Responsive Design

mehr als CSS

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```html
<meta name="viewport"
    content="width=device-width, initial-scale=1">

<link href="all.css" rel="stylesheet"
    media="all">
<link href="mobile.css" rel="stylesheet"
    media="(max-width: 480px)">
<link href="desktop.css" rel="stylesheet"
    media="(min-width: 481px)">
```

CSS Downloads by Media Query

A test by **@scottjehl**

The point of this page is to test whether today's browsers will download stylesheets that are referenced with media queries that would not apply on that browser or device.

This page contains 10 `link` elements that reference CSS files meant for testing. Each `link` has a `media` attribute containing a unique media query. All but a few of these media queries (and their respective stylesheets) would not likely apply on any devices today; for example, some media queries reference extremely wide screens, some reference impossibly (currently) rich high-density HD displays, and one is just plain nonsense (really: `media="nonsense"`). In addition to those, there are a few realistic queries as well, such as `only all`, `tv`, and `handheld`.

The results of manually testing this page by loading it in several browsers and monitoring HTTP traffic are as follows. The top row is the only one that should apply in every media-query supporting browser.

Media Query	iPhone 4.3	Android Tablet	Chrome 19	IE 8	IE 9	Opera 11	Opera Mobile
only all	DOWNLOADED	DOWNLOADED	DOWNLOADED	DOWNLOADED	DOWNLOADED	DOWNLOADED	DOWNLOADED
(min-width: 4000px)	DOWNLOADED	DOWNLOADED	DOWNLOADED	DOWNLOADED	DOWNLOADED	DOWNLOADED	DOWNLOADED
only all and (min-width: 4000px)	DOWNLOADED	DOWNLOADED	DOWNLOADED	DOWNLOADED	DOWNLOADED	DOWNLOADED	DOWNLOADED
(min-device-width: 4000px)	DOWNLOADED	DOWNLOADED	DOWNLOADED	DOWNLOADED	DOWNLOADED	DOWNLOADED	DOWNLOADED
(min-device-pixel-ratio: 6)	DOWNLOADED	DOWNLOADED	DOWNLOADED	DOWNLOADED	DOWNLOADED	DOWNLOADED	DOWNLOADED
only all and (min-device-pixel-ratio: 6)	DOWNLOADED	DOWNLOADED	DOWNLOADED	DOWNLOADED	DOWNLOADED	DOWNLOADED	DOWNLOADED
tv	DOWNLOADED	DOWNLOADED	DOWNLOADED	DOWNLOADED	DOWNLOADED	DOWNLOADED	DOWNLOADED
handheld	DOWNLOADED	DOWNLOADED	DOWNLOADED	DOWNLOADED	DOWNLOADED	DOWNLOADED	DOWNLOADED
nonsense	DOWNLOADED	DOWNLOADED	DOWNLOADED	DOWNLOADED	DOWNLOADED	NO REQUEST	DOWNLOADED

https://github.com/scottjehl/CSS-Download-Tests

86%

der responsive Websites
sind in der mobilen Ansicht
genau so schwer
wie in der Desktop Ansicht

Runterladen & Verstecken

```
<div id="main">...</div>
<div id="sidebar">...</div>

@media (max-width: 480px) {
    #sidebar {display: none;}
}
```

Runterladen & Schrumpfen

```
<div id="main">
    <img src="foto-1024px.jpg">
</div>


@media (max-width: 480px) {
    #main img  {
        max-width: 100%; height: auto;
    }
}
```

Javascript

```
<script src="jquery.min.js"></script>
<script src="masonry.pkgd.min.js"></script>
<script>
var $container = $('#container');
$container.masonry({
  columnWidth: 200,
  itemSelector: '.item'
});
</script>
```

```
<script src="masonry.pkgd.min.js"></script>
<script>
var container = document.querySelector('#container');
var msnry = new Masonry( container, {
  columnWidth: 200,
  itemSelector: '.item'
});
</script>
```

- 93 kB

- 1 HTTP Request

```
<script>
if (typeof document.querySelector === "undefined") {
  // jQuery
} else {
  // Reines Javascript
}
</script>
```

```
<script>
if (
  window.matchMedia("(min-width: 36em)").matches
) {
    document.write("<script
      src='masonry.pkgd.min.js'><" + "/script>");
    window.onload = function() {
     new Masonry(
       document.querySelector(".masonry"),
       {itemSelector:".item"});
    };
}
</script>
```

RICG
RESPONSIVE IMAGES COMMUNITY GROUP

We're a group of developers working towards a markup-based means of delivering alternate image sources based on device capabilities to prevent wasted bandwidth and optimize display for both screen and print.

JOIN US!

Examples of art direction. See more demos of responsive images.

WHAT IS THE `PICTURE` ELEMENT?

The `picture` element is a markup pattern that allows developers to declare multiple sources for an image. By using media queries, it gives developers control as to when and if those images are presented to the user.

SAMPLE MARKUP FOR `PICTURE`

```
<picture>
  <source media="(min-width: 40em)" srcset="big.jpg 1x,
big-hd.jpg 2x">
  <source srcset="small.jpg 1x, small-hd.jpg 2x">
  <img src="fallback.jpg" alt="">
```

WHAT IS THE `SRCSET` ATTRIBUTE?

The `srcset` attribute is an extension to the existing `img` tag that provides some of the functionality of the `picture` element. It uses a more concise syntax, part of which can be used by the `picture` element.

SAMPLE MARKUP FOR `SRCSET`

```
<img src="fallback.jpg" alt="" srcset="small.jpg 640w 1x,
small-hd.jpg 640w 2x, med.jpg 1x, med-hd.jpg 2x ">
```

Read the `srcset` Specification

Example `srcset` parser

```
<img src="fallback.jpg"
    srcset="small.jpg 640w 1x, small-hd.jpg 640w 2x,
        large.jpg 1x, large-hd.jpg 2x"
    alt="…">
```

This repository ▾   Search or type a command   ⑦   **Explore**   **Features**   **Enterprise**   **Blog**   **Sign up**   **Sign in**

📖 **borismus** / **srcset-polyfill**   ★ Star 183   ⑂ Fork 29

⑃ **22** commits   ⑃ **1** branch   🏷 **0** releases   👥 **3** contributors   **‹› Code**

⑃   ⑂ branch: **master** ▾   **srcset-polyfill** / ⊞   ⓘ **Issues**   7

Merge pull request **#12** from michrome/double-download-warning ⋯   ⑃ **Pull Requests**   2

borismus authored 6 months ago   latest commit **52a4c8aaef** 📋

📁 build	Fix width and height detection for IE8.		6 months ago
📁 demo	Added basic demo.		a year ago
📁 js	Fix width and height detection for IE8.		6 months ago
📁 tests	prove issues parsing srcset URL descriptors pairs		8 months ago
📄 .gitignore	Update grunt to 0.4.0.		6 months ago
📄 Gruntfile.js	Update grunt to 0.4.0.		6 months ago
📄 README.md	Replace warning with friendly hints		6 months ago
📄 package.json	Update grunt to 0.4.0.		6 months ago

↟ **Pulse**

ılı **Graphs**

⑂ **Network**

HTTPS clone URL

https://github.cor 📋

You can clone with HTTPS, or
Subversion. ⑦

☁ Download ZIP

📖 **README.md**

A spec compatible, unit tested polyfill

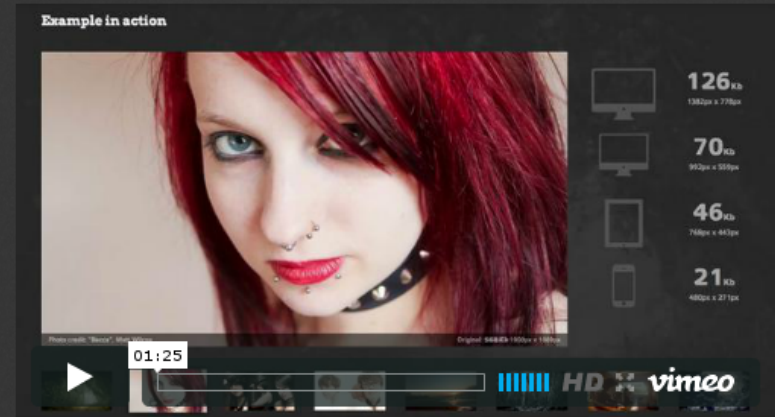https://github.com/borismus/srcset-polyfill

Adaptive Images

Deliver small images to small devices

Adaptive Images detects your visitor's screen size and automatically creates, caches, and delivers device appropriate re-scaled versions of your web page's embeded HTML images. No mark-up changes needed. It is intended for use with Responsive Designs and to be combined with Fluid Image techniques.

Why? Because your site is being increasingly viewed on smaller, slower, low bandwidth devices. On those devices your desktop-centric images load slowly, cause UI lag, and cost you and your visitors un-necessary bandwidth and money. Adaptive Images fixes that.

Example in action

01:25

126 Kb
1382px x 778px

70 Kb
962px x 559px

46 Kb
768px x 443px

21 Kb
480px x 271px

Photo credit: "Becca", Web Address

Original 5448Kb 1600px x 1480px

HD vimeo

Features

- Works on your existing site
- Requires no mark-up changes
- Device agnostic
- Mobile-first philosophy
- Easy & powerful customisations
- Up and running within minutes

See more features

Set-up

- Add `.htaccess` and `adaptive-images.php` to your document-root folder.
- Add one line of JavaScript into the `<head>` of your site.
- Add your CSS Media Query values into `$resolutions` in the PHP file.

You're done. Seriously.

Requirements

- Apache 2
- PHP 5.x
- GD lib *

* Normally a default with PHP

THE RESPONSIVE IMAGE ENGINE
It's time images were optimized for all devices... *now they can be!*

ReSRC delivers responsive images on-demand, direct from the cloud. Link your images to our super simple service and let us take care of everything.

FEATURES & BENEFITS

♡ Awesome User Experience

Deliver pixel perfect images to the latest HiDPI screens or provide your slower internet connected users with lightening fast bandwidth efficient images.

🖼 Truly Responsive

We don't rely on pre-defined breakpoints. We just take your single image and seamlessly deliver it at the exact size it needs to be to your device.

☺ Save Time & Money

Forget about batch processing and 'saving for web'. We've already done the legwork. Leave the days of manual image editing and manipulation behind you.

▮▮ Fast as Lightening

We've built ReSRC from the ground up and our bespoke image processing servers are finely tuned for what we do - nothing more, nothing less.

♟ You're in Control

👆 No Hassle Setup

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· · ·

Video Media Queries

```
<video controls>
    <source src="small.mp4" type="video/mp4"
        media="(max-width:480px)">
    <source src="small.webm" type="video/webm"
        media="(max-width:480px)">
    <source src="big.mp4" type="video/mp4">
    <source src="big.webm" type="video/webm">
</video>
```

RESS:
Responsive Design +
Server Side Components

```php
<div id="main">...</div>

<div id="sidebar">
<?php if ( is_mobile() ): ?>
  Mobil
<?php else: ?>
  Desktop
<?php endif; ?>
</div>
```

Endgeräte-Erkennung

http://detectmobilebrowsers.com/

http://wurfl.sourceforge.net/

https://deviceatlas.com/

MOBILE WEB BEST PRACTICES*

*"Best practices" is a loaded term when it comes to creating mobile web experiences. It's a unique context with it's own challenges and opportunities. While there's no silver bullet, this site will help you ask the right questions and help solve problems so you can start creating future-friendly web experiences.

WEB
WEB
WEB
WEB

PICK YOUR POISON

♠ STRATEGY ♣ USER EXPERIENCE ♥ VISUAL DESIGN

♦ ¿ @

http://mobilewebbestpractices.com/

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slideshare.net/walterebert

drupal.org/user/699574