

# 1 HTML Best Practice Guidelines

HTML emails do not adhere to pure HTML 4.01 coding standards and best practice. HTML emails must be coded very specifically otherwise they will not work in all online email clients. All email coding needs to follow these guidelines below. **We will** and **We will Not** are flexible guidelines that we recommend but that do not have to be adhered to.

- **We use** compliant HTML 4.01 with the exceptions documented in these guidelines.
- **We** validate your code. The W3C provide a validator at <http://validator.w3.org/>. Please ensure you use `<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.01 Transitional//EN">` otherwise your HTML may not validate properly.
- **We** make emails **600 pixels** wide.
- **We use** in-line styles as opposed to style sheets. Style sheets are ignored by a number of email clients.
- **We** include in-line styles for font properties, colour, and/or text-decoration in all hyperlinks (even if this means duplicating styles previously included in DIV, SPAN or TD tags) otherwise they will be reformatted by some online email clients.
- **We use** Hex or RGB values for colours rather than colour names.
- **We use** character entity tags for special characters, especially pound signs (*&pound;*) ampersands (*&amp;*) and quotes (*&quot;*).
- **We use** absolute dimensions in pixels for all measurements.
- **We** include ALT properties for all images and descriptive ALT attributes for all images of significance. See section 4, "Writing Effective ALT tags for images" on page 12 for more information.
- **We** test all emails in Firefox and Internet Explorer.
- **We use** 98263000 `<UAEpf n="PF_LOYALTY_ID" i="312"/>` for the collector's account number if it is required.
- **We use** `<UAEpf n="PF_POINTS_BALANCE" i="222"/>` for the collector's point balance if it is required.
- **We use** "Dear `<UAEpf n="PF_COLLECTOR_NAME" i="212"/>`" or "Dear Collector" for the Collector salutation if it is required.
- **We** include `style="display:block;"` on all images if possible. This fixes spacing issues in Live Mail.
- **We** wrap text (in the HTML version) that refers to a URL ("Nectar.com" for example) in an anchor tag with appropriate styling. If it is supposed to look like the surrounding text, the anchor We will share the same styling (with no text decoration). If the text is **NOT** supposed to be a link then the "href" element of the anchor tag they will be removed. If this is not done then the text will be recognised as a link by Gmail (and possibly other clients) and will be rendered in standard link styling (blue with an underline).
- All images will have height, width and alt attributes.

- **We don't use** XHTML for HTML emails.
- **We don't use** style sheets. Style sheets are ignored by a number of email clients; use in-line style instead.
- **We don't include** properties in the `<BODY>` tag. These will be removed by online email clients. Only the HTML in the body of the email and the text in the title are transferred to the template when a new message is created.
- **We don't use** uncompressed images.
- **We don't use** CSS background images. They DO NOT work in some email clients. Apply background images to tables or table cells instead using HTML properties.
- **We don't use** margin CSS properties. They are ignored by some email clients.

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- **We don't use** height CSS properties. They are ignored by Gmail.
  - **We don't use** JavaScript in any email. It will almost certainly be identified as SPAM and blocked.
  - **We don't use** standard semantic HTML tags (p,H1,H2, etc) just apply in-line style to table cells and use breaks and/or DIV tags. DIV tags they will be used sparingly if possible due to issues with Live Mail.
  - **We don't use** background CSS as it still appears to be unsupported in a majority of the key clients that we support.
  - **We don't include** units in HTML width properties (e.g. width="580px" they will be width="580").
  - **We don't include** a semicolon in HTML attribute values - they will only be used in style definitions (e.g. bgcolor="#f6f2ca;)

- **We will** include a TITLE tag (it makes the email less likely to be confused with spam). If one is not included we will add a title that is the same as the subject line.
- **We will** indent your HTML code properly as it makes the code easier to read.
- **We will** use CSS style properties in preference to HTML properties except where otherwise indicated in section 3, "Coding Standards" on page 7.
- **We will** where possible try to use background colours instead of images to fill large areas of uniform colour.
- **We will** be aware that ordered and unordered lists WE DO NOT render the same in Internet Explorer and Firefox. See section 3, "Coding Standards"
- **We will** try to code borders, dividers and other lines as table borders, cell background colours or small repeating background images rather than as large fixed height images so that the borders can expand if necessary when changes are made and to help keep page weight down.
- **We will**, if possible, test all emails in Hotmail, Outlook, Gmail and Yahoo email clients.
- **We will** use button images rather than background image and text.
- **We will** use the HTML background attribute. Due to issues in outlook 2007, it We will be used sparingly.

- **We will Not** use images to represent text. Many email clients block images. If you use too many images instead of text and they are blocked the recipient may not be able to understand the purpose of the email.
- **We will Not** produce code for emails by chopping a single creative image up in to a big table without any regard for the design, the code, or the usability of the email.
- **We will Not** use WYSIWYG HTML editor, image manipulation software or a word processor to produce HTML. NEVER use the Save as HTML feature of any product to produce HTML.
- **We will Not** use background images unless necessary.
- **We will Not** save all images in the same format regardless of image type or content. Each image We will be optimised independently and saved in the most appropriate format that minimises file size while maintaining quality. Continuous tone images (like photos) are best saved in JPG format. Large blocks of the same colour are best saved in GIF format.
- **We will Not** mix the content of images, especially if it has a major impact on optimisation. For example, WE DO NOT include a photo (that would be best saved in JPG format) with lots of white space (which would be best saved in GIF format) in the same image; slice the image instead. See Section 2, "Images" on page 6 for more information about image slicing.
- **We will Not** save text as JPEG if at all possible.
- **We will Not** use SPAN or DIV tags only to apply styles when there is another suitable tag to apply the style to. i.e. **We will Not** use a <DIV> tag purely to apply a style when you can apply a style to the table cell <TD> instead.
- **We will Not** use FONT tags; use in-line styles instead. FONT tags are deprecated - no longer supported - and we do not recommend using them and do not guarantee how an email will display in different email clients if they are used.
- **We will Not** use image maps. Instead, cut large images in to smaller elements and use a table to lay them out with <A> tags around linked elements. We don't guarantee support of image maps by all email clients.
- **We will Not** use mixed case image names as they can cause issues on Unix servers

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## 1.1 File Size

- **We use** the lowest possible image size without losing too much image quality.
- **We** select the most appropriate format depending on the type of image. If uncertain try both image formats to see which is smallest and has the best quality. See section 2, “Images”, on page 6 for more information.
- **We** try to keep page weight of the main body of the email (including all images) below 250KB

- **We will** include text as text wherever possible, not as an image. Text We will only ever be included as an image when a specific font **MUST** be used that may not be available on the recipient’s machine.
- **We will** reduce GIFs to the fewest number of colours required to maintain image resolution. Many GIFs can be reduced to at least **32 colours** without very little noticeable loss in quality.
- **We will** try to save JPEGs at the lowest quality possible unless too much image degradation occurs.

- **We Do Not** include HTML or CSS properties with attributes that are equal to default values. They are unnecessary and will increase page weight. If uncertain whether a CSS style is require, check an HTML/CSS reference guide and test the email in Internet Explorer and Firefox.
- **We Do Not** use images larger than 10KB as they will seriously impact modem download times.
- **We Do Not** use too many images larger than 10KB as they will decrease modem download times.

- **We don’t use** images larger than 75K.
- **The Email Will Not** exceed an overall page weight of the main body of the email (including all images) of 250KB

## 1.2 HTML and Text Format

- **We will** create both HTML and Plain Text (not Microsoft Word) versions of the email.

- **We don’t include** any special or extended characters (smart quotes for example).

## 1.3 Testing

### 1.3.1 Email Clients

**We will** test HTML in the following email clients, if possible:

- Hotmail
- Yahoo
- Outlook
- Gmail

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### 1.3.2 Browsers

**We** test HTML in the following browsers:

- Internet Explorer 6.0 (also version 5.0 and 5.5 if possible)
- Firefox 1.5, (up to version 3 now)

**We** test HTML in the following browsers if possible:

- Internet Explorer 5.0 and 5.5

## 1.4 Final Files

- **We** send all approved html and text files and images in a single ZIP file
- **We** include PDF versions of all approved HTML versions

## 2 Images

- Very large images will be sliced into smaller parts – however images we will not be randomly sliced. Slicing we will be based on optimization so quality is not impaired.
- ALL images will have an ALT property.
- Significant images will have a descriptive ALT attribute. Blank images and spacers can have a blank ALT attribute (alt="").
- Where a significant image need to be sliced the largest part will have the descriptive ALT attribute while the smaller part(s) we will have blank ALT attributes.
- Images with uniform colours or a limited colour palette will be saved as GIF format. Those with many colours and detail (continuous tone) will be saved as JPG format.
- Text will be coded as text wherever possible and not saved as an image.

See section 4, "Writing Effective ALT tags for images" on page 12 for more information.

### 2.1 Image types

#### Continuous Tone

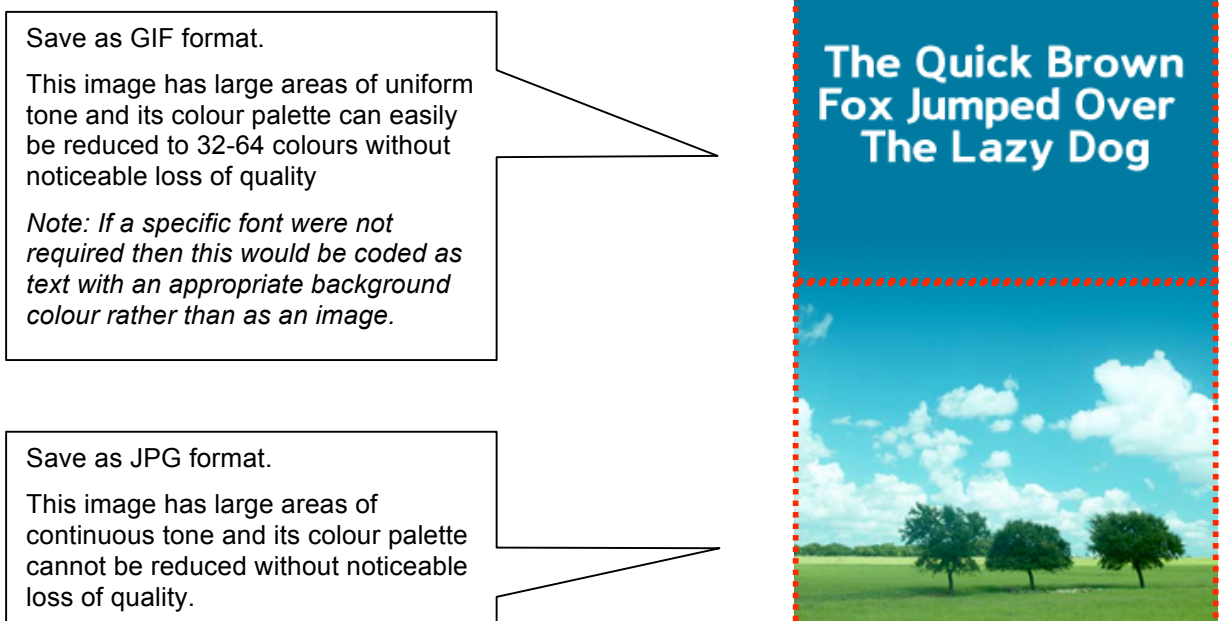
Continuous tone refers to images that have a virtually unlimited range of colour or shades of grey. Photographs, for example, are continuous-tone images. JPG format is best for these types of image.

#### Uniform Tone

Uniform tone refers to images that have a limited colour palette and/or large areas of uniform colour. GIF format is best for these types of images.

### 2.2 Correct slicing technique

The following demonstrates how an image can be sliced based on appropriate image formats.



- Saving this entire image in JPG format would result in loss of quality around the text unless the quality was increased, which would increase the file size.
- Saving the entire image in GIF format would result in a loss of quality around the clouds and trees unless a large colour palette was used, which would increase the file size.

By slicing the image, both halves can be optimised to provide the best quality and smallest file size.

## 3 Coding Standards

### 3.1 HTML Standards

Tag	Standard
General	<ul style="list-style-type: none"><li>▪ Emails will be at least 600 pixels wide</li></ul>
	<ul style="list-style-type: none"><li>▪ The “Dear Collector” greeting must be coded as: <code>Dear #Content:FirstandLastName#,</code> or <code>Dear Collector,</code> Note: the comma at the end MUST be included in the text version; it is optional in the HTML version.</li></ul>
	<ul style="list-style-type: none"><li>▪ Use the HTML extended and special character entity tags. Characters that often cause issues include:<ul style="list-style-type: none"><li>- <code>&amp;pound;</code> [ £ ]</li><li>- <code>&amp;amp;</code> [ &amp; ]</li><li>- <code>&amp;quot;</code> [ " ]</li></ul></li></ul> <p>See <a href="http://www.w3schools.com/html/html_entitiesref.asp">http://www.w3schools.com/html/html_entitiesref.asp</a> for a full list of character entity codes (HTML 4.01)</p>
	<ul style="list-style-type: none"><li>▪ We ensure that single quotes (apostrophes) are entered as simple characters [ ' ] rather than smart quotes [ ‘ ’ ].</li><li>▪ <b>We Do not</b> include apostrophes using character entity tags as this doesn't work in Internet Explorer 6.0</li><li>▪ If smart single [ ‘ ’ ] or double [ “ ” ] quotes are required use appropriate character entity tags:<ul style="list-style-type: none"><li>- <code>&amp;lsquo;</code>; left single quote</li><li>- <code>&amp;rsquo;</code>; right single quote</li><li>- <code>&amp;ldquo;</code>; left double quote</li><li>- <code>&amp;rdquo;</code>; right double quote</li></ul><p>Please note that these four characters will only display in Unicode/Double Byte Character Set (DBCS) enabled browsers.</p></li></ul>
	<ul style="list-style-type: none"><li>▪ We indent HTML code for ease of readability and maintenance especially when using tables</li></ul>
	<ul style="list-style-type: none"><li>▪ We use underscores in filenames rather than spaces.</li></ul>
	<ul style="list-style-type: none"><li>▪ We make all filenames lowercase.</li><li>▪ We write all HTML and CSS tags, properties and attributes in lowercase.</li></ul>
A	<ul style="list-style-type: none"><li>▪ Specify <code>target="_blank"</code> for all links.</li></ul>
BODY	<ul style="list-style-type: none"><li>▪ <b>We Do not</b> include properties in the BODY tag as they are often removed by online email clients.</li></ul>
FONT	<ul style="list-style-type: none"><li>▪ <b>We Do not</b> use FONT tags; use in-line styles instead. FONT tags are deprecated - no longer supported - and we do not recommend using them and do not guarantee how an email will display in different email clients if they are used.</li></ul>
IMG	<ul style="list-style-type: none"><li>▪ All images will have an <code>alt</code> property. All spacer images will have an empty <code>alt</code> attribute (e.g. <code>alt=""</code>, otherwise speech browsers may attempt to read the entire image file name). See section 4, “Writing Effective ALT tags for images” on page 12 for more information about effective ALT tags.</li></ul>
	<ul style="list-style-type: none"><li>▪ All images with links will include the <code>style="border:none;"</code> in-line style or <code>border="0"</code> HTML property.</li></ul>

	<ul style="list-style-type: none"> <li>▪ Height and width properties will be specified as HTML properties not in-line styles. For more information see section 3.2, CSS Standards, below.</li> <li>▪ <b>We Do not</b> use the word “HEAD” in image names as it can cause problems in some web-based email clients.</li> </ul>
<b>TABLE</b>	<ul style="list-style-type: none"> <li>▪ We use the following for all tables:  <pre>&lt;table style="width:&lt;width&gt;px;border:none;" cellspacing="0" cellpadding="0"&gt;   &lt;tr&gt;     &lt;td&gt;&lt;/td&gt;   &lt;/tr&gt; &lt;/table&gt;</pre> <p>Where <i>width</i> equals your table width in pixels.</p> </li> <li>▪ TABLE background images WILL be applied using the HTML <code>background</code> property: See section 3.2, “CSS Standards” for more details.</li> <li>▪ When column spanning (especially when overlapping spanned columns) we may need to include a 1px row with image spacers that define the width of every column in the table, even if the row is only one pixel high. This row can appear anywhere in the table.</li> <li>▪ When row spanning (especially when overlapping spanned rows) we may also need to include a 1px column with image spacers that define the height of every row.</li> </ul>
<b>TD</b>	<ul style="list-style-type: none"> <li>▪ You can omit width and height properties for all TD tags that contain an image or blank spacer GIF. We only include width or height properties in cases that require specific dimensions to control layout, e.g. when row and column spanning is in use or when cells contain text rather than images.</li> <li>▪ We use transparent spacer GIFs or <code>&amp;nbsp;</code> in blank cells DO NOT leave empty cells.</li> <li>▪ TD background images WILL be applied using the HTML <code>background</code> property: See section 3.2, CSS Standards, below for more details.</li> <li>▪ We use background images only when we have to.</li> </ul>
<b>UL / OL</b>	<ul style="list-style-type: none"> <li>▪ Height properties will be specified as HTML properties. See section 3.2, “CSS Standards” for more details.</li> </ul>
	<ul style="list-style-type: none"> <li>▪ Standard unordered and ordered lists render fairly similarly in both IE and Firefox but in both cases the lists display a large left indent. If you attempt to use padding and margin CSS properties to alter this indent it may not work consistently in both IE and Firefox and WILL NOT work in all online email clients. The margin property is NOT supported at all by Hotmail.</li> <li>▪ Best practice is to design your email to accommodate the indent and not to try and remove it.</li> <li>▪ If you have a list that requires a 0px left margin and needs to display the same way in IE and Firefox, we use a two column table and add the bullets manually in the left hand column using character entities (<code>&amp;bull;</code>) or text</li> <li>▪ If necessary images will be used as well but they are less flexible than text and character entities. They will be aligned properly as they will not align naturally in the same way as text and character entities will, and they will probably need to be re-aligned and possibly resized if the font size needs to be changed for any reason.</li> </ul>

## 3.2 CSS Standards

### 3.2.1 Campaign Monitor Guide to CSS Support in Email (June 2008)

Please refer to the following guide when determining the compatibility of CSS properties that are not documented in these guidelines. Where these guidelines conflict with the LMG guidelines below, the LMG guidelines take precedence.

### 3.2.2 LMG specific CSS standards

Property	Standard
<b>General</b>	Where possible and unless otherwise stated in this document, all properties will be expressed as style properties rather than HTML properties. The following exceptions are detailed in this section: <ul style="list-style-type: none"><li>TABLE and TD background images</li><li>Image, table row and table cell height properties</li></ul>
	To help decrease page weight in emails that have large quantities of code and many in-line styles you can remove all spaces between CSS properties and values. For example: <b>Correct:</b> <code>property:value;property:value;</code> <b>Incorrect:</b> <code>property: value; property: value;</code>
<b>background</b>	TABLE and TD background images tags WILL be applied using the HTML <code>background</code> property. Although this property is not included in the HTML 4.01 specification for these tags it is accepted by browsers and online email clients. <code>background-color</code> is accepted by Hotmail, Yahoo and Gmail.
	CSS background images using the <code>background-image</code> property are ignored by Hotmail and Gmail. In Hotmail and Yahoo <code>background-repeat</code> can be used with a background image applied using the HTML <code>background</code> property but this will be ignored by Gmail. Outlook 2006 (XP) has full support for all CSS background elements (including shorthand background properties). Currently Outlook 2007 has NO support for background images (HTML or CSS).
<b>border</b>	Use the following: <code>border-[top   bottom   left   right]-width</code> <code>border-[top   bottom   left   right]-style</code> <code>border-[top   bottom   left   right]-color.</code>
	Don't use shorthand border properties. <code>border</code> , <code>border-left</code> , <code>border-right</code> , <code>border-top</code> , and <code>border-bottom</code> shorthand properties do not work in Firefox v1.0.
<b>font and text</b>	Font properties will be included as in-line styles for all text and links.

<p><b>properties</b></p>	<ul style="list-style-type: none"> <li>Multiple font properties will be expressed as a shorthand font property:  <pre>font: [ &lt;font-style&gt;    &lt;font-variant&gt;    &lt;font-weight&gt; ]? &lt;font-size&gt; [ / &lt;line-height&gt; ]? &lt;font-family&gt;</pre> <p>[ ] square brackets are grouped properties     indicate that multiple properties may be included in any order  ? denotes an optional property or group of properties  &lt;&gt; chevrons indicate property values</p> <p>The font shorthand property WILL include font-size and font-family.  <b>Example:</b>  <pre>style="font:bold 12pt arial,sans-serif;"</pre> <p>DO NOT include the line-height property in shorthand as this is ignored by some online email clients.</p> </p></li> <li>font-family will be expressed as a single preferred font followed by a generic replacement (<i>sans-serif font</i>, sans-serif). For example: arial, sans-serif OR verdana, sans-serif.</li> <li>The preferred fonts for Nectar emails are verdana, and sans-serif.</li> <li>Sponsor Solus emails can use either arial or verdana, and sans-serif as preferred by the Sponsor.</li> <li>No other fonts will be used.</li> </ul>
<p><b>hyperlink font and text properties</b></p>	<ul style="list-style-type: none"> <li>Hyperlink font properties will be applied independently of any parent text styles (even if the style needs to be duplicated) as hyperlinks are often reformatted by web-based email clients.  For example, if you have a table cell that has a style of {font:9px arial,sans-serif} and the text within includes a hyperlink, you will duplicate the {font:9px arial,sans-serif;} style for the hyperlink if you want the text to remain consistent in all email clients.</li> <li>All hyperlinks will be also include colour and text-decoration properties.</li> </ul>
<p><b>height and width</b></p>	<ul style="list-style-type: none"> <li>Due to limitations in Gmail image height and width properties will be specified as HTML properties rather than style properties (e.g. height="x" width="y").</li> <li>Due to limitations in Gmail table, table row and table cell height properties will be specified as HTML properties rather than CSS properties (e.g. height="x").</li> </ul>
<p><b>margin</b></p>	<ul style="list-style-type: none"> <li><b>Do not</b> use margin properties (shorthand or verbose). They do not work in Hotmail.</li> </ul>
<p><b>padding</b></p>	<ul style="list-style-type: none"> <li>Only apply padding to table cells (TD).</li> <li>Applying padding to table rows (TR) doesn't work in Firefox v1.0 and only works in Internet Explorer if the table's cellpadding property is set to "0".</li> <li>Applying padding to tables (TABLE) in Internet Explorer causes the padding to be added to the cells within the table rather than to the table itself.</li> </ul>

### 3.3 TEXT standards

Element	Standard
Width	<ul style="list-style-type: none"> <li>Limit text emails to 65 characters per line</li> </ul>

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<b>Links</b>	<ul style="list-style-type: none"><li>▪ All links will be included on a separate line rather than in-line and will be immediately after or referenced within the text that they relate to. For example: Click below if you have forgotten your password: <a href="http://www.nectar.com/login/firstforgotPassword.nectar">http://www.nectar.com/login/firstforgotPassword.nectar</a></li><li>▪ Links are NOT limited to 65 characters as Dartmail will recode all links when the email is sent</li></ul>
<b>Dividers</b>	<ul style="list-style-type: none"><li>▪ The following dividers may be used to format text email =====</li></ul> <pre>*****</pre> <ul style="list-style-type: none"><li>▪ We use them in order of precedence. Use === for major section dividers followed by *** and then --- as appropriate within sections.</li><li>▪ Dividers may also be combined to add emphasis.</li></ul>

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## 4 Writing Effective ALT tags for images

### 4.1.1 Summary

Writing effective ALT text isn't too difficult. If it's a decorative image then null alternative text, or `alt=""` will be usually be used - never, ever omit the ALT property. If the image contains text then the ALT text will be simply repeat this text, word-for-word. Remember, ALT text will be describe the content of the image and nothing more.

Do also be sure also to keep ALT text as short and succinct as possible. Listening to a web page with a screen reader takes a lot longer than traditional methods, so do not make the surfing experience painful for screen reader users with bloated and unnecessary ALT text.

### 4.1.2 Spacer images and missing ALT text

Spacer images will be always be assigned null ALT text, or `alt=""` . This way most screen readers will completely ignore the image and won't even announce its presence. Spacer images are invisible images that pretty most websites use. The purpose of them is, as the name suggests, creating space on the page. Sometimes it's not possible to create the visual display you need, so you can stick an image in (specifying its height and width) and volia, you have the extra space you need.

Not everyone uses this null ALT text for spacer images. Some websites stick in `alt="spacer image"`. Imagine how annoying this can be for a screen reader user, especially when you have ten of them in a row. A screen reader would say, "Image, spacer image" ten times in a row (screen readers usually say the word, "Image", before reading out its ALT text) - now that isn't helpful!

Other web developers simply leave out the ALT property for spacer images (and perhaps other images). In this case, most screen readers will read out the filename, which could be 'newsite/images/onepixelspacer.gif'. A screen reader would announce this image as "Image, newsite slash images slash one pixel spacer dot gif". Imagine what this would sound like if there were ten of these in a row!

### 4.1.3 Bullets and icons

Bullets and icons will be treated in much the same way as spacer images, so will be assigned null alternative text, or `alt=""`. Think about a list of items with a fancy bullet preceding each item. If the ALT text, 'Bullet' is assigned to each image then, "Image, bullet" will be read aloud by screen readers before each list item, making it take that bit longer to work through the list.

Icons, usually used to complement links, will be also be assigned `alt=""`. Many websites, which place the icon next to the link text, use the link text as the ALT text of the icon. Screen readers would first announce this ALT text, and then the link text, so would then say the link twice, which obviously isn't necessary.

(Ideally, bullets and icons will be called up as background images through the CSS document - this would remove them from the HTML document completely and therefore remove the need for any ALT description.)

### 4.1.4 Decorative images

Decorative images too will be assigned null alternative text or `alt=""`. If an image is pure eye candy then there's no need for a screen reader user to even know it's there and being informed of its presence simply adds to the noise pollution.

Conversely, you could argue that the images on your site create a brand identity and by hiding them from screen reader users you're denying this group of users the same experience. Accessibility experts tend to favour the former argument, but there certainly is a valid case for the latter too.

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#### 4.1.5 Navigation & text embedded within images

Navigation menus that require fancy text have no choice but to embed the text within an image. In this situation, the ALT text will ben't be used to expand on the image. Under no circumstances will be the ALT text say, 'Read all about our fantastic services, designed to help you in everything you do'. If the menu item says, 'Services' then the ALT text will be also say 'Services'. ALT text will be always describe the content of the image and will be repeat the text word-for-word. If you want to expand on the navigation, such as in this example, you can use the title proprty.

The same applies for any other text embedded within an image. The ALT text will be simply repeat, word-for-word, the text contained within that image.

(Unless the font being used is especially unique it's often unnecessary to embed text within images - advanced navigation and background effects can now be achieved with CSS.)

#### 4.1.6 Company logo

Websites tend to vary in how they apply ALT text to logos. Some say, 'Company name', others 'Company name logo', and other describe the function of the image (usually a link back to the homepage), 'Back to home'. Remember, ALT text will be always describe the content of the image so the first example, alt="Company name", is probably the best. If the logo is a link back to the homepage then this can be effectively communicated through the title tag.