



ESCUELA TÉCNICA SUPERIOR DE INGENIERÍA – ICAI
Departamento de Sistemas Informáticos

Creating web pages

Chapter 7. Compatibility and Accessibility

Cristina Puente, Rafael Palacios
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Compatibility and Accessibility

- **Compatibility** means that the page can be seen with any web browser:
 - Internet Explorer, Firefox, Opera, Safari, PDA, movil...
 - Windows, Linux (unix), MacOS, Symbian, PalmOS, ...
- **Accessibility** is related with the organization of the content so that the page can be read easily, specially that **people with disabilities** can use the Web.



Compatibility and Accessibility

- **Accessibility**

- Nearly 10% of men are color blind.
- Many old people need to use large font size to be able to read the screen
- Blind people use voice synthesizers or Braille terminals
- Some pages cannot be seen properly in displays with low resolution or low number of colors

- The objective is that people with disabilities can perceive, understand, navigate, and interact with the Web.





Compatibility and Accessibility

- This is the most relevant aspect of good HTML programming. But it is not difficult, since HTML is a language designed to be adaptable to different devices and user preferences.
- Attaining accessibility usually provides compatibility.
- Accessibility also benefits people without disabilities:
 - people using a slow Internet connection.
 - people using a low resolution device such as a mobile phone.
 - people with "temporary disabilities" such as a broken arm.
- The most basic principle is to "be respectful with user preferences". Specially with font size, and screen resolution.



Compatibility and Accessibility

- Spanish **LSSI** law requires government websites to provide accessible content.
- LSSI law requires to conform with norms UNE 139801 and 139802, in addition to WAI (see below)

LSSI, Ley 34/2002 de 11 de julio, de Servicios de la Sociedad de la Información y del comercio electrónico





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Accessibility recommendations

Accessibility recommendations

- WAI (Web Accessibility Initiative) by W3C:
<http://www.w3.org/WAI/>
see WCAG 2.0 (Web Content Accessibility Guidelines)*
- Web and Software Accessibility Policies and Guidelines (MIT):
<http://web.mit.edu/atic/www/sw/>

* WAI recommendations are considered "norm" in the European Union.





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Some general tricks



Some general tricks

- Check the dynamic behavior
 - Change the windows size.
 - Change the font size in the browser.
 - Test different browsers, mobile devices, ...
- Text and object sizes
 - Always use "relative" font size definitions such as "small" or "0.7em".
 - Define the size of the object "relative" to the size of the windows. Ex. width="50%".
- Using colors
 - Do not use background and text colors with low contrast.
 - Be careful with those color that color blind people cannot distinguish properly.
 - Use standard color, called web-safe colors.
 - Try to print the pages or define special styles for printing
- Verify if the page passes the compatibility/accessibility tests.





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Page verification

Syntax verification

- Verify HTML page compatibility at: <http://www.w3.org/>
 - CSS Validator: <http://jigsaw.w3.org/css-validator/>
 - HTML Validator: <http://validator.w3.org/>





Accessibility verification

- TAW (Test de Accesibilidad Web), Ministerio de trabajo y asuntos sociales
<http://www.tawdis.net/>
- HERA accessibility test, developed by Fundación Sidar.
<http://www.sidar.org/hera/>



