Office of the Government Chief Information Officer

Web Accessibility Experience Sharing Workshop for IT Practitioners

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Today's Speaker

Speaker

Mr. Terry LEUNG (representative of the OGCIO)

Enquiry

Office of the Government Chief Information Officer

E-mail: wac@ogcio.gov.hk

Telephone: 2582 6079 (Ms CHAN)

Course Outline

This workshop will cover the following –

- Morning Session (9:30a.m - 12:35p.m) :
    - Digital 21 Strategy and Inclusive Society
    - What is web accessibility?
        - Importance of Web Accessibility
        - How Persons with Disabilities Access the Web
    - International and Government Practices
    - Four Principles of making websites accessible
    - Introduction to WCAG 2.0 Guidelines
    - Introduction to WCAG 2.0 Success Criteria and details

Course Outline

This workshop will cover the following –

- Afternoon Session (2:00p.m - 5:45p.m) :
    - Design and implement with WCAG 2.0.
    - Best practices on improving web accessibility of website
    - Experience Sharing Discussion
    - Q & A

Digital 21 strategy & inclusive society

One of five key areas of 2008 Digital 21 Strategy

- *Building an inclusive, knowledge-based society*
- bring the benefit of ICT to disadvantaged groups
- enhance their quality of life
- strengthen their capacity in engaging with the development of information society

What is Web Accessibility?

- Making website content available for ALL

- Including persons with disabilities

What is Web Accessibility?

- Web accessibility means that persons with disabilities can use the Web.

Importance of Web Accessibility

- Social Responsibility
- Legal Responsibility
- Access to Hidden Markets
- Lower Costs in Long Term

Importance of Web Accessibility

- Social Responsibility

  - Everyone has a responsibility to treat persons with disabilities the same as we treat persons without disabilities.

- Legal Responsibility

  - The Disability Discrimination Ordinance (Cap 487) has created a legal duty for organisations to ensure their services are available to everyone regardless of disability.
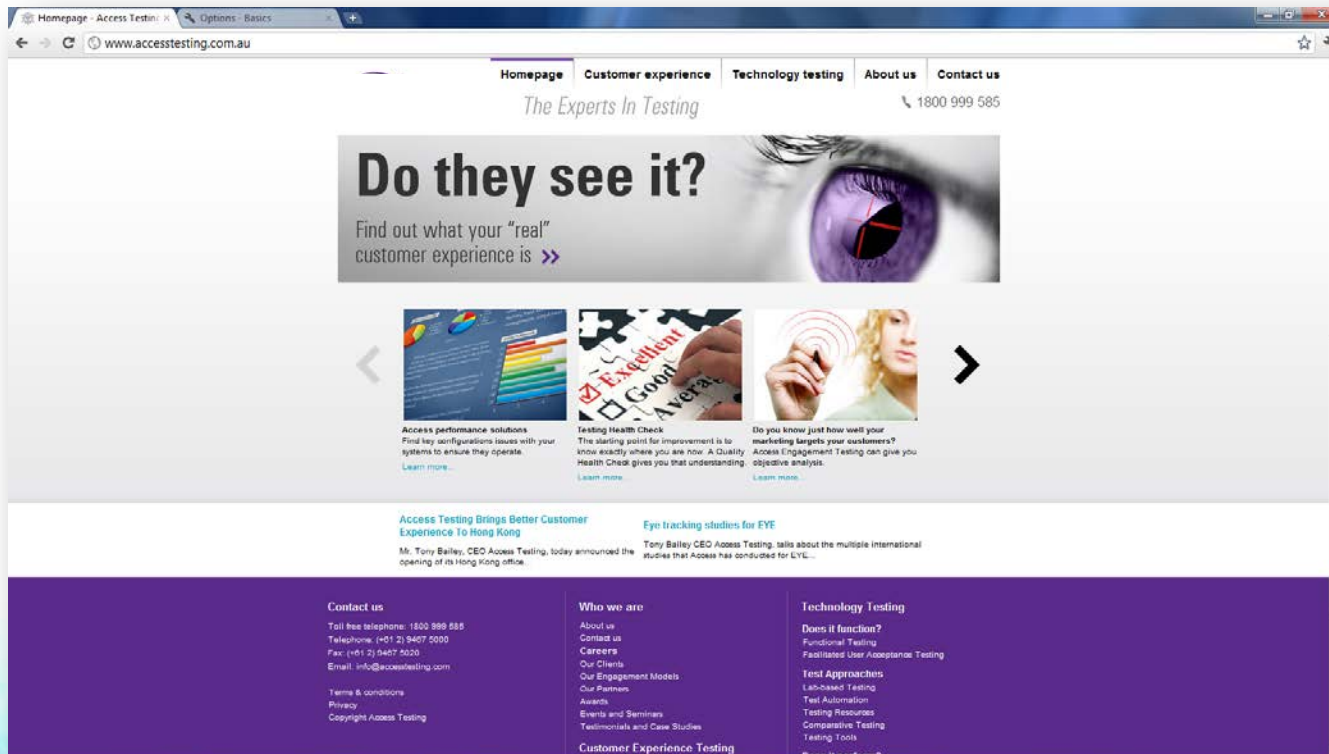
Importance of Web Accessibility

- Access to Hidden Markets
  - Effective web accessibility allows -
    - Government websites to reach more citizens and corporate websites to reach more online customers.

- Lower Costs in Long Term
  - on all website projects -
    - saves development time and money in the long term
    - websites that are easier to maintain and are compatible with different web browsers and devices such as Smart phones and Tablets

Importance of Web Accessibility

- Another Reason is that web sites are becoming increasingly complex…

How Persons with Disabilities Access the Web

- There are four major categories of disabilities
  - Visual Impairment
  - Physical Impairment
  - Hearing Impairment
  - Cognitive Impairment
- Also applies to people who have been temporarily injured

How Persons with Disabilities Access the Web

- Visual Impairment
  - In this case people either can't see a computer screen at all, or have difficulty seeing a computer screen.
  - It is critical that websites are designed to work with screen reading software, screen magnifiers and colours that are visible to colour blind people.

- Visual Impairment

An audio is played

How Persons with Disabilities Access the Web

- Visual Impairment

How Persons with Disabilities Access the Web

- Physical Impairment
  - It is important to make buttons large and not place important items too close together
  - Also ensure the website works with assistive technologies such as voice control software.

How Persons with Disabilities Access the Web

- Hearing Impairment

  - If information is being conveyed by audio, you will need to ensure an alternative way to access this information is provided.

  - Provide a text transcript of audio content or subtitles on the video.

How Persons with Disabilities Access the Web

- Cognitive Impairment
    - Although they don't require any special tools to use websites they may find the content of websites more difficult to interpret than average persons.
    - This should be kept in mind when organisations are writing content for their websites.

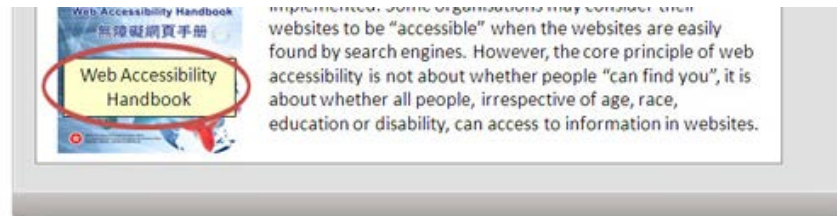# How Persons with Disabilities Access the Web

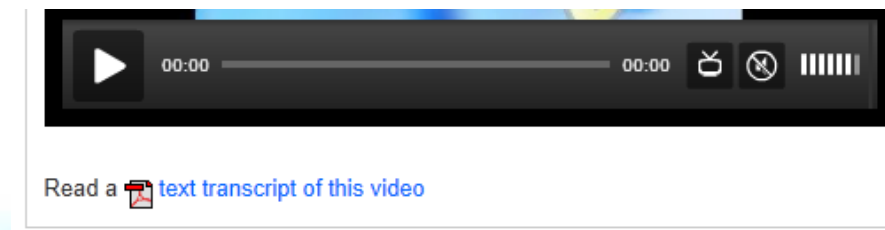- Common concerns of Persons with Disabilities in accessing website?

How Persons with Disabilities Access the Web

- No Alternatives for Non-text Information
  - Images should contain descriptive text alternative that effectively describes the image.

  - Video content should include text transcripts that can be interpreted by screen reading software.

How Persons with Disabilities Access the Web

Say "NO" to Computer Viruses
Dialogue Script (in PDF format)
Duration: 3:11
WMV Format (16.8MB) | MP4 Format (8.37MB)

The sequence of dialogue script are the same as the sequence in the video content itself.

I guess we should take good care of ourselves too

But many of my teammates got sick and

Videos on Information Security - Say "NO" to Computer Viruses (Dialogue Script)

On: Many colleagues got sick lately.

Po: That's so true. I guess we should take good care of ourselves too.

On: Bye now. Take care!

On: Chuen, are you sick too?

Chuen: No, I'm not. But many of my teammates got sick and I'm wearing a mask just to avoid being infected. You know, if I get sick, I can't come to the office and do my job.

On: Your preventive measure against virus is really stringent and proactive. But have you done enough to protect your computer from computer viruses?

How Persons with Disabilities Access the Web
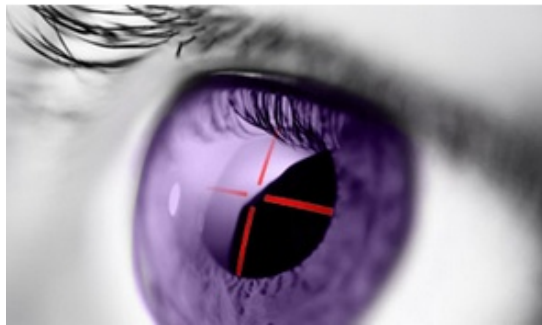
- Small Font Sizes or Insufficient Colour Contrast

Do they see it?

Find out what your "real"
customer experience is »

How Persons with Disabilities Access the Web

- Unable to Skip Inaccessible Adobe Flash and Moving Objects

How Persons with Disabilities Access the Web

- Websites with background Audio

How Persons with Disabilities Access the Web

- Complicated Web Site infrastructure

How Persons with Disabilities Access the Web

- Difficulties in Accessing PDF Documents

  - Text content in PDF documents created by using scanners is generally not accessible.

  - Avoid scanning when preparing PDF documents if the text-based sources are available.

  - Or process by Optical Character Recognition (OCR) software after scanning.

International Standards

- The Web Content Accessibility Guidelines (WCAG) have been developed over the years by the World Wide Web Consortium (W3C) consisting of people from industries, disability organisations, government, and research labs from around the world
  http://www.w3.org/WAI/

International Standards

- The Guidelines consist of four parts

4 Principles

12 Guidelines

61 Success Criteria

Many Techniques

International Standards

- Conformance Level "A"

  W3C WAI-A WCAG 2.0

  ➢ All Level A success criteria are satisfied

- Conformance Level "AA"

  W3C WAI-AA WCAG 2.0

  ➢ All Level A and AA success criteria are satisfied

- Conformance Level "AAA"

  W3C WAI-AAA WCAG 2.0
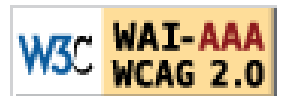
  ➢ All Level A, AA, and AAA success criteria are satisfied

  http://www.w3.org/WAI/WCAG2-Conformance.html

International and Government Practices

- In latest version (Version 2.0) 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

International Standards

- "W3C provides conformance logos for Web Content Accessibility Guidelines (WCAG) 2.0
  - Content providers can use these logos on their sites to indicate a claim of conformance to a specified conformance level…

  http://www.w3.org/WAI/WCAG2-Conformance.html

International and Government Practices

- Many economies are adopting WCAG 2.0 AA guidelines for public facing websites

GOVERNMENT	DEADLINE
New Zealand	June 2010
Canada	July 2013
Singapore	December 2013
Australia	December 2014

International and Government Practices

- United States

  - Section 508 requires that electronic and information technology that is developed by or purchased by the Federal Agencies be accessible by persons with disabilities.

  - Section 508 provides accessibility standards for all information technology.

  - Computer software, hardware, and documentation are all covered by Section 508.

International and Government Practices

- United Kingdom

  - The Equality Act came into force in October 2010, replacing the Disability Discrimination Act (DDA) in England, Scotland and Wales.

  - The Act is 'anticipatory', which means you cannot wait until a disabled person wants to use your services. You must think in advance (and on an ongoing basis) about what disabled people with a range of impairments might reasonably need.

HKSAR Government Practices

- HK Government has been implementing web accessibility guidelines since 1999, based on a version of W3C WCAG

- HK Government websites, except archive materials, are required to conform to W3C WCAG 2.0 Level AA by 2013

- Encourage quasi-government and public service organisations to take corresponding action

Four Principles of Making Websites Accessible

➤ Principle 1: Perceivable - Information and user controls must be presented to users in ways they can perceive.

Text Alternatives

This Handbook is designed for senior executives and managers to better understand the importance of web accessibility and show how it can be successfully implemented. Some organisations may consider their [Web Accessibility Handbook] "accessible" when the websites are easily found by search engines. However, the core principle of web accessibility is not about whether people "can find you", it is about whether all people, irrespective of age, race, education or disability, can access to information in websites.

Four Principles of Making Websites Accessible

➢ Principle 2: Operable – User control components and navigation must be operable by user.

Four Principles of Making Websites Accessible

➤ Principle 3: Understandable - Information and the operation of user interface must be understandable.

Error Suggestion

Home > Community Initiatives and IT Services > Web Accessibility

5 errors are found
Web Accessbility Suggestion Box

Name :   Please provide your name.

Telephone Number :   Please provide your telephone number.

(Please provide country/area codes if outside Hong Kong)

E-mail Address :   Please provide your e-mail address.

Suggestion / Comment :   Please provide your suggestion/comment.

Enter the characters in the image   Please enter the characters in the image.

Four Principles of Making Websites Accessible

➢ Principle 4: Robust – Content must be robust enough for reliable interpretation by a wide variety of web browsers, media players and assistive technologies.

Four Principles of Making Websites Accessible

- Within each of these principles are a range of guidelines focusing on different types of content

  - For example: WCAG 2.0 Guideline 2.1 "Keyboard Accessible: Make all functionality available from a keyboard."

  - We will look at these examples in the latter part.