Accessible Web Design

Why Bother?

⭐ You can, therefore you should

⭐ It's good business!

   ⭐ In the USA 10 million severely disabled people

   ⭐ $46 billion market

⭐ One day you'll be old too

   ⭐ Current $100 billion market

Why Bother?

⭐ Improved usability for all users

⭐ When it's easier to navigate, productivity increases

⭐ It's a challenge

⭐ It's the law!

Designing for the Visually Impaired

⭐ Types of visual impairment

⭐ Blind

⭐ Rely on screen readers: JAWS, Hal, VoiceOver or Orca

⭐ Text-to-speech technology

⭐ Low vision

⭐ Rely on screen magnification tools: Built in or 3rd party (Zoom-Text)

Designing for the Visually Impaired

⭐ Colour and Contrast Deficiencies

⭐ Monochrome vision

⭐ Distinguishing colours (green from red / blue from yellow / red from black)

⭐ Photosensitive Seizures

⭐ Flickering images

Structured HTML: Best Practices and Practical Advice

HTML: Keep it Simple

⭐(X)HTML should be well designed, semantically correct, relatively uncomplicated and human-readable

⭐ Stay away from tables for layout purposes

⭐The reading order should make sense before you apply CSS: i.e. create markup in a logical order

Structure Your HTML

⭐ HTML content should be structured correctly

⭐ Use <div> for blocks of content

⭐ <section> available in HTML5 / XHTML2

Nesting Headings: The Wrong Way

★ <h1>Lorem Ipsum</h1>

★ <p>Lorem ipsum dolor sit amet, consectetur adipiscing elit. Phasellus rhoncus aliquam sem, quis pellentesque ante euismod sit amet. Maecenas id faucibus nisi....</p>

★ <h3>Sed Consequat</h3>

★ <p>Sed consequat, orci id semper fringilla, dui nisl viverra magna, vitae porta elit tellus sed diam. In bibendum dignissim arcu in venenatis...</p>

Nesting Headings Correctly

- ⭐ `<h1>Lorem Ipsum</h1>`

- ⭐ `<p>Lorem ipsum dolor sit amet, consectetur adipiscing elit. Phasellus rhoncus aliquam sem, quis pellentesque ante euismod sit amet....</p>`

- ⭐ `<h2>Sed Consequat</h2>`

- ⭐ `<p>Sed consequat, orci id semper fringilla, dui nisl viverra magna, vitae porta elit tellus sed diam. In bibendum dignissim arcu in venenatis. Donec nibh lacus, malesuada ac viverra quis, cursus non lorem. Nam tristique nulla odio...</p>`

- ⭐ `<h3>Duis Aliquam</h3>`

- ⭐ `<p>Duis aliquam nisl at urna pretium a consequat neque molestie. Aliquam ligula nunc, porttitor sed adipiscing quis, tincidunt non quam.</p>`

The "title" attribute

Abbreviations \<abbr\> and Acronyms \<acronym\> both make use of the title attribute

\<abbr title='tablespoon'\>Tbsp.\</abbr\>

\<acronym title='World Wide Web'\>WWW\</acronym\>

Deprecated Tags

- Some time ago the W3C deprecated <s> (strikethrough) and <u> (underline) tags

- However, they left in <b> (bold) and <i> (italicised) font formatting tags in, but do not use these in your markup

Visual Formatting

Visual Form	HTML	CSS	Semantic
Bold	<b>	font-weight	<strong>
Italics	<i>	font-style: italic	<em> <var>
Underline	<u>	text-decoration: underline	<em><strong>
Strikethrough	<s>	text-decoration: line-through	<del>
Overline	none	text-decoration: overline	<ins>
Fixed Width	<tt>	font-family	<code><kbd> <samp><var>

Anchor Tags

⭐ Never do this:

⭐ Click here

⭐ Better:

⭐ About Us

⭐ Much better:

⭐ <a title='Read more about us'

⭐ href='/about_us.html'>About Us

Tables

⭐ Never use tables for layout - only use for tabular data!

```
view plain  copy to clipboard  print  ?
01.  <!-- Table markup-->
02.
03.  <table id="...">
04.
05.      <!-- Table header -->
06.
07.          <thead>
08.              <tr>
09.                  <th scope="col" id="...">...</th>
10.                  ...
11.              </tr>
12.          </thead>
13.
14.      <!-- Table footer -->
15.
16.          <tfoot>
17.              <tr>
18.                  <td>...</td>
19.              </tr>
20.          </tfoot>
21.
22.      <!-- Table body -->
23.
24.          <tbody>
25.              <tr>
26.                  <td>...</td>
27.                  ...
28.              </tr>
29.              ...
30.          </tbody>
31.
32.  </table>
```

Forms: Don't write this

⭐ <form>

⭐ First name:

⭐ <input type="text" name="firstname" />

⭐

⭐ Last name:

⭐ <input type="text" name="lastname" />

⭐ </form>

Forms: Instead, write this

⭐ `<form>`

⭐   `<label for="male">Male</label>`

⭐   `<input type="radio" name="gender" id="male" />`

⭐   `<br />`

⭐   `<label for="female">Female</label>`

⭐   `<input type="radio" name="gender" id="female" />`

⭐ `</form>`

Images

⭐ Always use the alt text when inserting graphical elements into your pages

⭐

Testing Pages

⭐Alternative text for non-text elements

⭐Well-constructed HTML markup

Help & Guidelines

⭐ Web Content Accessibility Guidelines

   ⭐ http://www.w3.org/WAI/

⭐ Fangs Add-On for Firefox (translates a page into text representative of output from a screen reader)

9 Principles for Web Accessibility

1. Don't make assumptions about the physical, mental and sensory abilities of users

2. You can only ever assume sending and receiving text

3. Users' time and technology belong to them

4. Provide text alternatives for non-text content

5. Only use widely available technologies

6. Use clear language to communicate your message

7. Make it usable, searchable and navigable

8. Design with semantic meaning and separate design from content

9. Progressively add features and allow graceful degradation

THANK YOU

Any questions?