

[CSS Media Queries](#)

What are CSS Media Queries



and how to implement them.

Introduction

CSS Media Queries are a feature in CSS3 which allows you to specify when certain CSS rules should be applied. This allows you to apply a special CSS for mobile, or adjust a layout for print.

The basic syntax looks like this:

```
// normal style
#header-image {
    background-repeat: no-repeat;
    background-image:url('image.gif');
}

// show a larger image when you're on a big screen
@media screen and (min-width: 1200px) {
    #header-image {
        background-image:url('large-image.gif');
    }
}

// remove header image when printing.
@media print {
    #header-image {
        display: none;
    }
}
```

But can also be called like this:

```
<link rel='stylesheet' media='all' href='normal.css' />
<link rel='stylesheet' media='print' href='print.css' />
<link rel='stylesheet' media='screen and (min-width: 701px)' href='medium.css' />
```

The advantage of this method is that only the valid CSS is downloaded; so no print.css is only downloaded when printing (or using print preview).

Combining mediaqueries can be done by combining them with an comma. The query below is to target devices with an device-ratio of 1.5. The first element is for webkit, the second if for all other browser (1.5 * 96).

```
@media screen and (-webkit-device-pixel-ratio: 1.5), screen and (resolution: 144dpi)
```

Because it's cascading all non-overwritten rules remain valid; e.g. the background remains no-repeat. Using this syntax you can do a couple of things;

1. Tweak that font so it really fits on that old iPhone,
2. Remove menus and fluff from Print pages
3. Create a full responsive site, by creating 'breakpoints' where the page should get a different design.

For example:

```
#block1, #block2 {  
    float: left;  
    width: 100%;  
}  
  
@media (min-width: 1000px) {  
    #block1, #block2 {  
        width: 50%;  
    }  
}
```

This example shows the 2 blocks on big screens next to each other, while on small screens they will be displayed below each other.

Support

All modern browser support Media Queries. Internet Explorer supports it in IE9. All modern mobile browsers are supported, including Blackberry 7.0 and 10.0.

Features

A media query syntax is made up by a media type and zero or more expressions.

Available media types:

all

All devices listen to this

braille

Used for braille tactile feedback devices.

embossed

Used for paged braille printers.

handheld

Used for handheld devices (Smartphones and tablets do NOT listen to this!).

print

Used for paged material and for documents viewed on screen in print preview mode.

projection

Used for projected presentations, for example projectors.

screen

Used primarily for color computer screens and smartphones.

speech

Used for speech synthesizers.. (Whatever that may be)

tty

Used for media using a fixed-pitch character grid (such as teletypes, terminals, or portable devices with limited display capabilities).

tv

Used for television-type devices (low resolution, color, limited-scrollability screens, sound available).

Available expressions:

width

The width of the current window

height

The height of the current window

device-width

The width of the device

device-height

The height of the device

orientation

Either landscape or portrait

aspect-ratio

The aspect ratio of the current window

device-aspect-ratio

The aspect ratio of the device

color

The number of color bits per color component

color-index

The number of available colors on the device

monochrome

The number of bits per pixel in a monochrome frame buffer

resolution

The resolution of the device

scan

Either progressive or interlace

grid

Is the device grid-based?

Media types

Of course browsers don't behave the way we expect to do. Most important; the *handheld* media type is not used by smartphones and tablets. Smartphones respond to *screen*. So in effect, the handheld media type is quite useless. The *TV* media type doesn't work with a **Boxee Browser**. **Google TV** also doesn't respond to it. Thanks to [@botteaap](#) for testing! The only browser I've come across is the **Wii browser**, powered by Opera.

