



Web Accessibility Testing Using NVDA



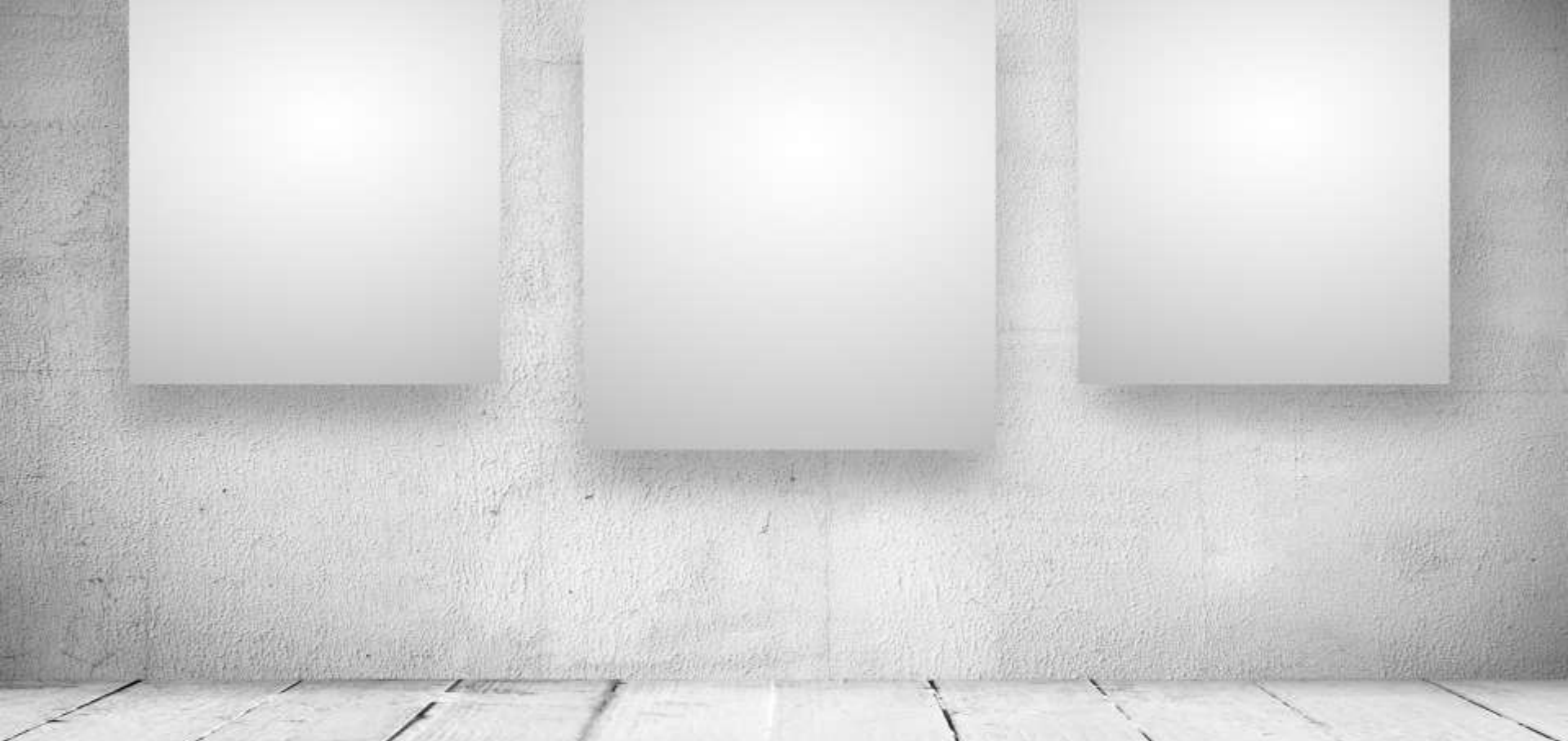
a11yQc 2014
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Content Overview

- 1 Fundamental Testing Concepts
- 2 Testing for HTML Accessibility
- 3 Wrapping Up and Questions



Anything specific YOU would like to hear about?



Fundamental Testing Concepts

3-Step Testing Process

Automated

1



3-Step Testing Process

Automated

1



Manual

2



3-Step Testing Process

Automated

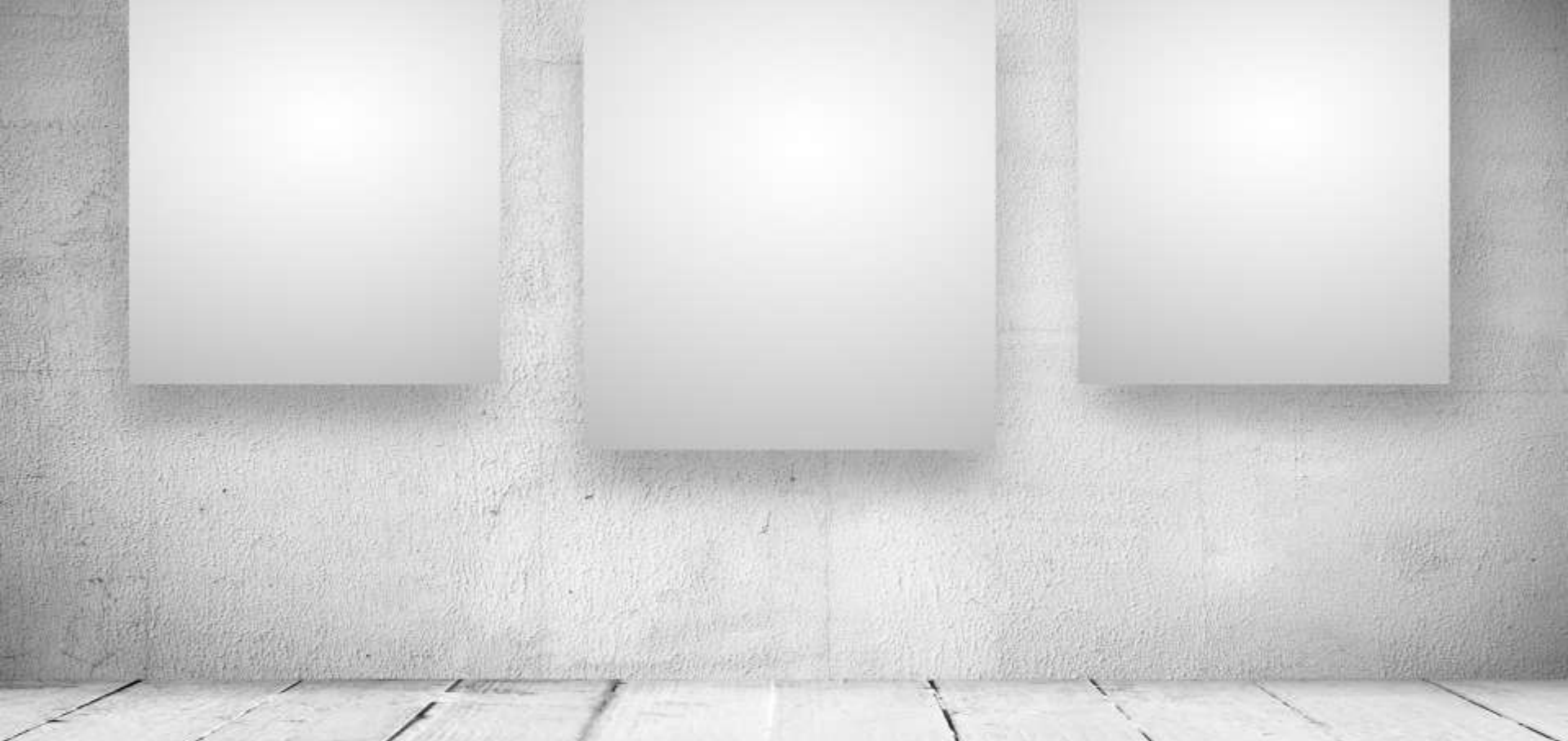


Manual



Screen Reader





Learning to Use the Tools

Using NVDA – The Basics



References

- <http://bit.ly/1fDhahU>
- <http://bit.ly/1nOBkrH>

Let's try it out,
shall we?



Meet NVDA



bla bla bla
bla bla bla bla,
bla bla bla bla!
bla bla bla bla!!
bla bla bla bla...
bla bla bla

Don't Panic

- Speech Rate
- Speech Viewer
- Control Key



Sinking out teeth into NVDA



Home of the free NVDA screen reader

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Download NVDA

Download NVDA 2014.1, the latest version of the free screen reader made by users for users.

New to NVDA? Find out about its [Features and System Requirements](#)

[DOWNLOAD](#)

What is NVDA?

NVDA (NonVisual Desktop Access) is a free "screen reader" which enables blind and vision impaired people to use computers. It reads the text on the screen in a computerised voice. You can control what is read to you by moving the cursor to the relevant area of text with a mouse or the arrows on your keyboard.

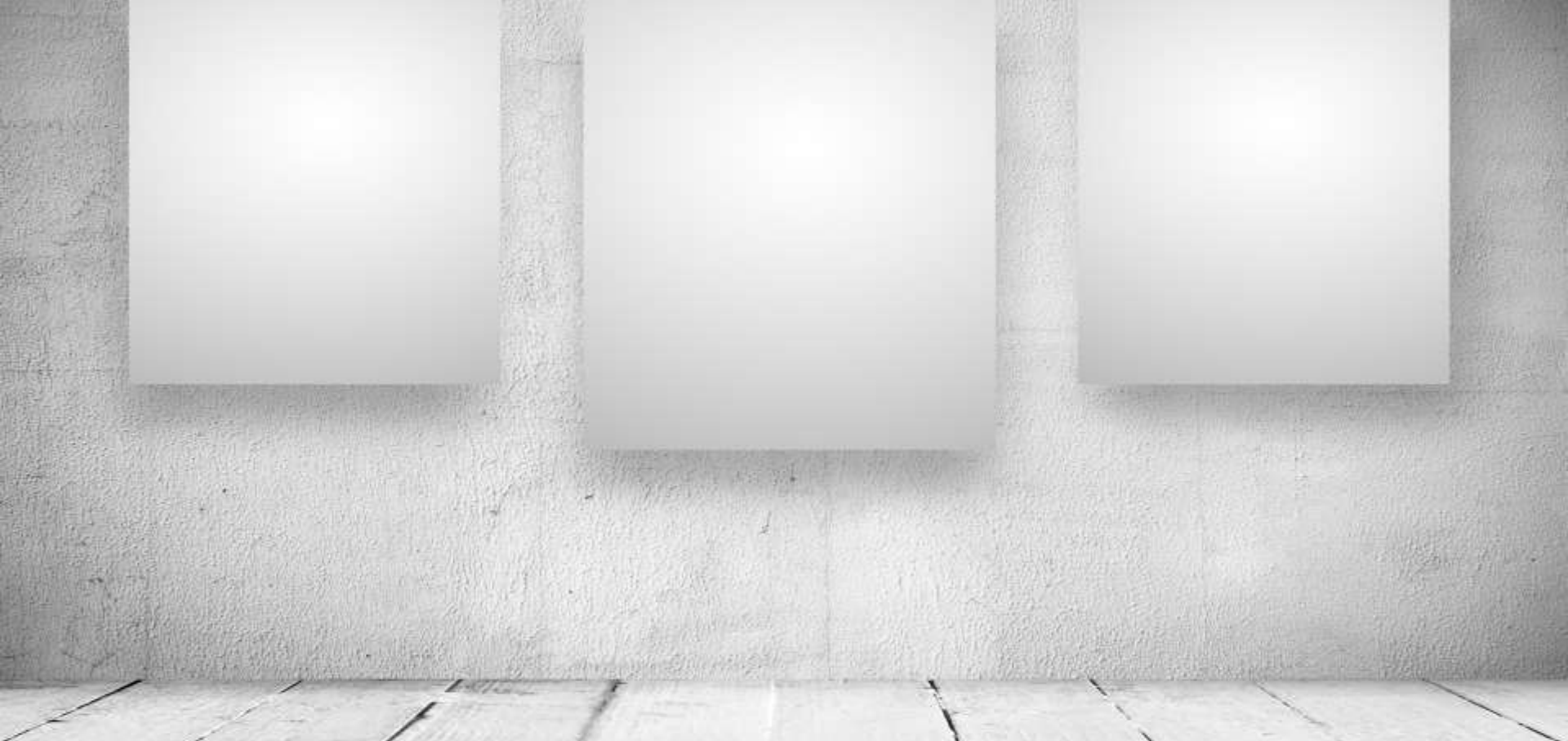
NVDA can also convert the text into braille if the computer user owns a device called a "braille display".

NVDA provides the key to education and employment for many blind people. It also provides access to social networking, online shopping, banking and news.

NVDA works with Microsoft Windows. You can [download](#) it to your PC on our [FTP site](#) which you can use with any computer.

Our Mission





Testing for HTML Accessibility

a11yTips – an ever growing resource

a11yTips

Simple tips on making web content more accessible to all



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Advocating social inclusion for people with disabilities and the elderly on the Web since 2000, through pragmatic universal design best practices, W3C open standards and web accessibility guidelines.

Spread the word if you enjoy these tips and make sure to follow [@dboudreau](#) on Twitter to stay on top of the latest updates!

HOME

OVERVIEW

ABOUT

ARCHIVE

Overview

Perceivable

Information and user interface components must be presentable to users in ways they can perceive. This means that users must be able to perceive the information being presented (it can't be invisible to all of their senses).



1.1 Text Alternatives

Provide text alternatives for any non-text content so that it can be changed into other forms people need, such as large print, braille, speech, symbols or simpler language.



Make sure visual contents such as images and graphics come with alternate text-based descriptions that can be reliably conveyed and interpreted by assistive technologies such as screen readers.

1.1.1 Non-text Content

- 2014/04/26: Turn purely decorative images in PDF documents into artifacts
- 2014/04/28: Provide meaningful text alternatives for images in PDF documents
- 2014/04/17: Include decorative images using CSS
- 2014/04/10: Provide alternate CAPTCHAs in the form of logic tests
- 2014/04/09: Provide alternate audio CAPTCHAs to support visual CAPTCHA tests
- 2014/04/08: Provide a text alternative describing the purpose of the CAPTCHA
- 2014/03/02: Provide ALT attributes on images used as submit buttons
- 2014/02/24: Provide long descriptions for complex images using longdesc
- 2014/02/23: Add complex images to long descriptions using aria-describedby
- 2014/02/22: State the presence of long descriptions from complex images
- 2014/02/21: Provide adjacent long descriptions for complex images
- 2014/02/18: Provide long descriptions for complex images in a remote location
- 2014/02/17: Describe complex images by their purpose or nature
- 2014/02/16: Fully describe the purpose and content of complex images
- 2014/01/29: Provide alt attributes for active images
- 2013/12/29: Make decorative images invisible to assistive technologies

Today's Checkpoints

1. Page Titles
2. Default Language
3. Bypass Blocks
4. Page Regions
5. Section Headings
6. Link Purpose
7. Reading Order
8. Keyboard Navigation
9. Informative Images
10. Decorative Images
11. Data Tables
12. Forms

Putting It Into Action

The screenshot shows the homepage of the a11yQC website. The header features the logo 'a11yqc' and navigation links: 'Accueil', 'Horaire', 'Conférences et ateliers', 'Inscription', and 'Nous joindre'. The main banner area has a background image of a speaker at a podium and an audience. The text on the banner includes the event title 'Le Web pour tous !', a subtitle 'Le seul évènement au Québec dédié à l'accessibilité Web', and a list of topics: 'Conférences et ateliers sur les enjeux actuels de l'accessibilité Web', 'Documents téléchargeables', 'Mobilité', 'Expérience utilisateur', 'WAI-ARIA'. A prominent purple button says 'Achetez vos billets', and a white box next to it shows the price '125\$ plus taxes' with a note 'tarif régulier'. Below the banner, the date '14 octobre 2014' and location 'au Cégep de Sainte-Foy' are displayed. The footer is divided into three purple columns with white text, each describing a different aspect of the event: 'Défi étudiant multiprogramme 2014', 'Partenaires : une visibilité unique !', and 'Revivez les expériences passées'.

a11yqc

Accueil Horaire Conférences et ateliers Inscription Nous joindre

Le Web pour tous !

Le seul évènement au Québec dédié à l'accessibilité Web

Conférences et ateliers sur les enjeux actuels de l'accessibilité Web
Documents téléchargeables, Mobilité, Expérience utilisateur, WAI-ARIA

Achetez vos billets

125\$ plus taxes tarif régulier

14 octobre 2014 au Cégep de Sainte-Foy

Défi étudiant multiprogramme 2014

Découvrez le grand défi qui attend les étudiants du Cégep de Sainte-Foy

Partenaires : une visibilité unique !

Votre organisation veut être reconnue comme un acteur de premier plan en

Revivez les expériences passées

Découvrez ou revisitez les conférences des deux dernières éditions d'a11yQC !

Page Titles

WCAG SC	Checkpoint	Requirement	Testing Tools
2.4.2 (A)	Page Titles	Pages have descriptive, informative and unique page titles.	• FireEyes • Web Developer • NVDA

a11yTip #1

Provide descriptive titles for web pages

<http://bit.ly/1IKYkFE>

Default Language

WCAG SC	Checkpoint	Requirement	Testing Tools
3.1.1 (A)	Default Language	The language of the page is identified using the HTML lang attribute.	• FireEyes • FireBug • NVDA

a11yTip #2

Identify the default language of the content

<http://bit.ly/1IKWPaG>

Bypass Blocks

WCAG SC	Checkpoint	Requirement	Testing Tools
2.4.1 (A)	Bypass Blocks	A method (heading structure, aria landmarks and/or skip links) is provided to skip navigation and other page elements that are repeated across pages.	• FireEyes • NVDA

a11yTip #3

Provide a mechanism to skip content repeated across pages

<http://bit.ly/1fGcXKr>

Page Regions

WCAG SC	Checkpoints	Requirements	Testing Tools
1.3.1 (A)	Page Regions	WAI-ARIA landmarks are used to identify various sections of the page.	• Jim Thatcher's Favelets • NVDA

a11yTip #4

Use landmark roles to define page regions

<http://bit.ly/1ryGRRx>

Section Headings

WCAG SC	Checkpoint	Requirement	Testing Tools
1.3.1 (A)	Headings	Hierarchically structure content using heading elements.	• FireEyes • Web Developer • NVDA

a11yTip #5

Organize content using hierarchically nested headings

<http://bit.ly/1ia4Gc6>

Link Purpose

WCAG SC	Checkpoint	Requirement	Testing Tools
2.4.4 (A)	Link Purpose	The purpose of each link, form image button or image map hotspot can be determined from the link text alone, or from the link text and the context.	• FireEyes • Web Developer • NVDA

a11yTip #6

Provide links that meaningfully describe their purpose

<http://bit.ly/1mJNDCm>

Reading Order

WCAG SC	Checkpoint	Requirement	Testing Tools
1.3.2 (A)	Reading Order	The reading and navigation order (determined by code order) is logical and intuitive.	• Web Developer • NVDA

a11yTip #7

Organize content in a sequential reading order that remains logical

<http://bit.ly/1rPdEkF>

Keyboard Navigation

WCAG SC	Checkpoint	Requirement	Testing Tools
2.1.1 (A)	Keyboard Navigation	Page functionalities are available using the keyboard, unless the functionality cannot be accomplished in any known way using a keyboard.	• Tabulation Key • NVDA

a11yTip #8

Ensure pages can be fully controlled without a mouse

<http://bit.ly/Sknpgr>

Informative Images

WCAG SC	Checkpoint	Requirement	Testing Tools
1.1.1 (A)	Active and Informative Images	Static and linked images that convey information have descriptive alternative text that serves the same purpose and presents the same information as the image.	• FireEyes • Web Developer • NVDA

a11yTip #9

Provide alt attributes for active images

<http://bit.ly/1q0OVOJ>

Decorative Images

WCAG SC	Checkpoint	Requirement	Testing Tools
1.1.1 (A)	Decorative Images	Images that do not convey content, are decorative, or with content that is already conveyed in text are given null alternative text (alt=""), a presentation role or implemented as CSS backgrounds.	• FireEyes • Web Developer • NVDA

a11yTip #10

Make decorative images invisible to assistive technologies

<http://bit.ly/1fGdj3A>

Data Tables

WCAG SC	Checkpoint	Requirement	Testing Tools
1.3.1 (A)	Data Tables	Data cells are explicitly associated with header cells for data tables, and descriptive table captions and summaries are provided where appropriate.	• FireEyes • Web Developer • NVDA

a11yTip #11

Structure tabular information using table markup

<http://bit.ly/1kvnzYG>

Forms

WCAG SC	Checkpoints	Requirements	Testing Tools
1.3.1 (A)	Forms Association	Text labels are programmatically associated with form controls using the LABEL element with matching values on the for and ID attributes.	• FireEyes • Jim Thatcher's Favelets • NVDA

a11yTip #12

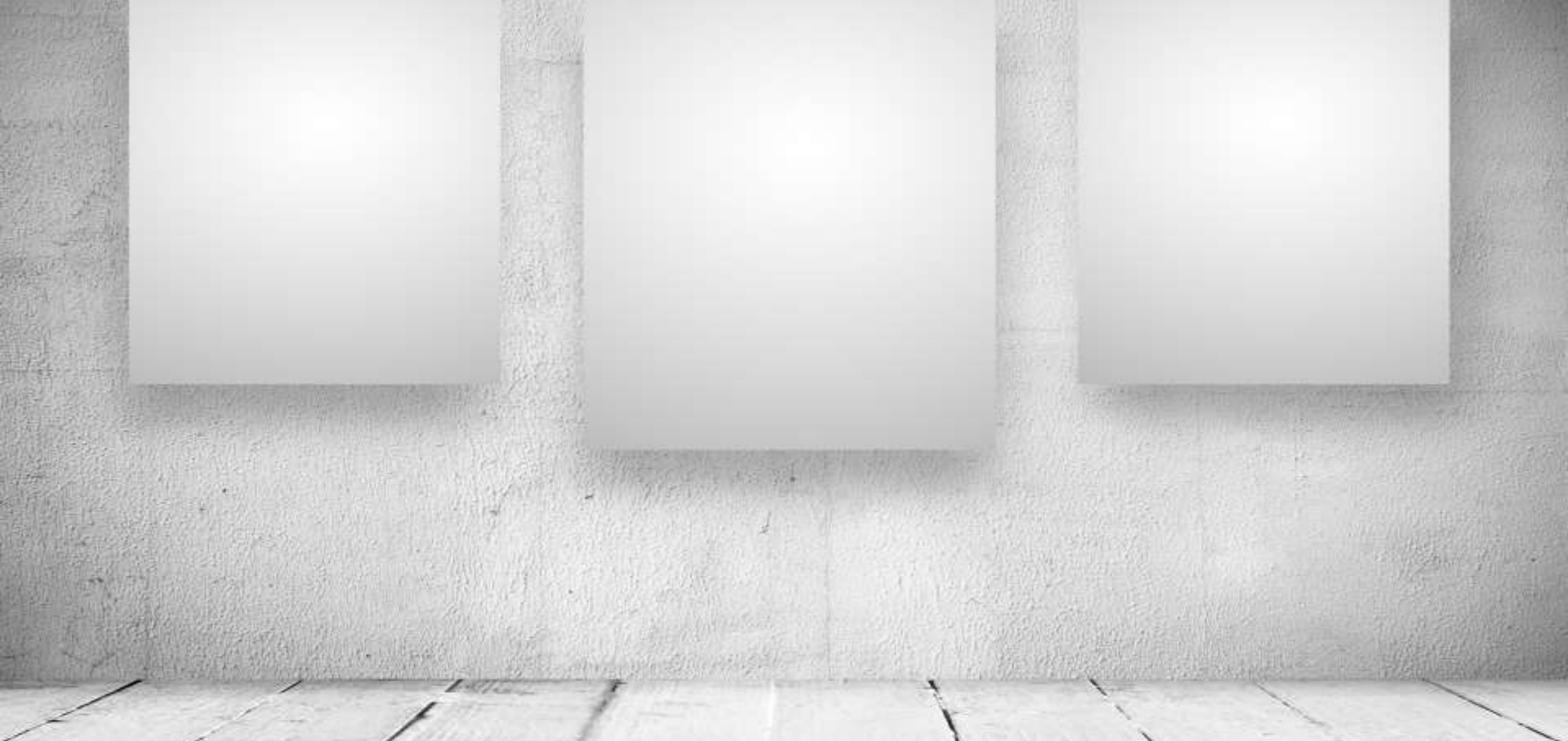
Associate text labels with form controls using the LABEL element

<http://bit.ly/Vr03GH>



Pro Tip

Involve end users with various disabilities



Wrapping Up and Questions

Q&A

You have

Questions

We have

Answers

Q&A

Merci Beaucoup!



Thank you

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- <http://kpumc.org/wp-content/uploads/2014/01/Angry-Woman.jpg>
- http://farm8.staticflickr.com/7063/6896013401_b402f7a0ec_o.jpg
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- http://3.bp.blogspot.com/-DlcXdS_8RM/U0J3D-oKTgl/AAAAAAAABEE/k8gl_rimyZ8/s1600/questions.jpg
- <http://d187.org/wp-content/uploads/2013/11/QA.jpg>