



LAYOUT, TYPOGRAPHY AND FORMATTING
/
GRAPHICS, COLOR, TRANSPARENCY

3.3 LAYOUT, TYPOGRAPHY AND FORMATTING / GRAPHICS, COLOR, TRANSPARENCY

During this topic, you will be learning how to build your page layout using CSS styles, but you should note that this was not always a standard practice. In the mid-1990s, when web design developed, the only method available for sophisticated page layout, such as adding multiple columns to a page, was to use the HTML `<table>` tag. The HTML table was originally designed to present data in a logical format, using rows, columns, and cells. Designers adopted this table component and used it as the foundation for their page organization. At the time, this technique made perfect sense, because tables were the only tool available to create the sort of designs required at the time. Designers often used techniques such as nesting tables. For example, the code for a standard two-column page might start with a table consisting of three rows and two columns.

Today, before building a page layout, you should make a few decisions in advance. The first concerns the width of the layout. There are two main categories of layout widths: fixed-width layouts and flexible-width layouts. Fixed-width layouts are much more often use: in a fixed-width layout, all page elements are nested within a container that has a constant width. A fixed-width layout is useful for the designer due to it offers a way to reliably position the various layout elements (such as headers, sidebars, and footers). It also supplies a reliable structure for elements, such as the width of a paragraph on a page or the placement of pictures.

Layouts adapt to the width of the browser window are called flexible layouts. When users have different monitor resolutions, flexible layouts making it possible to build a fixed-width layout that looks the same on every screen. A correctly designed flexible layout can automatically adjust to fit the user's browser window.

You could think that flexible layouts are more appropriate for the web. Now that mobile devices with different screen ratios, sizes and resolutions make up a substantial proportion of web browsers, a flexible layout might be better adjusted to these new interfaces than a fixed-width layout. Flexible-width layouts are much more difficult to build. During designing these, there are more decisions for the designer to make and more options to consider.

To wrap the text around an image there is use the float property. This style was borrowed from print design, where the effect is called text wrap or runaround. CSS reaches this effect by allowing elements following a floated element in the HTML markup to surround the element, effectively changing their placement. This behavior also makes it possible to create columns on a page.

The section and aside elements, as block-level elements, will be stacked on top of one another by default. However, we want these elements to sit side by side. By floating the section to the left and the aside to the right, we can position them as two columns sitting

opposite one another. To better shape our desired outcome, there are added a margin: and width: to each column.

Pointers are useful for print, and although available for use on the screen, they indicate an absolute unit of measurement and they don't translate well to the screen. Pixels, on the other hand, are the unit of measurement often used for screen-based graphics. Monitor resolution sizes are measured in pixel units. In an ideal world, designers could reliably use pixel sizes for their fonts due to they are relative units and are designed to scale natively. Unfortunately, web browsers such as Internet Explorer 6 and 7 do not resize pixel-based text if the user wants to override the default settings. The unit of measurement called an em is very similar to pixels because it is designed to scale, but the huge difference is that ems are not related to the monitor resolution while pixels are tied to the monitor resolution. Although Ems may not be intuitive at first, understanding how to use them will worthwhile in the future.



In this section, you will learn how to add space between the sections of text on your page (which have margins of zero from the reset style sheet). You will learn some strategies for guiding the layout. Keep on your mind to don't use only a single method of CSS layout. You should understand the different options, which should help you in your future projects to decide which method to use.

Good graphic design of the website stays in line with the principles of typography, composition and use. The basic rules outlined below will help you become more aware of how you structure and use typography in your designs.

Your first step towards more effective typography is to learn a bit about the art. If you're unfamiliar with its concepts, you might think that typography must be a fairly simple discipline. The anatomy of a typeface involves very specific jargon, careful measurements and general standards that must be known and respected. As with many forms of design, you can only get away with breaking a rule if you know it well and are doing it purposely to make an experiment.

Next, you should be aware of font communication. Font choice should never be an arbitrary action. Simply looking through your entire library to find a font that you enjoy will rarely

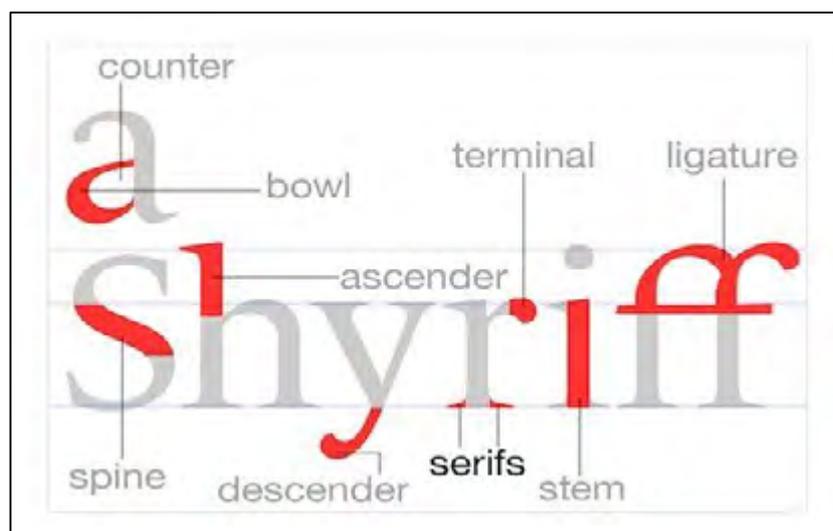
produce an effective result. The reason is that there is an inseparable psychology related to certain types of fonts.

Another thing which is an extremely important concept in typography is an alignment. For some reason, non-designers tend to instinctively center align everything. Somewhere in life, we learn that if something is centered then it is balanced and therefore better. In reality, center alignment is the weakest, hardest to read alignment and should be used very selectively.

After you've selected a primary typeface, the next step is to select another font that will accentuate it. Remember that headlines should grab the reader instantly. You've got a second or two at best to get someone's attention in the print world. If you miss that opportunity, you've lost your potential customer. What this means practically is that when you're creating a headline, don't simply type it out: design it.

The best way to learn to create efficient and attractive typography is to discover and survey some existing examples. So keep a lookout everywhere you go for what others are doing and think about why it does or doesn't seem to work well.

Keep on mind, that there are some challenges of fonts on the web. When designing for the web, you can format text in a way that is similar to desktop publishing and word processing applications, but there are important differences to keep in mind. Remember that a specific font needs to be installed on the user's computer when the web page is rendered on the viewer's computer or device. If the user does not have this font, the browser replaces it with another font. Due to you don't know what fonts are installed on user's computers, and because the web browser of a viewer might substitute fonts, your design intentions for text might not be truly reproduced. One option is to use fonts that you are sure will be found on most devices. Unfortunately, only a handful of fonts can reliably be found on virtually all devices around the world.



The graphics on your website should be optimal and appropriate for it. Optimizing refers to the preparation of pictures for use on the web. The target of optimization is to reduce the

file size of the image for faster downloading, without compromising the quality of the picture. Ultimately, you may have to lower the quality of your pictures so they are small enough to be downloaded and viewed fast. Keep on the mind that in many cases, it is more important to have a speedy download than to make the user wait for beautiful (but big) image files. Before you start adjusting the file size and quality of your images, you should have a broad idea of how you will use them, and how large they will be.

Many web designers faultily believe that if an image has a resolution of 72 dpi (dots per inch), it's ready for the web. However, the total pixel dimensions of the picture are much more important. The image size should be adjusted to your other content also. So consider which proportions of the pixel (width to height ratio) will be the most appropriate and crop the image to fixed dimensions. Keep on mind that after image resizing you should sharpen it because it can become blurry. The Unsharp Mask feature (available in Photoshop) sharpens the image based on levels of contrast while keeping the areas that don't have contrasting pixels smooth.

When saving a picture that you will use on the web, you need to consider two factors: the size and quality of the picture file. When you are adding a file to your webpage, you must find a balance among the quality you want and speed of download of it your viewers want. Each image format has benefits and drawbacks.. Consider the table below which presents different file formats and decide on a format for the picture you just resized.

| File format | JPEG | PNG-8 | PNG-24 | GIF |
|--|------|-------|--------|-----|
| Lossy | • | • | • | |
| Supports anti-aliasing | • | | • | |
| Supports transparency | | | • | • |
| Supports animations | | | | • |
| Supports varying amounts of transparency | | • | • | |
| Has limited colors | | • | | • |
| Is best for photos | • | | • | |
| Is best for solid colors | | • | • | • |

Table 1. File formats with their pros and cons

The JPEG file format allows you to keep the file size small, but some loss in picture quality occurs when you save the image file. Since the JPEG format provides anti-aliasing, it is recommended for photographic images and illustrations with a lot of gradients. Keep on mind that anti-aliasing is a technique used in computer graphics that allow smooth out



the naturally jagged edges of objects such as text or any area where a transition in tonal values is required. When saving a picture as a JPEG, you can also select varying levels of quality. Although transparency doesn't exist in the JPEG format, you can simulate the transparency effect. To do this you should use the matting feature to match the background color of your web page and then display the image in your browser. Your settings will be common for many images on your web page, so save them for the future.

If your web page contains large pictures you can use slicing of them due to downloading several smaller packets of information on the web is faster than downloading one large packet. A slice is a part of a picture, cut from a larger picture. These pieces are held together by an HTML table or Cascading Style Sheets (CSS). Slices are also useful when you need to save parts of a picture in different formats.