

Web Accessibility (WCAG)

An abstract graphic featuring a central bright white sphere with colorful, flowing ribbons in yellow, green, blue, and red. The background is a light blue gradient with faint, semi-transparent icons representing various accessibility needs: a person in a wheelchair, an eye, an ear, a hand, a speech bubble, and a speaker. Binary code (0s and 1s) is also visible in the background.

**Adapted from Slides from
Office of the
Government Chief Information Officer
HKSAR**

What is Web Accessibility?

- Making website **Content** available for **ALL users**
 - Including persons with disabilities (about 5.2% of total population)
 - Aged people
 - Good interaction benefits ALL users

Four Major categories of disabilities

- Physical Impairment
- Hearing Impairment
- Visual Impairment
- Cognitive Impairment



Legislation / Guideline

Country	Legislation / Guideline
Australia	<ul style="list-style-type: none">• Disability Discrimination Act (DDA) of 1992• WWW Access: DDA Advisory Notes• The Guide to Minimum Website Standards
Canada	<ul style="list-style-type: none">• Canadian Human Rights Act of 1977• The Government of Canada Internet Guide
China	<ul style="list-style-type: none">• 國務院令第622號 - 《無障礙環境建設條例》 (State Council Order No. 622 - "Construction of Accessible Environment")
United Kingdom	<ul style="list-style-type: none">• The Equality Act 2010• Formal investigation report on Web Accessibility
United States	<ul style="list-style-type: none">• American with Disability Act (ADA)• Section 508 of the Rehabilitation Act• Assistive Technology Act of 1998• Section 255 of the Telecommunications Act of 1996
European Union	<ul style="list-style-type: none">• Accessibility of Public Websites – Accessibility for PWDs (People with Disabilities): Council Resolutions, 2002

Legal Risks: Lawsuits and Complaints

- Complaint against Sydney Organising Committee for the Olympic Games 2000
 - No alternative text for image and contained inaccessible image map
 - Compensation sum of AU\$20K paid by respondent
- National Federation of the Blind filed a class-action suit against Target.com in 2006
 - No alternative text for image and inaccessible image maps, etc.
 - Penalty of \$6 million + plaintiff legal fees \$3 million + defense legal fees, court monitoring, loss of reputation, ...
- Mendizabal v. Nike Inc. (2017)
- Robles v Domino's Pizza (2016 and ongoing as of 2020)

Legal Risk: Lawsuits and Complaints (Cont.)

- A NGO complained about inaccessible PDFs on Hong Kong Government website in June 2012



【本報訊】選舉事務處在核實選民登記冊時涉嫌觸犯《殘疾歧視條例》。香港失明人士協進會會長莊陳有昨去信平機會，指選舉事務處在本月15日公佈的臨時選民登記冊及抽樣調查信件，只提供一般文字版本，視障人士無法查閱，隨時在不知情的情況下喪失選民資格。

莊陳有指失明人士看不見選舉事務處發出的抽樣信件，可能連需要核實身份也不知道。「事務處嘅網頁都係只得文字，欠缺無障礙設施，香港話就話無障礙城市，事實仲好落後。」莊陳有已在本月15日去信選舉管理委員會主席馮驊，要求改善，至今仍未獲回覆。

What you should do in Web Accessibility

1. Use **ALT** with meaningful description for non-text content
2. **OCR** scanned documents so text-to-speech software works
3. You want text message to look nice, use **CSS**, do not use graphical images
4. Provide **text resizing** function
5. Maintain sufficient **color contrast**
6. Use **simple page layout** (structured by row or column)
7. Provide skip button to skip video and animation, etc.
8. Avoid background audio/music
9. Provide **caption** and **description** for video and audio

International Standards

- **World Wide Web Consortium (W3C)**
 - **Web Content Accessibility Guidelines (WCAG)** have been developed over the years by W3C
 - Version 1.0 in 1999
 - Version 2.0 in 2008
 - Version 2.1 in 2017

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

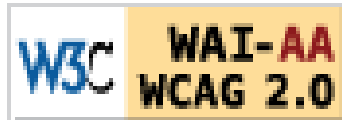


WCAG - Conformance

- There are three Levels of conformance –

Level A 25 success criteria	Level AA +13 success criteria	Level AAA +23 success criteria
Basic	Recommended	Ideal

Level AA Conformance



HKSAR WCAG Conformance

- Every government department website has a conformance statement; this one is www.gov.hk
- Thus, government contracts involving webpages must meet WCAG 2.0 standard

GovHK 香港政府一站通



Home > Accessibility on GovHK > Web Accessibility Conformance Statements

Web Accessibility Conformance Statements

Share:      

Web Accessibility Conformance Statements

We are committed to ensuring that our website conforms to the World Wide Web Consortium (W3C) Web Content Accessibility Guidelines (WCAG) 2.0 Level AA requirements to the maximum extent possible. However, due to the following reason(s), we are unable to incorporate all Level AA accessibility features at this point in time.

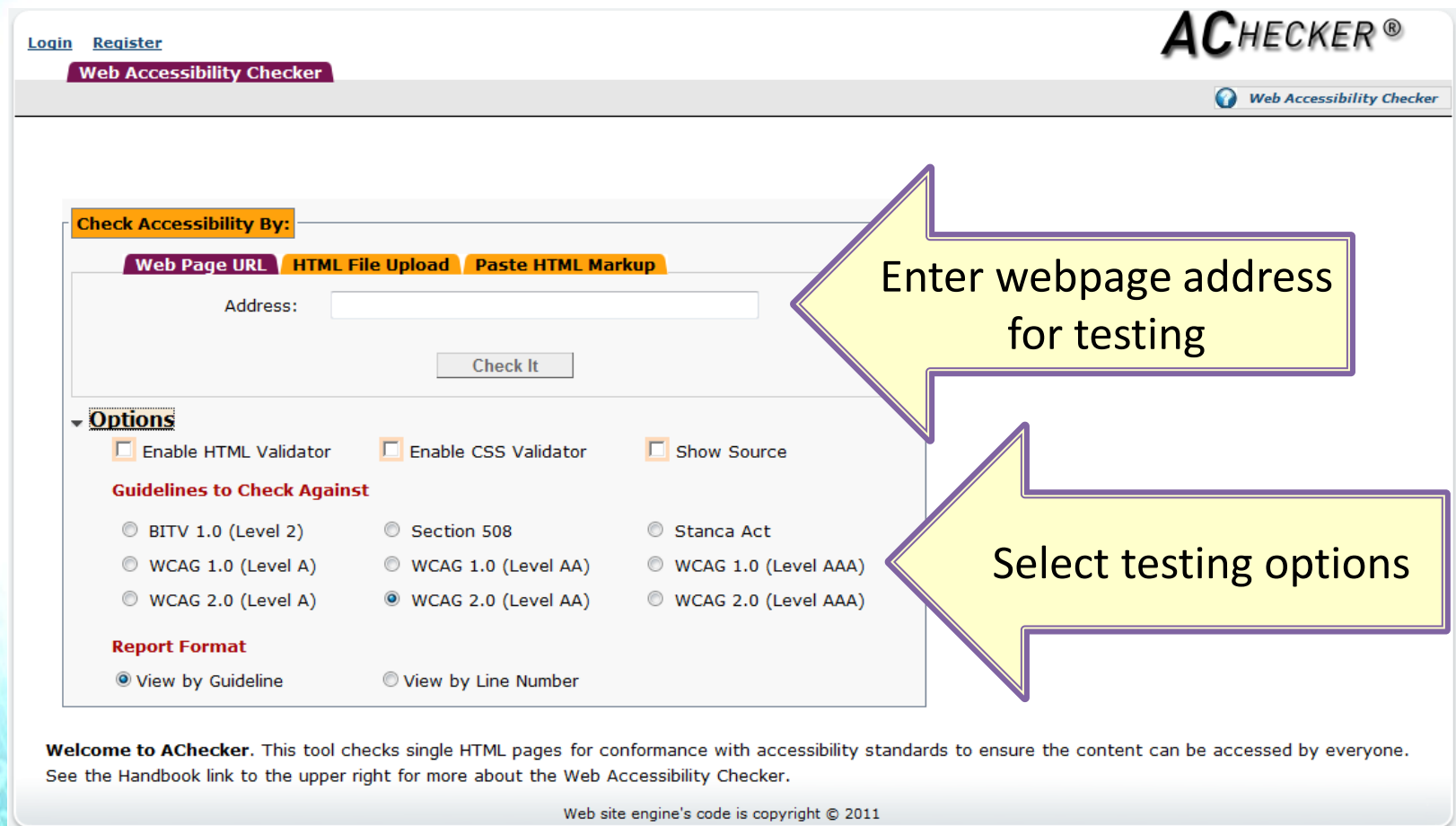
Testing Techniques

1. Code scanning

- Many accessibility issues can be detected automatically using specialist software and tools
- Example tools –
 - [AChecker](#)
 - [WAVE](#)
 - PDF Accessibility Checker
- Color contrast checker
 - [WebAIM](#)

Code Scanning

- <http://achecker.ca/checker/index.php>



The screenshot shows the AChecker Web Accessibility Checker interface. At the top, there are links for 'Login' and 'Register', and the 'Web Accessibility Checker' title. The main section is titled 'Check Accessibility By:' and has three tabs: 'Web Page URL', 'HTML File Upload', and 'Paste HTML Markup'. The 'Web Page URL' tab is active, showing an 'Address:' input field and a 'Check It' button. A yellow arrow points to the input field with the text 'Enter webpage address for testing'. Below the input field is an 'Options' section with a dropdown arrow. It contains three checkboxes: 'Enable HTML Validator', 'Enable CSS Validator', and 'Show Source'. Below these are 'Guidelines to Check Against' with radio buttons for BITV 1.0 (Level 2), WCAG 1.0 (Level A), WCAG 2.0 (Level A), Section 508, WCAG 1.0 (Level AA), WCAG 2.0 (Level AA) (which is selected), Stanca Act, WCAG 1.0 (Level AAA), and WCAG 2.0 (Level AAA). Below the guidelines is a 'Report Format' section with radio buttons for 'View by Guideline' (selected) and 'View by Line Number'. A second yellow arrow points to this section with the text 'Select testing options'. At the bottom, there is a 'Welcome to AChecker' message and a copyright notice.

Check Accessibility By:

Web Page URL **HTML File Upload** **Paste HTML Markup**

Address:

Options

☐ Enable HTML Validator ☐ Enable CSS Validator ☐ Show Source

Guidelines to Check Against

☐ BITV 1.0 (Level 2) ☐ Section 508 ☐ Stanca Act

☐ WCAG 1.0 (Level A) ☐ WCAG 1.0 (Level AA) ☐ WCAG 1.0 (Level AAA)

☐ WCAG 2.0 (Level A) ☒ WCAG 2.0 (Level AA) ☐ WCAG 2.0 (Level AAA)

Report Format

☒ View by Guideline ☐ View by Line Number

Welcome to AChecker. This tool checks single HTML pages for conformance with accessibility standards to ensure the content can be accessed by everyone. See the Handbook link to the upper right for more about the Web Accessibility Checker.

Web site engine's code is copyright © 2011

Code Scanning

- Sample report - no known problem

[Login](#) [Register](#)

Web Accessibility Checker

Web Accessibility Checker

Check Accessibility By:

Web Page URL HTML File Upload Paste HTML Markup

Address:

Check It

Options

Accessibility Review

Export Format: PDF Report to Export: All Get File

Accessibility Review (Guidelines: [WCAG 2.0 \(Level AA\)](#))

Known Problems(0) Likely Problems (2) Potential Problems (505) HTML Validation CSS Validation

✔ Congratulations! No known problems.

Code Scanning

- Sample report – known web accessibility problem

Accessibility Review

Accessibility Review (Guidelines: [WCAG 2.0 \(Level AA\)](#))

Known Problems(9)

Likely Problems (1)

Potential Problems (215)

1.1 Text Alternatives: Provide text alternatives for any non-text content

Success Criteria 1.1.1 Non-text Content (A)

Check 1: [img element missing alt attribute.](#)

Repair: Add an `alt` attribute to your `img` element.

2.4 Navigable: Provide ways to help users navigate, find content, and determine where they are.

Success Criteria 2.4.4 Link Purpose (In Context) (A)

Check 174: [Anchor contains no text.](#)

Repair: Add text to the `a` element or the `title` attribute of the `a` element or,

❌ *Line 228, Column 39:*

How you can help?

- Develop awareness, attitude and mindset on web accessibility in your organization
 - Observe latest guidelines and standards
 - Adopt web accessibility designs in institution
 - Help business partners or clients aware of the importance and relevant skills
 - Encourage and incorporate web accessibility elements in design stage in information and communication systems, products and services
 - Uphold the professional ethics
- “I had never thought about it ...” is not an excuse