

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



- ``

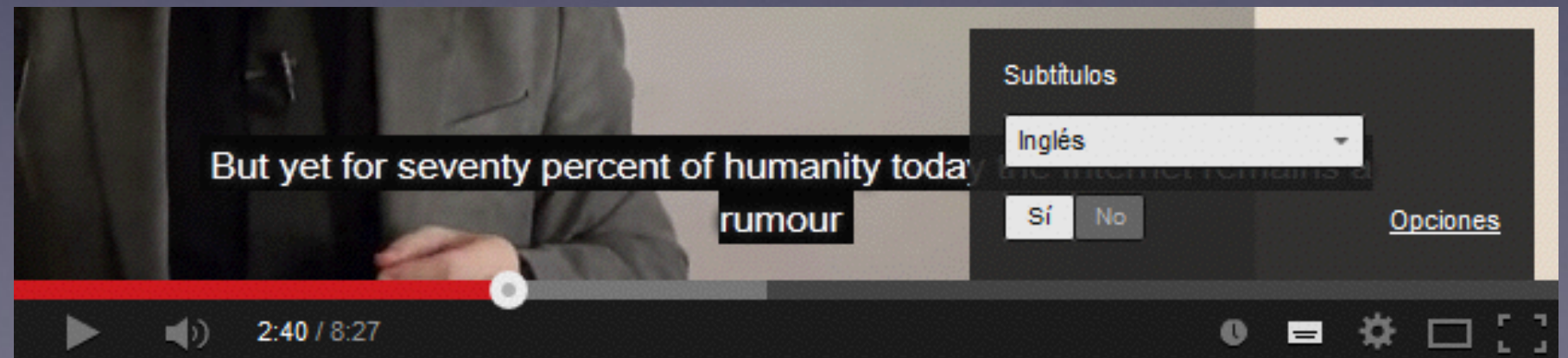
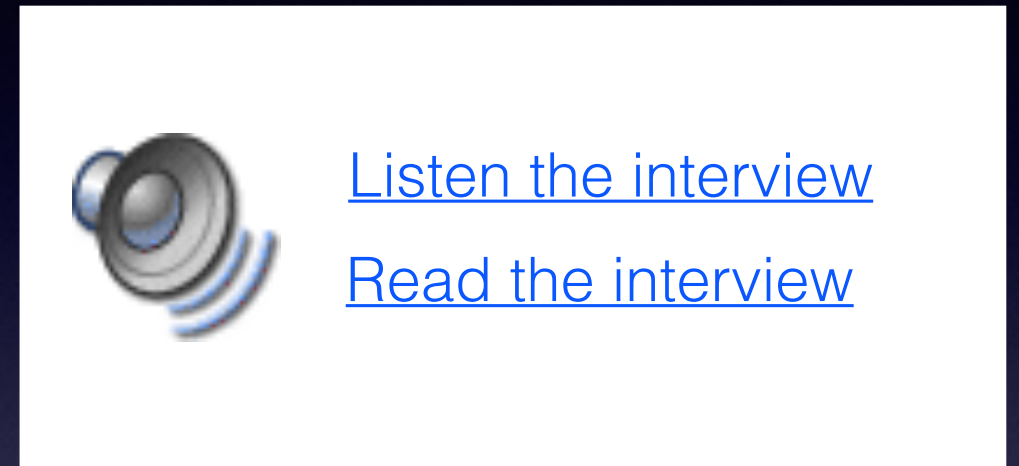
- What to put?
- What not?
- Exceptions: CAPTCHA, decorative images

Perceivable

- Time-based media
 - Provide alternatives

Perceivable

- Audio:
 - Text with the equivalent information
- Video:
 - Text with the equivalent information
 - Subtitles

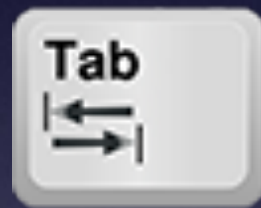


Perceivable

- Adaptable
 - Content can be presented in different ways
 - Separate content and presentation layer
 - HTML, CSS, JS
 - Use semantic elements
 - `<h1>`, `<p>`, ``
 - Differences between `` and ``

Operable

- Keyboard accessible



- Be careful with JavaScript's "onclick" method
 - ``

Operable

- Enough time



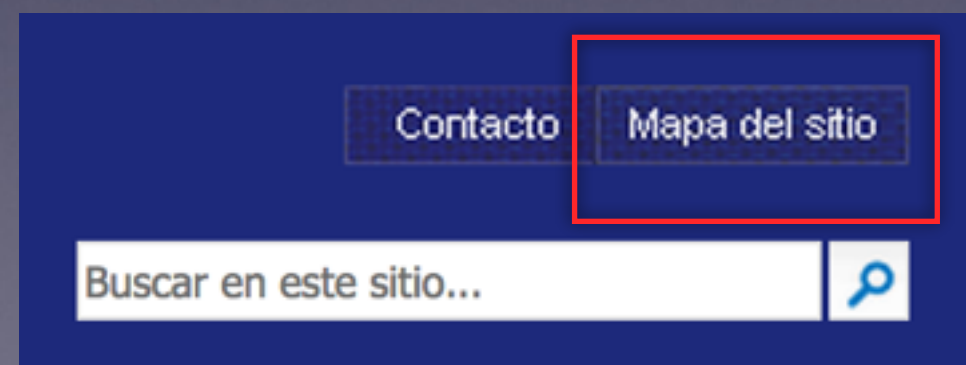
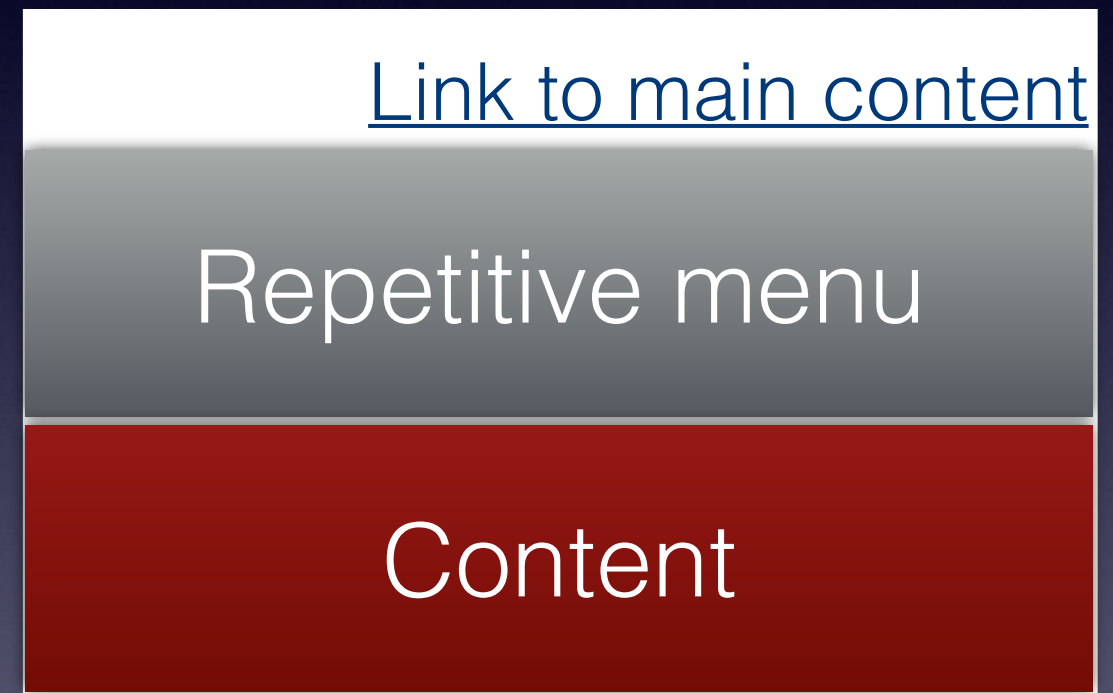
<http://bcu.gub.uy>



<http://cromo.com.uy>

Operable

- Navigable
 - Bypass blocks
 - Page titled
 - Focus order
 - Multiple ways



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

The image shows a form with two sections. The first section is titled '* Nombre' and contains two input fields: 'Nombre' and 'Apellidos'. Below these fields is a red error message: 'No puedes dejar este campo en blanco.' The second section is titled '* Nombre de usuario' and contains a single input field. To the right of this field is the text '@gmail.com'. Below this field is another red error message: 'No puedes dejar este campo en blanco.' The form is enclosed in a light gray border.

*** Nombre**

Nombre Apellidos

No puedes dejar este campo en blanco.

*** Nombre de usuario**

@gmail.com

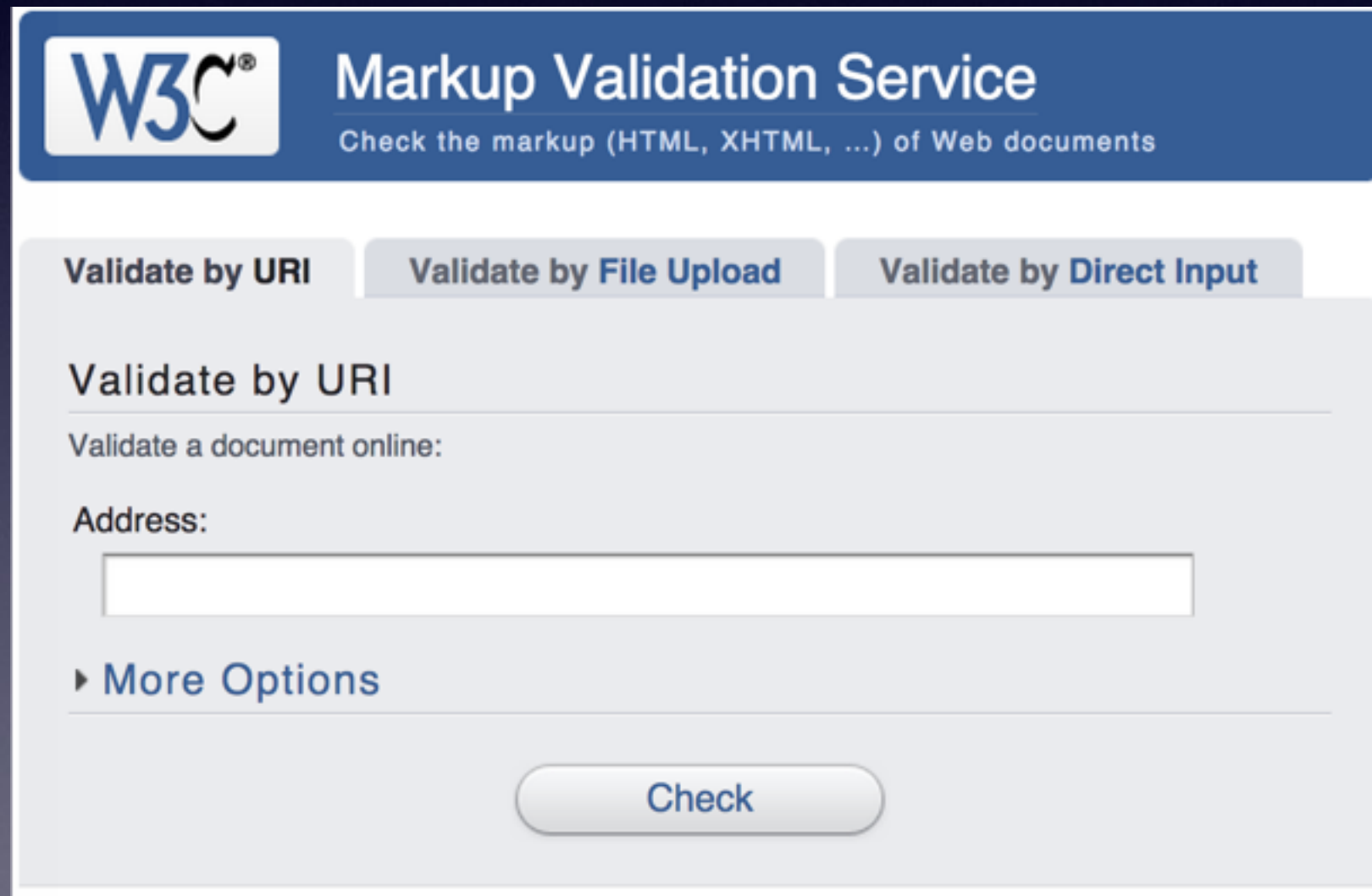
No puedes dejar este campo en blanco.

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



The screenshot shows the W3C Markup Validation Service interface. At the top, there is a blue header with the W3C logo and the text "Markup Validation Service" and "Check the markup (HTML, XHTML, ...) of Web documents". Below the header, there are three tabs: "Validate by URI", "Validate by File Upload", and "Validate by Direct Input". The "Validate by URI" tab is selected. Under this tab, there is a section titled "Validate by URI" with the text "Validate a document online:". Below this, there is a label "Address:" followed by a text input field. At the bottom of the form, there is a link "More Options" and a "Check" button.

<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 :	<input type="text" value="http://bcu.gub.uy/Paginas/Default.aspx"/>		
Encoding :	utf-8	<input type="button" value="(detect automatically)"/>	
Doctype :	HTML 4.01 Transitional	<input type="button" value="(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

BCU portal.gub.uy | Portal del Estado

www.bcu.gub.uy/Paginas/Default.aspx

BCU BANCO CENTRAL DEL URUGUAY

Contacto Mapa del sitio

Buscar en este sitio...

Portada Acerca del BCU Política Monetaria Sistema Financiero Sistema de Pagos Estadísticas y Estudios Billetes y Monedas Sala de Prensa

Noticias

24/9
Próxima reunión del COPOM
El Banco Central del Uruguay anuncia que la próxima reunión del Comité de Política...

22/9
Sistema de Pagos - Proyecto Normativo
Sistemas Electrónicos de Compensación y Comunicación

22/9
Compra Directa 2014-CD-PC-1454
Suministro e instalación de carteles de señalización interna y retiro de los carteles...

22/9
Presidente Alberto Graña participa de LXXXVI Reunión de Directorio del FLAR
El Presidente del BCU, Alberto Graña, estará...

19/9
Principales Agregados Monetarios
Agosto 2014

Cotizaciones

Moneda	Promedio
Peso	1,721
Real	10,031
US\$ Bill	24,777
US\$ Fdo	24,742
Euro	31,566
26/09/14	2,9065

Cierre del 25/09/2014

Una política monetaria orientada a la estabilidad.

Uno de los propósitos fundamentales del Banco Central es la estabilidad de precios, lo que implica generar las condiciones para que la inflación se mantenga dentro del rango objetivo establecido por el Gobierno. Para lograrlo, nuestra institución debe preservar el valor de la moneda, que se mide a través de la capacidad de compra del peso uruguayo.

Activos de Reserva
Base monetaria
Expectativas de Inflación
Inflación - Últimos datos

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