

Responsive Web Design Principles

Create a Media Query

Media queries change the presentation of content based on different viewport sizes. The viewport is a user's visible area of a web page, and it differs depending upon the device used to access the site.

→ Media queries consist of a media type, and if that media type matches the device the doc is displayed on, the styles are applied. You can have as many selectors and styles inside your media query as you want.

Ex:- @media (max-width: 100px) { }

= applied when device width is less than or equal to 100px

Ex:- @media (~~max-width: 100px~~ min-height: 350px) { }

Ex:- @media (max-width: 800px) {

p {

font-size: 10px;

}

}

Make an Image Responsive

Making images responsive with CSS is actually very simple. You just need to add these properties to an image.

img { ~~width: 100%;~~ max-width: 100%;

height: auto;

}

The 'max-width' of 100% will make sure the image is never wider than the container it is in, and the 'height' of 'auto' will make the image keep its original aspect ratio.

Use a Retina Image for higher resolution displays:

Some images that have not been made with a high-resolution Display in mind could look pixelated when rendered on a High-Resolution display.

The simplest way to make your images properly appear on High-Resolution Displays, such as the MacBook Pro's "retina display" is to define their 'width' and 'height' values as only half of what the original file is.

Make Typography Responsive

Instead of using em or px to size text, you can use viewport units for responsive typography. Viewport units like percentages are relative units, but they are based off different items. Viewport units are relative to the viewport dimensions (width or height) of a device, and percentages are relative to the size of the parent container element.

There are four different viewport units:-

- 1) vw (viewport width): 10vw would be 10% of the viewport's width.
- 2) vh (viewport height): 3vh would be 3% of the viewport's height.
- 3) vmin (viewport minimum): 70vmin would be 70% of the viewport's smaller dimension (width or height).
- 4) vmax (viewport maximum): 100vmax would be 100% of the viewport's bigger dimension.