

# Web Accessibility Guide

All you need to know about accessible websites



The usability & accessibility specialists

Report written and researched by Webcredible © 2004-2007.



The usability & accessibility specialists

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## Web accessibility: An introduction

Web accessibility is about making your website accessible to all Internet users (both disabled and non-disabled), **regardless of what browsing technology** they're using.

Accessible websites usually see a large increase in traffic as they become available to all Internet users. Web accessibility is extremely important as a website that's optimised in web accessibility has numerous benefits:

### Fulfilling legal obligation

- ▣ In 1995 the Disability Discrimination Act was passed
- ▣ In 1999 part III of the Act, which refers to service providers, came into force
- ▣ In 2002 the Code of Practice for part III of the Act was published and specifically mentions that accessible websites are now a legal requirement

For more information about the legal requirements please consult page 5.

### Maximising access to your website

Nowadays websites can be accessed using a variety of different devices, each one facing different accessibility issues:

- ▣ **Handheld device** - Very small screen with limited support for JavaScript and large images (e.g. mobile phone, PDA)
- ▣ **Screen reader** - Reads the content of the page aloud in the order it appears in the HTML document (used by blind web users)
- ▣ **Screen magnifier** - Magnifies the screen so only a very small section of the page can be viewed at any one time (used by web users with poor vision)
- ▣ **WebTV** - 560px in width with horizontal scrolling not available
- ▣ **Lynx browser** - Text-only browser with no support for tables, CSS, images, JavaScript, Flash or audio and video content

“

We made our website accessible in order to set an example to the 1,000,000+ web developers who visit our website each month. Thousands of sites have since followed our lead.

”

- Matt Mickiewicz, SitePoint  
([www.sitepoint.com](http://www.sitepoint.com))



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The number of people accessing the Internet from handheld devices is increasing at a massive rate – in 2008 there'll be an estimated **58 million PDAs sold** worldwide<sup>1</sup>. You can test how your website looks on a handheld device with the Opera mini simulator<sup>2</sup>.

### Less time-consuming to manage

An accessible website separates the content (the words and images that we see on the screen) and presentation (the way that these words and images are laid out) of each page.

Each web page has an HTML document which contains the words and images for that page (the content), and calls up a stylesheet document containing the presentation information - this stylesheet document is shared by all the pages on the website. Therefore, to change the layout of your website you only have to make changes in one file, **saving considerable time (and therefore money)**.

### Ready for the future

Inaccessible websites struggle to cope with the variety of methods that are being used to access the Internet, especially **handheld devices**. If your website isn't accessible within the next five years there could be a large number of Internet users who can't access your website. By making the necessary adjustments now you'll be creating a long-term future for your website.

### Higher search engine ranking

A website accessible to humans is also accessible to search engines. Search engines can't usually understand images, JavaScript, Flash, audio and video content. Search engines will be able to understand the purpose of your website more easily if you provide alternative content for each of these. The more confident a search engine is of what your website is about, all other things being equal, the higher in the search rankings it'll place your website.

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<sup>1</sup> [www.etforecasts.com/pr/pr0603.htm](http://www.etforecasts.com/pr/pr0603.htm)

<sup>2</sup> [www.opera.com/products/mobile/operamini/demo.dml](http://www.opera.com/products/mobile/operamini/demo.dml)

## The law in the UK

There's **widespread speculation about the legislation** that's been introduced, which will ensure that websites are accessible to disabled users.

### So, what does the law state?

Part III of the Disability Discrimination Act refers to the provision of goods, facilities and services. The Code of Practice, which **specifically mentions websites**, can be downloaded in its entirety from the DRC (Disability Rights Commission) website<sup>3</sup>.

The relevant quotes from this 175-page document are:

- 2.2 (p7): "The Act makes it unlawful for a service provider to discriminate against a disabled person by refusing to provide any service which it provides to members of the public."
- 4.7 (p39): "From 1st October 1999 a service provider has to take reasonable steps to change a practice which makes it unreasonably difficult for disabled people to make use of its services."
- 2.13 - 2.17 (p11-13): "What services are affected by the Act? An airline company provides a flight reservation and booking service to the public on its website. This is a provision of a service and is subject to the act."
- 5.23 (p71): "For people with visual impairments, the range of auxiliary aids or services which it might be reasonable to provide to ensure that services are accessible might include ... **accessible websites**."
- 5.26 (p68): "For people with hearing disabilities, the range of auxiliary aids or services which it might be reasonable to provide to ensure that services are accessible might include ... **accessible websites**."

“  
The Act makes it unlawful for a service provider to discriminate against a disabled person by refusing to provide them any service which it provides to members of the public.

”

- Code of Practice, Disability Discrimination Act

### When did the law come into force?

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<sup>3</sup> [www.drc.org.uk/open4all/law/Code\\_of\\_Practice.pdf](http://www.drc.org.uk/open4all/law/Code_of_Practice.pdf)

The law about accessible websites came into force on 1st October 1999<sup>4</sup> and the Code of Practice for this section of the Act was published on 27th May 2002<sup>5</sup>. This means that **many websites are in breach of the law**.

It was widely believed that the new laws were implemented in October 2004, when the final part of the Act came into force. This final piece of legislation actually referred to service providers having to consider making permanent physical adjustments to their premises and was not related to the Internet in any way.

## Can you be sued?

Well, probably, yes. The RNIB (Royal National Institute of the Blind) have considered taking up a number of **legal cases against organisations** with regard to their websites. When they raised the accessibility issues of the website, companies have typically made the necessary changes, rather than face the prospect of legal action.

The DRC published their findings from their formal investigation into 1000 websites<sup>6</sup>. If your website was included in this then you may have to start thinking about making it accessible to all web users.

## What do you need to do to comply?

It's widely believed that if, or perhaps more appropriately *when*, a case makes it to court that the **W3C accessibility guidelines** will be used to assess a website's accessibility and ultimately decide the outcome of the case. The W3C is the Internet governing body and its web accessibility guidelines can be found on its website<sup>7</sup>.

To further complicate matters, the W3C offers three different levels of compliance. **Priority 1 guidelines**, (which *must* be satisfied according to the W3C) will almost certainly have to be adhered to. Priority 2 guidelines (which *should* be satisfied and are the EU recommended level of compliance<sup>8</sup>), or some part of, will probably need to be adhered to too.

The courts will also no doubt take guidance from the outcome of an Australian case in 2000, when a blind man successfully sued the Sydney Olympics organising committee

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<sup>4</sup> [www.drc.org.uk/open4all/law/code.asp](http://www.drc.org.uk/open4all/law/code.asp)

<sup>5</sup> [www.hmso.gov.uk/si/si2002/20020720.htm](http://www.hmso.gov.uk/si/si2002/20020720.htm)

<sup>6</sup> [www.drc-gb.org/publicationsandreports/2.pdf](http://www.drc-gb.org/publicationsandreports/2.pdf)

<sup>7</sup> [www.w3.org/TR/WAI-WEBCONTENT/full-checklist.html](http://www.w3.org/TR/WAI-WEBCONTENT/full-checklist.html)

<sup>8</sup> [www.disabilityworld.org/09-10\\_02/access/internetaccess.shtml](http://www.disabilityworld.org/09-10_02/access/internetaccess.shtml)



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over their inaccessible website<sup>9</sup>. (The Australian Disability Discrimination Act quite closely resembles that of the UK's.) UK courts may also take into account the New York case against Ramada.com and Priceline.com, who were also successfully sued over the accessibility of their websites in 2004<sup>10</sup>.

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<sup>9</sup> [www.contenu.nu/socog.html](http://www.contenu.nu/socog.html)

<sup>10</sup> [www.out-law.com/page-4823](http://www.out-law.com/page-4823)

## How disabled users access the Internet

### Visually impaired users

Internet users that have no sight at all utilize a screen reader, which **reads the content of the web page**, or rather the HTML code of the page, back to them. These machines sift through the HTML code and the technology deciphers what needs to be read aloud and what should be ignored.

You can download the JAWS screen reader for a free trial<sup>11</sup>. Once you've downloaded it, go to your website, turn your monitor off, and try to navigate your website.

“

Many blind and partially sighted people find it liberating to be able to shop without asking a sighted friend to help, or to read the news or a book without assistance from a sighted person.

”

- Julie Howell, RNIB  
([www.rnib.org.uk](http://www.rnib.org.uk))

### Partial/poor sight

To take full advantage of the Internet, users with partial or poor sight need to be able to **enlarge the text** on web pages. To confirm your website allows them to achieve this, go to 'View > Text size > Largest' on Internet Explorer.

If your site is accessible to this group of users then the size of the text throughout the page will increase. Users with poor vision may also use a screen magnifier. You can download the MAGic screen magnifier for a free trial<sup>12</sup>.

### Colour blindness

It's estimated that one in 12 men and one in 200 women have some form of colour blindness<sup>13</sup>, the most common type being the inability to differentiate between red and green. You can check how Internet users with colour blindness are viewing your website with the Vischeck<sup>14</sup>.

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<sup>11</sup> [www.freedomscientific.com/fs\\_downloads/jaws\\_form.asp](http://www.freedomscientific.com/fs_downloads/jaws_form.asp)

<sup>12</sup> [www.freedomscientific.com/fs\\_downloads/magic.asp](http://www.freedomscientific.com/fs_downloads/magic.asp)

<sup>13</sup> [www.iee.org/Policy/Areas/Health/cvdintro.cfm](http://www.iee.org/Policy/Areas/Health/cvdintro.cfm)

<sup>14</sup> [www.vischeck.com/vischeck/vischeckURL.php](http://www.vischeck.com/vischeck/vischeckURL.php)

## Deaf users

Deaf users are able to access the Internet in much the same way as able-bodied people, with one key exception - audio content. If it's a key function of your website for people to be able to hear a message, then be sure to **provide written transcripts and subtitles**.

## Users with dyslexia or learning difficulties

Web users with dyslexia or learning difficulties often experience difficulties reading on the web. As such, it's essential that content is written in as clear and simple a format as possible. Try reading through some content-heavy pages on your website - do you find it easy to stay focussed on what you're reading?

## Keyboard-only users

Some of your site visitors may be **unable to use a mouse** when browsing the Internet, due to a physical disability. Try putting yourself in their position by navigating your website using only tab, shift-tab, and the return key.

## Other users

Other people who may access your website that have disadvantages include:

- ▣ Some **Epileptic users** who must always be careful to avoid seeing flickering between 2 and 55 Hz
- ▣ Web users from **outside your industry** who may not understand industry jargon or acronyms
- ▣ Web users whose **first language is not English** and who may not be able to comprehend complicated language

To really put yourself in the position of any one of these web users try out the DRC's inaccessible website demonstration<sup>15</sup>.

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<sup>15</sup> [www.drc-gb.org/open4all/newsroom/website6.asp](http://www.drc-gb.org/open4all/newsroom/website6.asp)

## Myths

### Creating a text-only equivalent is sufficient

Creating a separate text-only equivalent can lead to a **number of problems:**

- ▣ A text-only version is not necessarily accessible
- ▣ Two versions of the same website can represent a large time and money investment for you
- ▣ Your primary site may still be inaccessible to many users
- ▣ An 'extra' website for blind and disabled users can be one more way to make them feel marginalised from mainstream society

“

By developing a fully accessible website we experienced a dramatic reduction of man hours needed to maintain the site.

”

- Matthew Ogston,  
AccessibleNet  
([www.accessiblenet.org](http://www.accessiblenet.org))

Web accessibility isn't just about blind and disabled Internet users being able to use your site – it's about *everyone* being able to successfully access it. It really doesn't have to take very much time or money to make your website accessible, especially if you're building a new website.

### It's too complicated and expensive to make my website accessible

To develop an accessible website from scratch will cost virtually the same as to develop an inaccessible website. A very large, highly inaccessible website can take more time and money to fix up, although the basic layout and design usually need not change.

Achieving a basic- to mid-level knowledge of accessibility isn't too difficult and anyone with basic web development skills can learn and eventually implement accessibility solutions.

### Accessible web pages and attractive design cannot go together

Many advocates of web accessibility tend to have rather dull, unattractive websites. This is unfortunate, as web accessibility need not affect the design of the website in any way whatsoever. To fully dispel this myth, have a look at the CSS Zen Garden<sup>16</sup> – a beautiful website offering maximum accessibility.

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<sup>16</sup> [www.csszengarden.com](http://www.csszengarden.com)

## Accessible websites stifle creativity

Web accessibility actually places very few restrictions on website design. In fact, as with regular websites, you're only really limited by your imagination when creating accessible websites. Have a look at the CSS Zen Garden<sup>16</sup> to see for yourself that creativity doesn't have to be affected.

## My site visitors don't have a problem accessing my website

Not necessarily. Please see 'Benefits – part 1: Increase in reach' on page 15 to see just how many Internet users you may be excluding from your site. You can be sure that with 35 million websites to choose from<sup>17</sup> it's unlikely that site visitors prevented from accessing your website are going to waste their time contacting you to ask you to fix the problem.

## Web accessibility places restrictions on the web page design

Not at all. As with regular websites, you're only limited by your imagination when creating accessible websites. Text size needn't be extra-large (provided it's resizable), you can use any colour scheme within reason (provided colour isn't the only way you differentiate information) and you can use as many images as you like (provided an alternative description is provided).

These provisos mostly happen behind the scenes and don't affect the presentation of the website.

## Blind and disabled people don't use the Internet

On the contrary, blind and disabled people benefit from the Internet perhaps more than anyone else.

For example, visually impaired people have to phone up a supermarket when they want to go shopping to inform them of their arrival. When they get there, a store assistant will accompany them around the store. Through accessible websites visually impaired people can now shop at home, and in their own time.

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<sup>17</sup> [www.zooknic.com/Domains/counts.html](http://www.zooknic.com/Domains/counts.html)

## How to...Web accessibility

Web accessibility is about making your website accessible to all Internet users (both disabled *and* non-disabled), regardless of what browsing technology they're using.

### Your website must be able to function with all different browsing technologies

This is the first and perhaps most important rule of web accessibility. Not everyone is using the latest version of Internet Explorer, with all the plug-ins and programs that you may require them to have for your website. Different browsing technologies can include:

- **Handheld device** - Very small screen with limited support for JavaScript and large images (e.g. mobile phone, PDA)
- **Screen reader** - Reads the content of the page aloud in the order it appears in the HTML document (used by blind web users)
- **Screen magnifier** - Magnifies the screen so only a very small section of the page can be viewed at any one time (used by web users with poor vision)
- **WebTV** - 560px in width with horizontal scrolling not available
- **Lynx browser** - Text-only browser with no support for tables, CSS, images, JavaScript, Flash or audio and video content
- **Slow connection (below 56kb)** - Users may turn off images to enable a faster download time
- **1600px screen width** - Very wide screen

This basically means that you must **provide alternatives** to:

- **Images** - in the form of ALT text
- **JavaScript** - by ensuring all content is still accessible to non-JavaScript users
- **Flash** - with HTML equivalents
- **Audio & video** - by providing written transcripts

You must also be careful how your pages look when support for CSS and/or tables has been removed.

A good way to **test for all this** is to download the Lynx browser<sup>18</sup> and see if you can successfully access every part of your website. Please consult page 19 for some more ideas for testing your website.

## Forms need to be accessible to all web users

When a web user fills out a form it's a great thing. People fill out forms to:

- ▣ Buy a product
- ▣ Sign up to a newsletter
- ▣ Ask a question

These are the goals of your website! Site visitors may look through your site, decide they like what they see and try to sign up to your newsletter.

...But the form's inaccessible so they click away and you lose a potential customer. Many forms on the web are inaccessible. The two main reasons for this are:

- ▣ Prompt text is incorrectly positioned
- ▣ Prompt text is unassigned to form items

Prompt text is the text that appears next to each form item, for example, 'name', 'email', 'comments'.

## It should be easy for all users to quickly process the content on your website

We generally don't read web pages. We scan, trying to find what we're looking for as quickly as possible<sup>19</sup>. On a regular monitor, we scroll down the page looking at the items that stand out from the rest of the text: **headings, links, emboldened text** and **bullet points**. Non-keyboard and visually impaired users often scan pages by browsing through headings and/or links.

Make sure you use headings, links, emboldened text and bullet points and that they contain descriptive text. For example, never use 'click here' for link text.

## Structure and presentation should be completely separated

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<sup>18</sup> [lynx.browser.org](http://lynx.browser.org)

<sup>19</sup> [www.useit.com/alertbox/9710a.html](http://www.useit.com/alertbox/9710a.html)

By separating structure and presentation your website will be flexible enough to be ready for the future of the Internet: PDAs, mobile phones, in-car browsers, WebTV and 1600px screens.

The **structure** of a document is how it is organised, usually with navigational menu items, headings, sub-headings, paragraphs, lists, and links. The **presentation** of a document is how these words and images are presented to the end user.

The main principle behind this is to **use CSS and not tables** to lay out your web pages. Check out the Webcredible resources area for lots of CSS tips and information<sup>20</sup>.

There's more to separating structure and presentation than just laying your web pages out with CSS. You can, and should, avoid using presentational elements as they may cause your website to become inaccessible to certain users. The W3C has provided an HTML element list that tells you which elements are structural and which are presentational<sup>21</sup>.

### The end user should have control over your web pages

All web users have **unique requirements** for how they use the Internet, depending on the kind of browser they're using or any kind of handicap or disability they may have. By handing control back to your users they'll be able to use your website in the way that best suits them.

This could mean allowing users to resize text, warning them when links are going to open in a new window, or providing a skip link at the top of the page that takes visually impaired users directly to the page content (so they don't have to listen to the navigation options on every page).

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<sup>20</sup> [www.webcredible.co.uk/user-friendly-resources/css](http://www.webcredible.co.uk/user-friendly-resources/css)

<sup>21</sup> [www.w3.org/TR/WCAG10-HTML-TECHS/#index-elements](http://www.w3.org/TR/WCAG10-HTML-TECHS/#index-elements)

## Benefits – part 1: Increase in reach

Some organisations are changing their websites to make them accessible, but many are seemingly not making the adjustments. Disabled people don't access their website, they say, so why should they care?

## Why you should care about blind and disabled Internet users

The statistics on the number of users who may face difficulties using your website are quite startling:

- There are 8.6 million registered disabled people in the UK - 14% of the population<sup>22</sup>
- One in 12 men and one in 200 women have some form of colour blindness - 9% of the UK population<sup>23</sup>
- Two million UK residents have a sight problem - 4% of the population<sup>24</sup>
- There are 12 million people aged 60 or over - 21% of the UK population<sup>25</sup>

“

We estimate that the average table-based HTML web page would download two to three times more quickly if it was created with a CSS layout.

”

- Trenton Moss, Webcredible  
([www.webcredible.co.uk](http://www.webcredible.co.uk))

Although there is inevitably some overlap between all of the aforementioned groups, adding up these numbers provides a total of **48% of the UK population** that could potentially face problems using your website. That's an extraordinarily high number.

## It's not just disabled users who can't access your website

Non-disabled people may also experience difficulties using your website. Not everyone is viewing your website on the latest version of Internet Explorer, with all the plug-ins and programs that you may require them to have for optimal access.

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<sup>22</sup> [www.drc-gb.org/whatwedo/aboutus.asp](http://www.drc-gb.org/whatwedo/aboutus.asp)

<sup>23</sup> [www.iee.org/Policy/Areas/Health/cvdintro.cfm](http://www.iee.org/Policy/Areas/Health/cvdintro.cfm)

<sup>24</sup> [www.rnib.org.uk/xpedio/groups/public/documents/code/public\\_rnib001950.hcsp](http://www.rnib.org.uk/xpedio/groups/public/documents/code/public_rnib001950.hcsp)

<sup>25</sup> [www.statistics.gov.uk/census2001/pyramids/pages/UK.asp](http://www.statistics.gov.uk/census2001/pyramids/pages/UK.asp)

If your website relies on images, Flash or JavaScript, and fails to provide alternatives, then a number of web users will be unable to access your website. The following examples are a common occurrence:

- ▣ **WebTV, mobile phones, and PDAs** have limited support for large images, Flash and JavaScript. You can test your website on WebTV by downloading the free WebTV viewer<sup>26</sup>. You can also look at how your website will look on a mobile phone with the Opera mini simulator<sup>27</sup>.
- ▣ Users on slow connections may **turn images off** to enable a quicker download time. Some browsers, such as the text-only Lynx browser do not display images at all.
- ▣ Not all users have downloaded the latest Flash program needed to display your site. Additionally, the download time on Flash websites often takes so long that users lose patience and don't even wait to see the content. As of December 2005 under two thirds of web users in the UK were connected to the Internet via broadband<sup>28</sup>.
- ▣ **JavaScript** is a scripting language that can cause changes to a page, often through mouse functions, buttons, or other actions from the user. For example, pop-ups are opened using JavaScript. JavaScript is unsupported by about 4% of web users<sup>29</sup>, because they've turned it off to prevent pop-up adverts, for security reasons or their browser doesn't support it.

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<sup>26</sup> [developer.msntv.com/TOOLS/webtvvwr.asp](http://developer.msntv.com/TOOLS/webtvvwr.asp)

<sup>27</sup> [www.opera.com/products/mobile/operamini/demo.dml](http://www.opera.com/products/mobile/operamini/demo.dml)

<sup>28</sup> [www.statistics.gov.uk/pdffdir/intc0206.pdf](http://www.statistics.gov.uk/pdffdir/intc0206.pdf)

<sup>29</sup> [www.thecounter.com/stats/2006/April/javas.php](http://www.thecounter.com/stats/2006/April/javas.php)

## Benefits – part 2: The business case

There are, two very good reasons why businesses should start taking web accessibility seriously:

- An accessible website will **make you more money**
- An accessible website will **save you money**

There are seven explanations for this:

### Your website will be easier to manage

An accessible website separates the content (the words and images that we see on the screen) and presentation (the way that these words and images are laid out) of each page. Each web page has an HTML document that contains the words and images for that page (the content), and calls up a CSS document that includes the presentation information - this CSS document is shared by all the pages on the website.

To adjust the layout of your website, you only have to make changes in the CSS file, saving considerable time (and therefore money).

### Your website will be compatible with new technology

The use of PDAs and mobile phones to access the Internet is growing at a massive rate. The people making use of these new technologies are generally **high-income individuals**. In order to reach this lucrative target, you'll need a website that can work on these machines. To test your website, try accessing it on the Opera mini simulator<sup>30</sup>, which shows how your site will look on a mobile phone.

### Your website will appear higher in the search engines

By making your website more accessible to web users, you're also making it **more accessible to search engines**. Search engines can't usually understand images, JavaScript, Flash, audio and video content. By providing alternative content to each of these, search engines will have a better understanding of the purpose of your website.

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I'd heard that accessible websites achieve high search engine rankings, but I wasn't sure if this was true. Since we made our website accessible, traffic from search engines has increased, six-fold!

- Gez Lemon, Juicy Studio  
([www.juicystudio.com](http://www.juicystudio.com))

<sup>30</sup> [www.opera.com/products/mobile/operamini/demo.dml](http://www.opera.com/products/mobile/operamini/demo.dml)



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The more confident a search engine is of what your website is about, all other things being equal, the higher it'll place your website in the search rankings.

### **You won't have to incur legal fees**

The RNIB (Royal National Institute of the Blind) and the DRC (Disability Rights Commission) have been exerting pressure on companies and the government to make their websites accessible. Indeed, the DRC has published their findings from their formal investigation into 1000 websites<sup>31</sup>.

### **Your website's download time will significantly improve**

As of December 2005 under two thirds of UK web users were connected to the Internet via broadband<sup>32</sup>. If your website takes much longer than ten seconds to download many of your site visitors will be clicking away and you'll lose their custom.

### **The usability of your website will be enhanced**

There is a large amount of overlap between web accessibility and usability. It's been shown that a usability redesign increases the sales/conversion rate of a website by 100%<sup>33</sup>.

### **You'll gain good publicity**

Make your website accessible to everyone and you can tell the world about it.

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<sup>31</sup> [www.drc-gb.org/publicationsandreports/2.pdf](http://www.drc-gb.org/publicationsandreports/2.pdf)

<sup>32</sup> [www.statistics.gov.uk/pdfdir/intc0206.pdf](http://www.statistics.gov.uk/pdfdir/intc0206.pdf)

<sup>33</sup> [www.useit.com/alertbox/20030107.html](http://www.useit.com/alertbox/20030107.html)

## Ten basic accessibility tests

There are a number of basic tests you can make to address some of the main issues of web accessibility. The following list includes guidelines that provide a good start in increasing your website's accessibility:

### Check information images for alternative text

In Internet Explorer place the cursor over an information image (e.g. the organisation logo). Does a **yellow tooltip appear** with a brief, accurate description of the image? For screen reader users and users whose browsers don't support images, this alternative text is what they'll see (or hear) in place of the image.

### Check decorative images for alternative text

Place the cursor over a decorative image that doesn't have any function other than to look nice. Does a yellow box appear with a description of the image? It shouldn't. This image serves no purpose so there's no reason for users whose browsers don't support images to know that it's here.

Be careful though as this **isn't a foolproof test**. If a yellow box doesn't appear, this could mean one of two things:

- The alternative text of the image is assigned a null value (`alt=""`), which means that it'll be ignored by screen readers. This is the ideal scenario.
- The alternative text of the image is simply not set at all, which means that screen readers will usually read aloud the file name - something which can be highly disorienting and frustrating. This is certainly not the desired outcome.

### 'Listen' to video or audio content with the volume turned off

If you turn your speakers off, you're clearly unable to listen to, or follow, any audio content. This situation is faced by a deaf person on a daily basis. Ensure your website supplies **subtitles or written transcripts**, so that hearing impaired users can access this content.

### Check that forms are accessible

Usually there's prompt text next to each item in a form. For example, a contact form might have the prompt text 'name', 'e-mail', and 'comments', each one next to a box where site users will enter their details. When you **click on the prompt text**, does a flashing cursor appear in the box next to that text? If not, your forms may be inaccessible.

## Check that text can be resized

Can the text size on your website be adjusted? If not, then your website may not be accessible to web users with poor visibility. To check in Internet Explorer go to 'View > Text size > Largest'.

## Check your website in the Lynx browser

The Lynx browser is a text-only browser and doesn't support many of the features that other browsers such as Internet Explorer have. You can check how your site looks in this browser with the Lynx Viewer<sup>34</sup>. If your website makes sense and can be navigated through the Lynx browser, then it'll likely be fulfilling many web accessibility guidelines.

## Check that you can access all areas of your website without the use of a mouse

Can you navigate through your website using just tab, shift-tab and return? If not, then neither can keyboard-only users.

## Check there's a site map

Can you find a site map? If not, then neither can people who are lost on your website.

## Ensure link text makes sense out of context

Screen reader users often browse websites by tabbing from one link to the next. Does all the link text on your website make sense out of context? 'Click here' and 'more' are two common examples of non-descriptive link text.

## Check your web pages with an automated program

Two programs available for free on the Internet are WebXact<sup>35</sup> and Wave<sup>36</sup>. They're unable to provide you with much in the way of specific information as most checks must be done by humans. They can however give you a top-level overview of how badly your site might be going wrong. (The errors and warnings from an automated program should be treated with a lot of scepticism, however, as a number of incorrect recommendations are often made.)

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<sup>34</sup> [www.delorie.com/web/lynxview.html](http://www.delorie.com/web/lynxview.html)

<sup>35</sup> [webxact.watchfire.com](http://webxact.watchfire.com)

<sup>36</sup> [www.wave.webaim.org](http://www.wave.webaim.org)

## Further reading

### Websites

- **W3C web accessibility guidelines 1.0**  
[www.w3.org/TR/WAI-WEBCONTENT/full-checklist.html](http://www.w3.org/TR/WAI-WEBCONTENT/full-checklist.html)  
The official 65 checkpoints in full
- **Webcredible web accessibility articles**  
[www.webcredible.co.uk/user-friendly-resources/web-accessibility](http://www.webcredible.co.uk/user-friendly-resources/web-accessibility)  
Lots of easy-to-understand accessibility how-to articles
- **Accessify**  
[www.accessify.com](http://www.accessify.com)  
Free accessibility tools and lots of useful accessibility resources
- **Accessible Net**  
[www.accessiblenet.org](http://www.accessiblenet.org)  
Excellent online directory of links and resources about web accessibility
- **Dive Into Accessibility**  
[www.diveintoaccessibility.org](http://www.diveintoaccessibility.org)  
An excellent online learning resource for web accessibility
- **Juicy Studio**  
[www.juicystudio.com](http://www.juicystudio.com)  
Website offering up-to-date accessibility articles and opinion pieces
- **A List Apart accessibility articles**  
[www.alistapart.com/topics/userscience/accessibility](http://www.alistapart.com/topics/userscience/accessibility)  
Large number of well written (and often innovative) accessibility articles

### Books

- **Web Accessibility: Web Standards and Regulatory Compliance**  
– Jim Thatcher et al
- **Building Accessible Websites**  
– Joe Clark



The usability & accessibility specialists

## About Webcredible

Webcredible is a usability and accessibility consultancy providing a range of services:

### Usability

- ▣ Usability testing
- ▣ Usability website evaluation
- ▣ Ongoing usability support
- ▣ Intranet usability

### Training

- ▣ Usability testing training
- ▣ Writing for the web training
- ▣ Web usability training
- ▣ Web accessibility training
- ▣ Advanced CSS training

### User-centered design

- ▣ User research & focus groups
- ▣ Card sorting & site map creation
- ▣ Wireframe design & testing

### Accessibility

- ▣ Web accessibility evaluation
- ▣ Accessibility testing
- ▣ Ongoing accessibility & CSS help

### Accessible web design

- ▣ CSS web design & build
- ▣ CSS / XHTML coding
- ▣ DOM scripting & accessible

Webcredible is widely regarded as one of the most innovative and respected usability and accessibility consultancies in the UK. Webcredible's research articles have been re-published on well over 100 websites and in numerous offline publications.

Webcredible regularly conducts usability testing studies and has a purpose-built usability lab (see [www.webcredible.co.uk/services/tour](http://www.webcredible.co.uk/services/tour) for a virtual tour). Clients include BBC, Environment Agency, Norwich Union, T-Mobile, Visa, World Health Organization and Yamaha.

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