

Introduction to HTML Accessibility

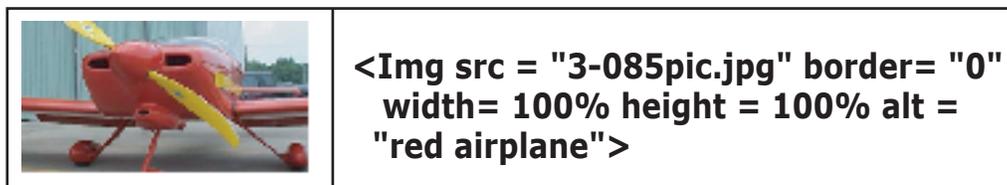
- HyperText Markup Language (HTML) is the common language of the Internet. Over 3.3 billion files on the World Wide Web use HTML to communicate a dizzying array of information. HTML is flexible, easy to use and understand, and can be used to communicate information in almost any format, from desktop computers to cellular phones. The nearly -universal nature of HTML makes it indispensable in distance education.
- HTML supports accessibility for students with disabilities in a number of ways. However, most web developers are not aware of the elements in HTML that promote accessibility. By making a few changes to the existing HTML code of a page – most of which will never be noticed by the casual reader – content developers can make that page accessible to students with disabilities.

About HTML Code

- HTML code, or mark-up, consists of tags, which are a set of symbols defined in HTML to have special meaning. Tags start with a less-than sign (<) followed by a keyword, and conclude with a greater-than sign (>). (These signs are known as angle brackets.) For example: , <form>, <table> are tags that represent images, forms, and tables, respectively. It is important to note that tags are not case-sensitive so , , and all have the same meaning.
- There are two types of tags: start tags and end tags. Start tags always begin the effect, such as <p> for the beginning of a paragraph and may take certain attributes that affect the tag's behavior. An attribute is a word separated from the keyword by a space and that generally requires a numerical value in quotes preceded by an equal sign. For example, the tag <table width="90%"> describes a table that is 90 percent of the width of the screen display. End tags close the effect and repeat the keyword with a slash in front, such as </p> to end a paragraph.

Making Images Accessible

- Images are very powerful tools for conveying information and supplementing text material. However, users with visual impairments may have difficulty in viewing the images on an HTML page. Other users may choose to disable the images from being shown in order to improve the download time, especially when using a slower Internet connection. Providing a textual equivalent for all images makes the resulting HTML page accessible for all users.
- Images are displayed in HTML using the tag. Within that tag, web developers can select a number of attributes for that image. A typical tag might look like this:



- The attributes in this tag include "src", which refers to the name of the file, "border", which specifies the thickness of the border, if any, "width" and "height", which describe how to display the file, and "alt". "Alt" is short for "alternative text", and specifies a brief descriptive text message to display if the image cannot be displayed. The text message is usually referred to as an "alt-tag". Screen readers for students who are visually impaired can pick up the alternative text and read that information to users. Without the "alt-tag", the screen reader would be unable to determine if the picture shown was of a red airplane or a fuzzy kitten.

■ Introduction to HTML Accessibility - *continued*

- Using the appropriate alt-tag is just as important as using one in the first place. For more resources on writing/creating alt-tags, read Factsheet #7, "Describing Graphic Files for Students with Visual Impairments".

■ Proper Use of Headers

- When designing a well-formatted Web page, it is important to consider structure before presentation. Because various Web browsers will render the content differently, it is imperative that header tags (such as <h1> and <h2>) be used to mark section headers. For example, headers should make sense logically, breaking up sections and subsections in an "outline" style. Subsection headers should be used only after main headers have been used. For example, this use of headers is appropriate because there is a logical progression "up" and "down" the header chain:

```
<h1>Main title</h1>
<h2>Sub Point 1</h2>
<h2>Sub Point 2</h2>
<h3>Sub Point 2.1</h3>
<h3>Sub Point 2.2</h3>
<h2>Sub Point 3</h2>
```

The following use of headers is inappropriate because the logical progression does not progress from one level to the next.

```
<h1>Main title</h1>
<h3>Sub Point 1</h3>
<h3>Sub Point 2</h3>
<h1>Sub Point 2.1</h1>
<h4>Sub Point 2.2</h4>
<h4>Sub Point 3</h4>
```

■ Resources

This document only touches on two of the most common factors in HTML accessibility. For more information about HTML accessibility, visit the following web sites:

- ■ World Wide Web Consortium's Web Accessibility Initiative: <http://www.w3.org/WAI>
- ■ WebAim: Web Accessibility In Mind: <http://www.webaim.org/>
- ■ AccessIT: National Center on Accessible Information Technology in Education
<http://www.washington.edu/accessit/index.php>