Web Accessibility

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Content

- What is Web Accessibility?

  - Some definitions

- Accessibility guidelines

  - A few guidelines to make our websites more accessible

- Conclusions

What is Web Accessibility?

- Various definitions

- "A web site is accessible if people with specific disabilities can use it with the same effectiveness, safety and security as non-disabled people."

- Validity and Reliability of Accessibility Evaluation Methods, Giorgio Brajnik

- Not only for people with disabilities

- Disability given by the context

Types of Disabilities

- Visual

- Motor/Mobility

- Cognitive/Intellectual

Assistive technologies

- Screen reader

- Screen magnification

- Cntrl +

Benefits of Web Accessibility

- Social

- Technical

- Financial

- Legal

  - Some countries have introduced legislations

  - Affect public sector web sites

  - In Uruguay there is a bill

WCAG

- Guidelines for making content accessible

- Published by the W3C

- The 2.0 version was published in 2008

  - Became an ISO standard in 2012: ISO/IEC 40500:2012

- 12 guidelines under 4 principles

Guidelines

- 4 principles

  - Perceivable

  - Operable

  - Understandable

  - Robust

Perceivable

- Text alternatives

  - For every non-text content

  - To be interpreted by screen readers
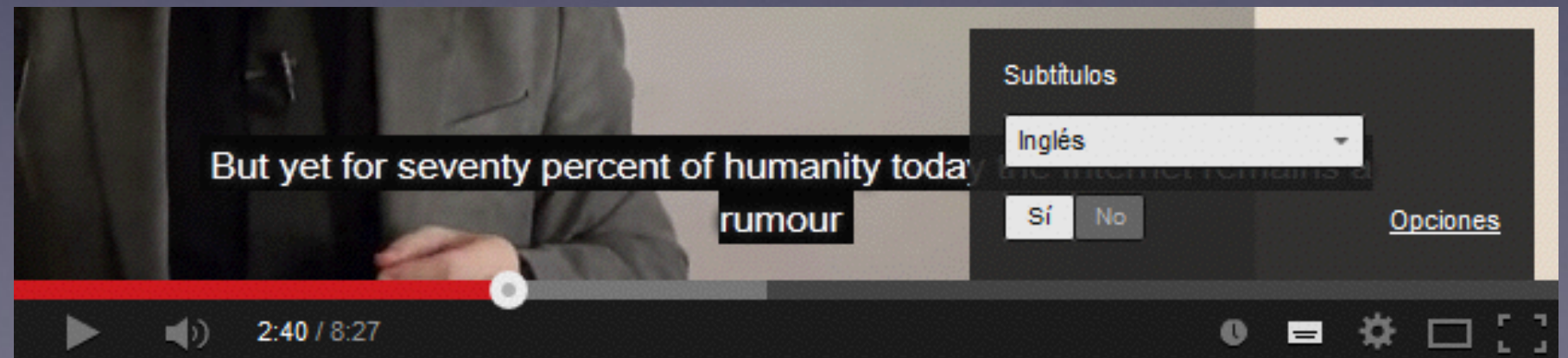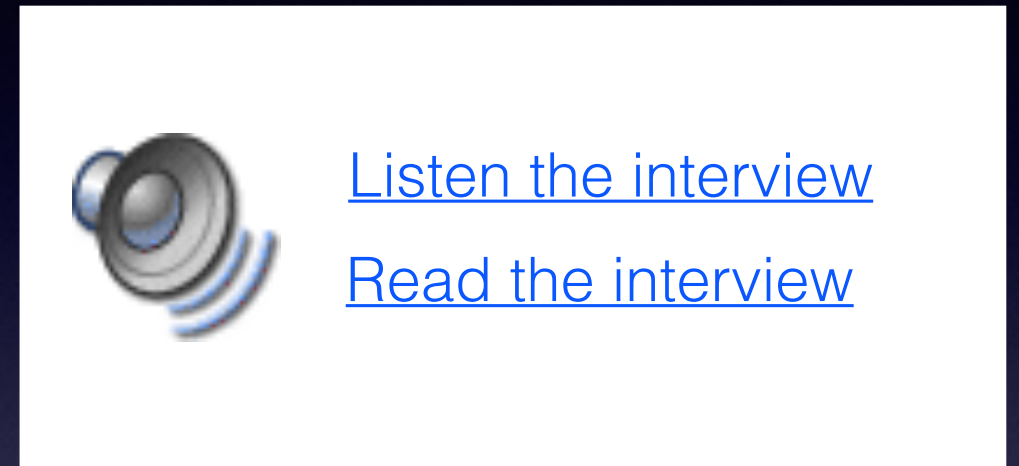
Perceivable

- \<img src="firefox.jpg" alt="Firefox" height="256" width="256" >

- What to put?

- What not?

- Exceptions: CAPTCHA, decorative images

Perceivable

- Time-based media

  - Provide alternatives

Perceivable

- Audio:

  - Text with the equivalent information

Listen the interview

Read the interview

- Video:

  - Text with the equivalent information

  - Subtitles

But yet for seventy percent of humanity toda...

rumour

Subtítulos

Inglés

Sí No

Opciones

2:40 / 8:27

Perceivable

- Adaptable

  - Content can be presented in different ways

  - Separate content and presentation layer

    - HTML, CSS, JS

  - Use semantic elements

    - <h1>, <p>,

    - Differences between <strong> and <b>

Operable

- Keyboard accessible
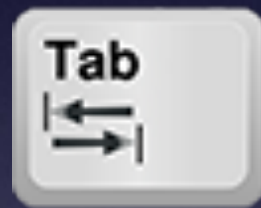
- Be careful with JavaScript's "onclick" method

  - <img src="search.jpg" onclick="Search();" alt="Search">

Operable

- Enough time

❌ http://bcu.gub.uy

✓ http://cromo.com.uy

Operable

- Navigable

  - Bypass blocks

  - Page titled

  - Focus order

  - Multiple ways

Link to main content

Repetitive menu

Content

Contacto | Mapa del sitio

Buscar en este sitio…
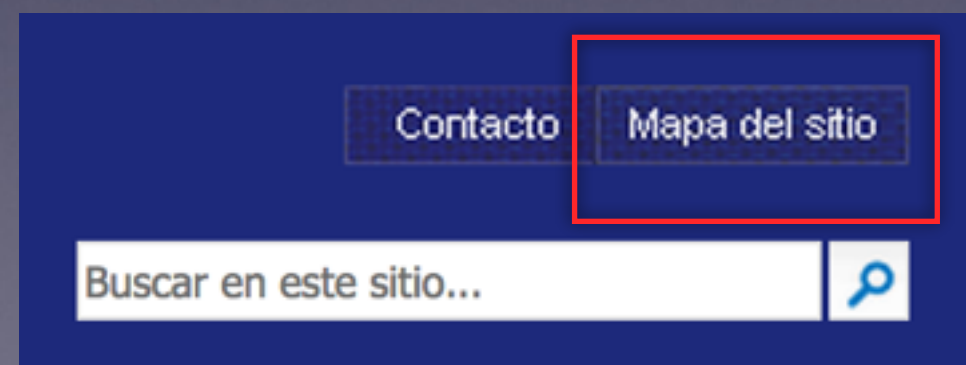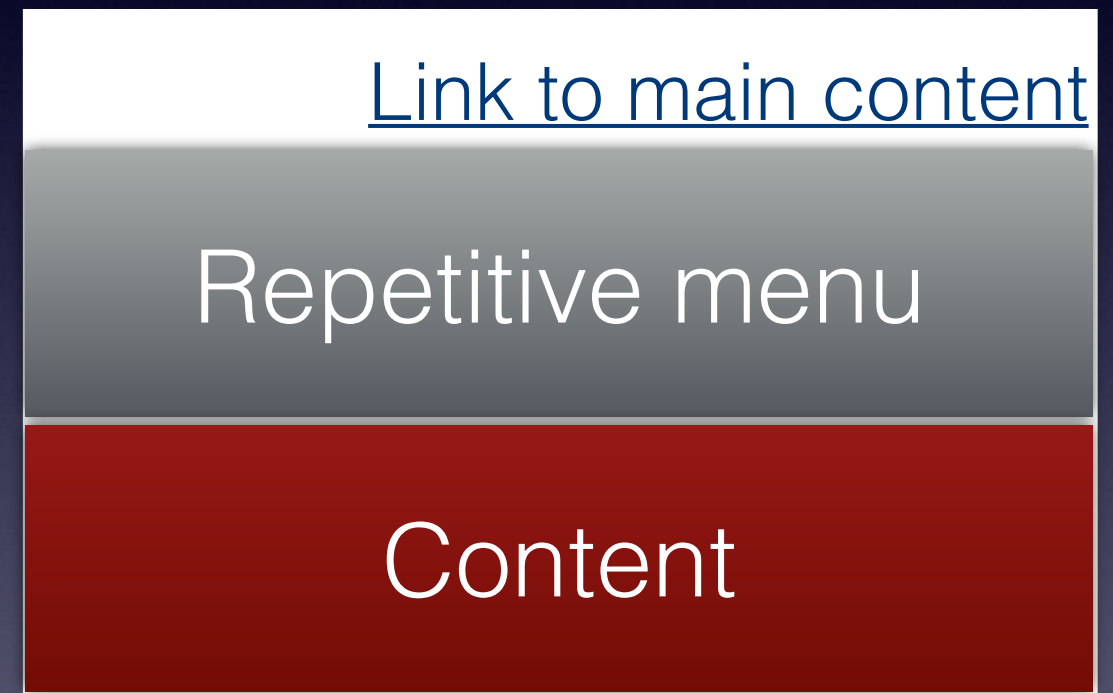
Understandable

- Language of the page

  - Programmatically determined

  - <html …. lang="en" xml:lang="en">

  - Screen readers, subtitles

Understandable

- Readable

  - Unusual words

  - Abbreviations

  - Reading level

Understandable

- Input assistance

  - Help users to avoid and correct errors

  - Forms

Understandable

- Indicate clearly required or optional fields

    - * Required information

- Identify errors
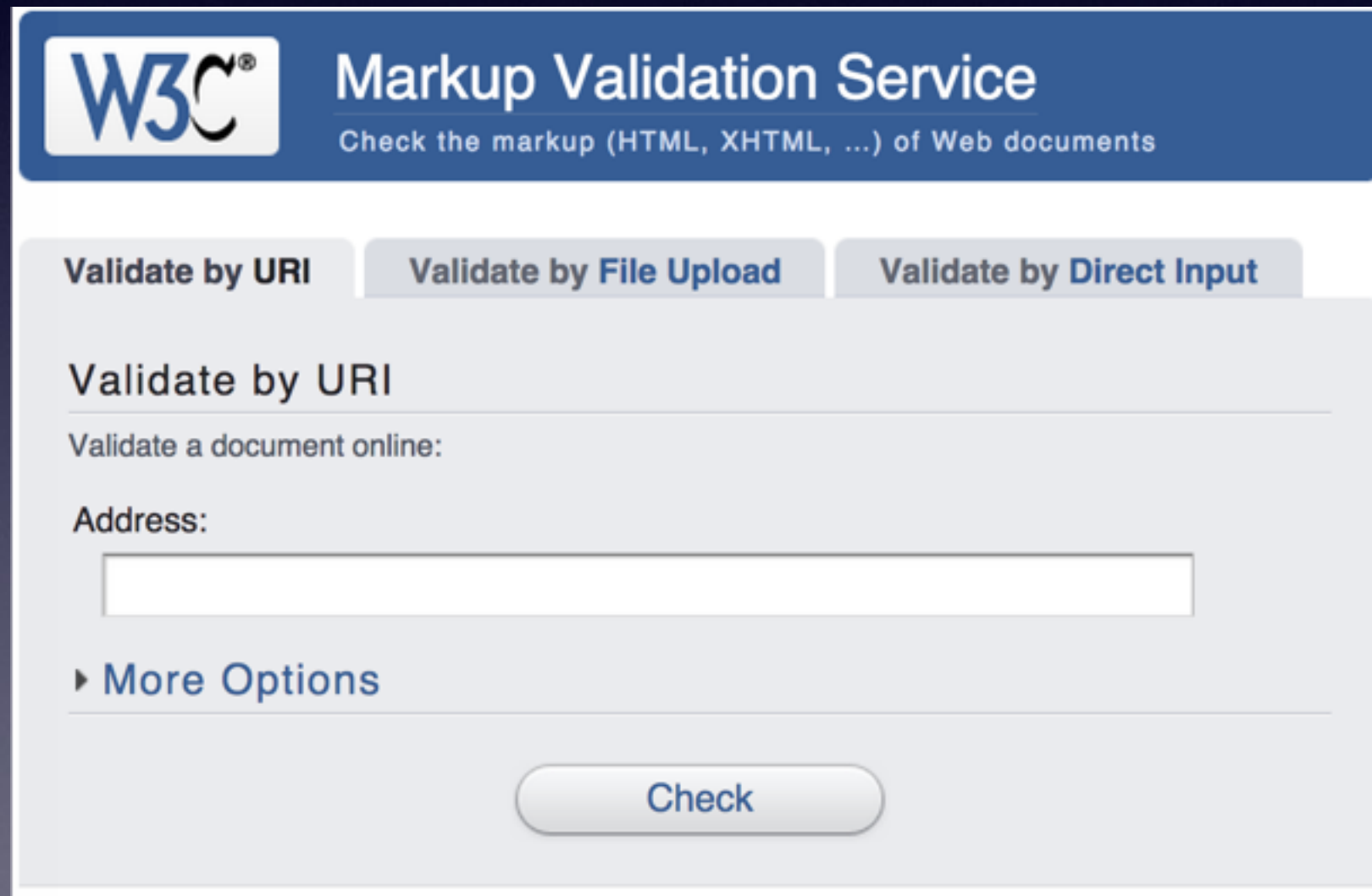
Robust

- Content must be robust enough that it can be interpreted reliably by a wide variety of user agents, including assistive technologies.

  - Screen readers

Robust

- W3C Validator

http://validator.w3.org/

Robust

- Validating Central Bank of Uruguay webpage..

	Errors found while checking this document as HTML 4.01 Transitional!	
Result:	52 Errors, 67 warning(s)	
Address :	http://bcu.gub.uy/Paginas/Default.aspx	
Encoding :	utf-8	(detect automatically)
Doctype :	HTML 4.01 Transitional	(detect automatically)
Root Element:	html	

- Various errors probably caused by a Content Manager

- Some images without alt attribute

Accessibility evaluation

- Manual evaluation

  - http://www.w3.org/WAI/WCAG20/quickref/

  - Check every 'success criteria'

  - 1.1.1 All non-text content that is presented to the user has a text alternative that serves the equivalent purpose…

Accessibility evaluation

- Automatic evaluation

  - http://tawdis.net/ (online)

  - http://totalvalidator.com

  - Evaluate with more than one validator

Example

Try to check the currency rates in the 'Central Bank of Uruguay' webpage with a screen reader

Example - How to improve?

- Button to bypass blocks

- For some content is preferable to use div rather than tables

- Lots of news hidden in the HTML

  - Screen reader's navigation slower

  - It would be better to have a "Read all the news" button

Conclusions

- Most of the guidelines are not hard to implement

- It is easier to start thinking about accessibility the sooner as possible

- Try to include everybody

- Improves the usability and maintainability of your website

- Make sure you are not breaking any law