

SCREEN SIZES

Different visitors to your site will have different sized screens that show different amounts of information, so your design needs to be able to work on a range of different sized screens.



iPhone 4

Size: 3.5 inches

Resolution: 960 x 640 pixels



iPad 2

Size: 9.7 inches

Resolution: 1024 x 768 pixels

When designing for print, you always know the size of the piece of paper that your design will be printed on. However, when it comes to designing for the web, you are faced with the unique challenge that different users will have different sized screens.

Since computers have been sold to the public, the size of screens has been steadily increasing. This means that some people viewing your site might have 13 inch monitors while others may have 27+ inch monitors.

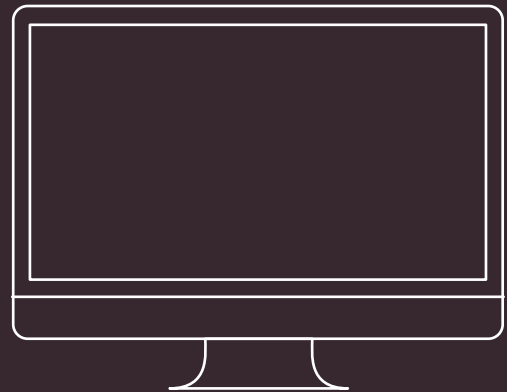
The size of a user's screen affects how big they can open their windows and how much of the page they will see. There are also an increasing number of handheld devices (mobile phones and tablets) that have smaller screens.

SCREEN RESOLUTION

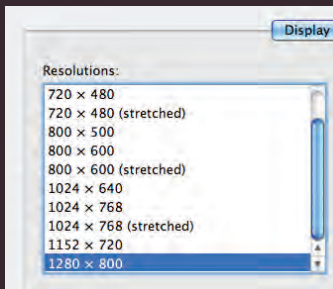
Resolution refers to the number of dots a screen shows per inch. Some devices have a higher resolution than desktop computers and most operating systems allow users to adjust the resolution of their screens.



13" MacBook
Size: 13.3 inches
Resolution: 1280 x 800 pixels



27" iMac
Size: 27 inches
Resolution: 2560 x 1440 pixels



Most computers will allow owners to adjust the resolution of the display or the number of pixels that are shown on the screen. For example, here you can see the options to change the screen size from 720 x 480 pixels up to 1280 x 800 pixels.

It is interesting to note that the higher the resolution, the smaller the text appears. Many mobile devices have screens that are higher resolution than their desktop counterparts.

PAGE SIZES

Because screen sizes and display resolutions vary so much, web designers often try to create pages of around 960-1000 pixels wide (since most users will be able to see designs this wide on their screens).

Judging the height that people are likely to see on the screen without scrolling down the page is much harder. For several years, designers assumed that users would see the top 570-600 pixels of a page without having to scroll and some tried to fit all of the key messages in this area (fearing that people would not scroll down the page).

As screen sizes have increased and handheld devices have become more popular, the area users will see is far more variable.

The area of the page that users would see without scrolling was often referred to as being “above the fold” (a term newspapers had originally coined to describe

the area of the front page you would see if the paper were folded in half).

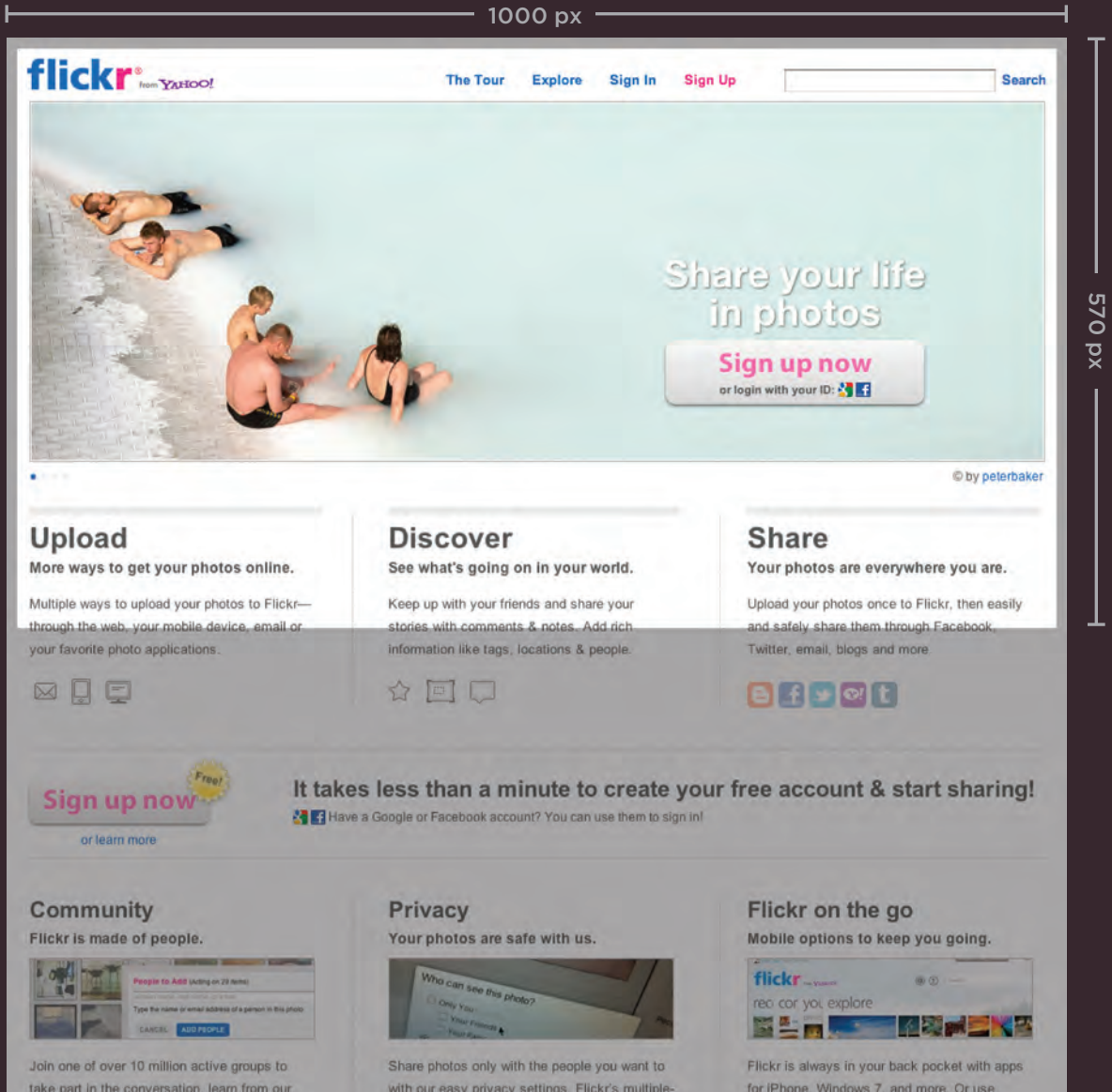
It is now recognized that if someone is interested in the content of the page, they are likely to scroll down to see more. Having said which, usability studies have shown that visitors can judge a page in under a second so it is still important to let new visitors know that the site is relevant to them and their interests.

As a result, many designs still try to let the user know what the site is about within the top 570-600 pixels, as well as hint at more content below this point. But do not try to cram too much into that top area.

At the time of writing, there was a growing trend for people to create adaptive or responsive designs that could change depending on the size of the screen.

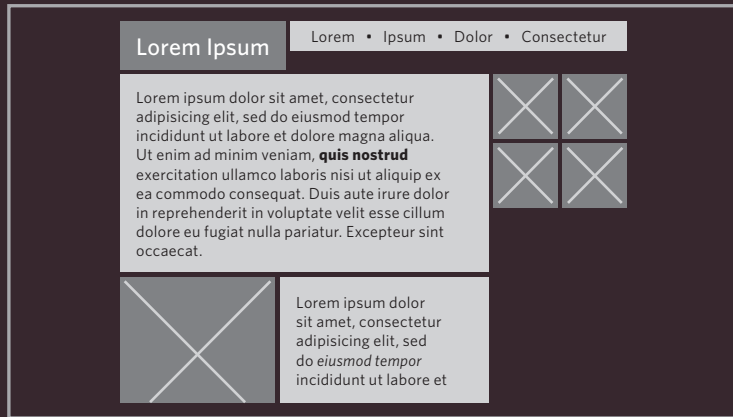
The shaded area is hidden by the constraints of the browser window, so the user must scroll in order to view the lower region.

However, the user gets a taste for what is lower on the page and can tell that there will be more to see if they scroll down.



FIXED WIDTH LAYOUTS

Fixed width layout designs do not change size as the user increases or decreases the size of their browser window. Measurements tend to be given in pixels.



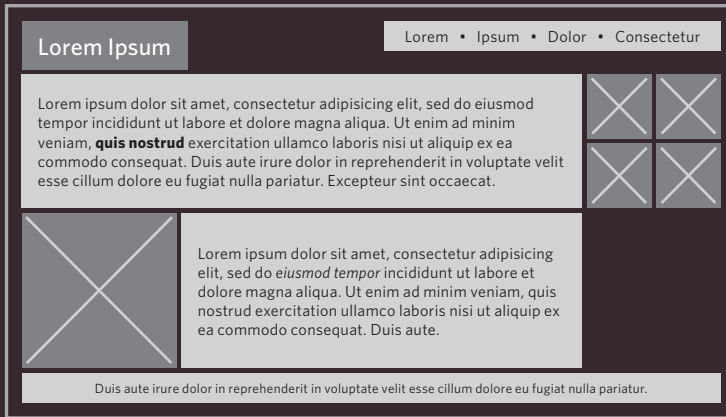
ADVANTAGES

- Pixel values are accurate at controlling size and positioning of elements.
- The designer has far greater control over the appearance and position of items on the page than with liquid layouts.
- You can control the lengths of lines of text regardless of the size of the user's window.
- The size of an image will always remain the same relative to the rest of the page.

DISADVANTAGES

- You can end up with big gaps around the edge of a page.
- If the user's screen is a much higher resolution than the designer's screen, the page can look smaller and text can be harder to read.
- If a user increases font sizes, text might not fit into the allotted spaces.
- The design works best on devices that have a site or resolution similar to that of desktop or laptop computers.
- The page will often take up more vertical space than a liquid layout with the same content.

LIQUID LAYOUTS



Liquid layout designs stretch and contract as the user increases or decreases the size of their browser window. They tend to use percentages.

ADVANTAGES

- Pages expand to fill the entire browser window so there are no spaces around the page on a large screen.
- If the user has a small window, the page can contract to fit it without the user having to scroll to the side.
- The design is tolerant of users setting font sizes larger than the designer intended (because the page can stretch).

DISADVANTAGES

- If you do not control the width of sections of the page then the design can look very different than you intended, with unexpected gaps around certain elements or items squashed together.
- If the user has a wide window, lines of text can become very long, which makes them harder to read.
- If the user has a very narrow window, words may be squashed and you can end up with few words on each line.
- If a fixed width item (such as an image) is in a box that is too small to hold it (because the user has made the window smaller) the image can overflow over the text.

Because liquid layouts can stretch the entire width of the browser, resulting in long lines of text that are hard to read, some liquid layouts only let part of the page expand and contract. Other parts of the page have minimum and maximum widths.