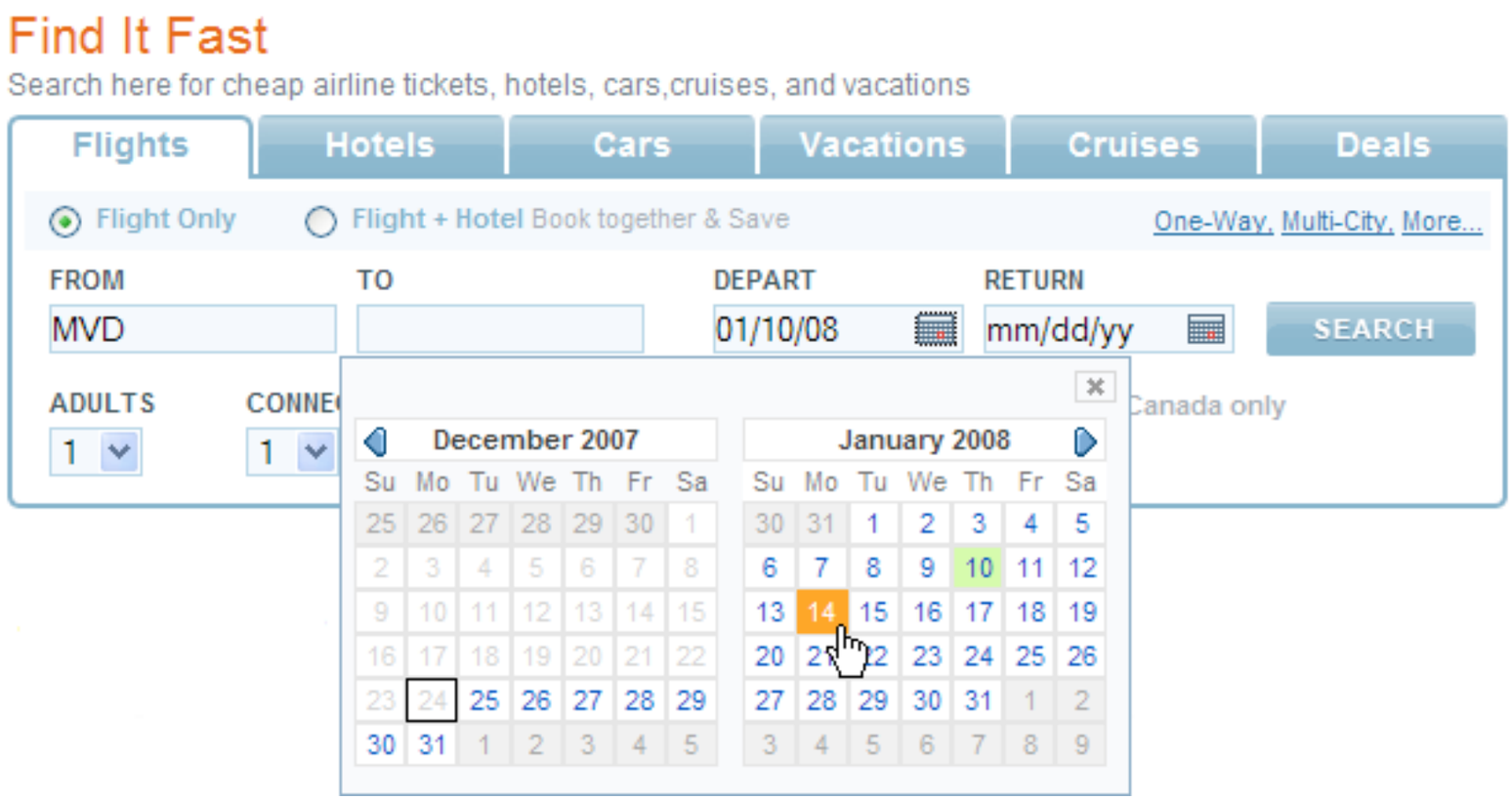
- A descriptive text transcript (including all relevant visual and auditory clues and indicators) is provided for non-live, web-based audio (audio podcasts, MP3 files, etc.).

- A text or audio description is provided for non-live, web-based video-only (e.g., video that has no audio track).

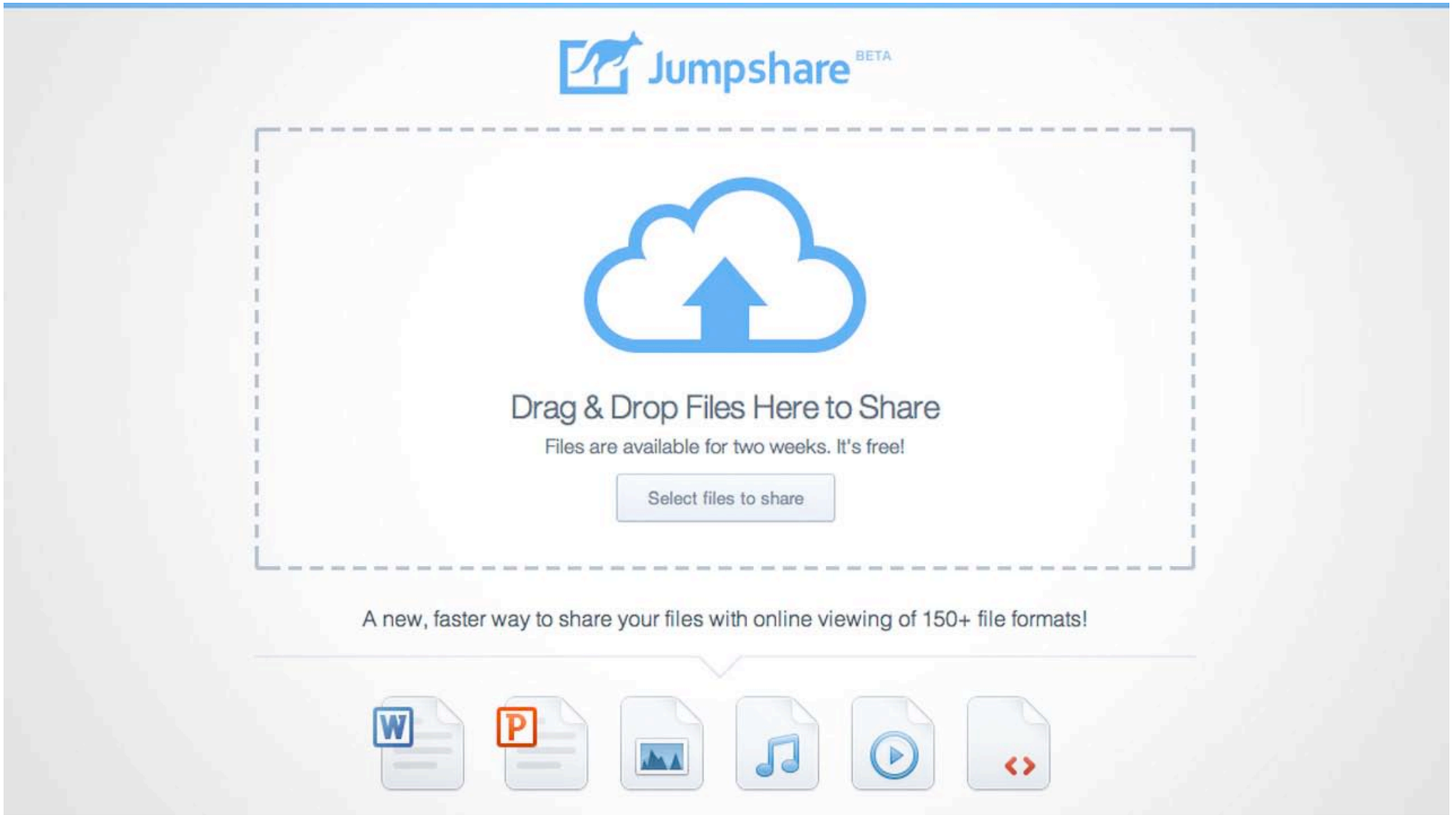
NO WAI!!!!

THIS GOES WAY BEYOND CONTENT...

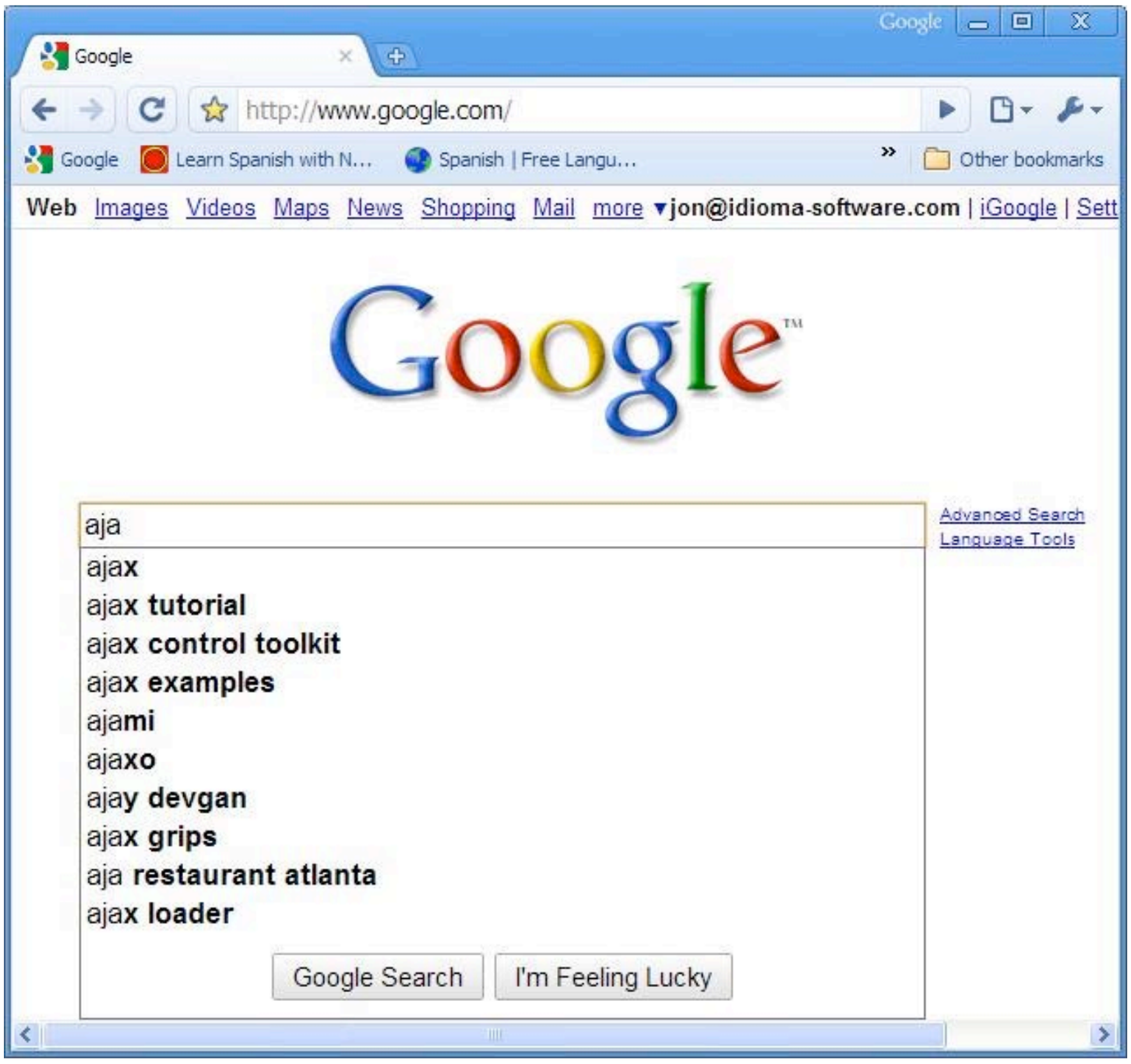
WHAT ABOUT WIDGETS?



Overlays and popups



Drag-and-drop



Dynamic Updates (AJAX)

Inbox

Sel	Msg	Status	Att	Pri	From	Subject	Date	Size
☐	1	✉	0	⌄⌄	John Smith	Trip to Florida	Mar 10	2K
☐	2	✉		⌄	Fred Jones	Lunch on Friday	Mar 12	1K
☐	3	✉	0		Jane Johnson	Proposal for you to review	Mar 13	12K
☐	4	✉		⌃	Bill Smith	Information on Weekend	Mar 19	122K
☐	5	✉	0	⌃⌃	Skip Roland	Opportunity to participate	Mar 20	4K

Sortable Grids

A·R·I·A

WAI-ARIA (Accessible Rich Internet Applications)

... defines a way to make Web content and Web applications more accessible to people with disabilities. It especially helps with dynamic content and advanced user interface controls developed with Ajax, HTML, JavaScript, and related technologies.

http://www.w3.org/WAI/ARIA/

WAI-ATAG 2.0 (Authoring Tool Accessibility Guidelines)

This specification provides guidelines for designing web content authoring tools that are both (1) more accessible to authors with disabilities and (2) designed to enable, support, and promote the production of more accessible web content by all authors.

http://www.w3.org/TR/ATAG20/

WHAT ABOUT DRUPAL?

DRUPAL IS ACCESSIBLE

As an inclusive community, **we are committed to making sure that Drupal is an accessible tool** for building websites that can also be accessed by people with disabilities.

- Drupal.org Accessibility statement

DRUPAL IS ACCESSIBLE

Drupal 7 is designed to support the development of sites that comply with WCAG 2.0 and ATAG 2.0.

ACCESSIBLE DRUPAL THEMES

The #D7AX (or #DAX) hashtag marks themes whose developers actively support accessibility improvements.

ACCESSIBLE DRUPAL MODULES

Look for the #D7AX (or #DAX) hashtag on the page of each module you download for your site.

Pathauto

Superfish

Token

ACCESSIBILITY-SPECIFIC MODULES

Drupal modules to make your site more accessible:

Node Accessibility / Node Accessibility Statistics

Accessible Skip Links

YouTube Video Accessibility Controls

CCK Accessibility

“AA” DRUPAL WEBSITE

Vote for Your Favourite Session!

Submitted by admin on Fri, 2013-07-05 12:55

Session voting is **now open** to registered users! A quick overview of all proposed sessions is available below.

The highest voted sessions will receive more prominent placement in the schedule. Keep an eye on Twitter and Facebook too - **retweets** and **likes** for individual session posts will *count towards voting* as well!

Read more

Registration is Now Open!

Submitted by admin on Mon, 2013-06-24 15:33

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The cost of attending this year's camp will be $30/day.

Read more

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12
10

ACCESSIBILITY DEV TOOLS

Firefox Extensions:

- WAVE Toolbar
- Juicy Accessibility Toolbar

Chrome Extensions:

- Accessiblity Developer Tools

OTHER VALIDATION TOOLS

Web-based Tools:

IDI Web Accessibility Checker: http://achecker.ca/checker/index.php
WebAIM Color Contrast Checker: http://webaim.org/resources/contrastchecker/
Photosensitivity Epilepsy Analysis Tool (PEAT): http://trace.wisc.edu/PEAT

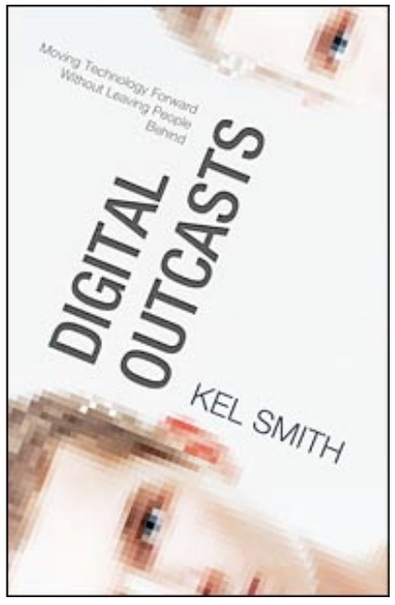
Automated Tools:

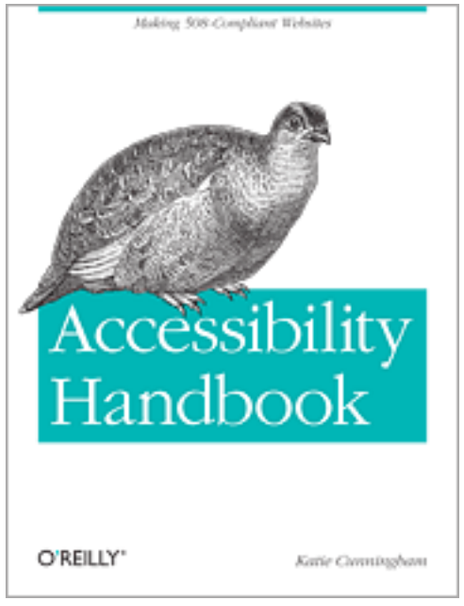
AriaLinter (requires Grunt.js): https://github.com/globant-ui/arialinter
A11yLint Brackets Extension : https://github.com/DuaneOBrien/A11YLint-Brackets
(requires Brackets and optionally brackets-grunt for Grunt.js integration)

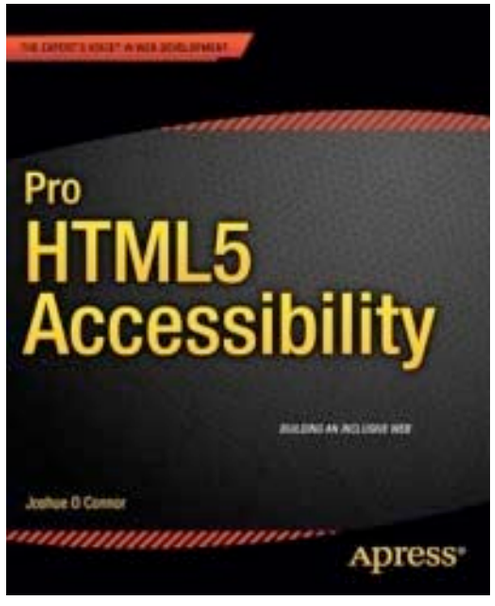
Checklists:

Gov. of Canada's WCAG 2.0 Conformance Assessment Tool:
http://www.tbs-sct.gc.ca/ws-nw/wa-aw/wa-aw-assess-methd-eng.asp

RECENT A11Y BOOKS







Digital Outcasts, Kel Smith, (Morgan Kaufmann), (2013)
Accessibility Handbook, Katie Cunningham, (O'Reilly), (2012)
Pro HTML5 Accessibility, Joshue O'Connor, (Apress), (2012)
Universal Design for Web Applications, W. Chisholm & M. May, (O'Reilly), (2008)

DRUPAL GROUPS

Accessibility

https://groups.drupal.org/accessibility

LOCAL MEET-UPS & EVENTS

Toronto Accessibility & Inclusive Design

http://www.meetup.com/a11yTo/

Accessibility Camp Toronto

Toronto

A11y Camp

Guelph

May 28 and 29, 2013
UNIVERSITY OF GUELPH
Solutions for Inclusion

The Accessibility Conference

http://www.accessconf.ca/

DEEP 2013

Designing Enabling Economies and Policies

http://deep.idrc.ocadu.ca/

ADDITIONAL RESOURCES

Web Accessibility initiative

OpenAjax alliance

Accessibility Support Website

inclusive design institute

inclusive design research centre
OCAD University

GET STARTED!

- Get educated
- Rally support
- Make a plan
- Become involved

THANK YOU

CONTACT ME!

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Skype: crispinbailey

Therefore