

matchMedia

What is it?

What you could do with it

Quirks

Browser support

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Who knows what matchMedia is or does?

How many of you have used matchMedia?

`matchMedia` is a method for testing css media queries in javascript

CSS snippet:

```
@media screen and (min-width: 500px) {  
    . . .  
}
```

```
<link media="screen and (min-width: 500px)"  
href="project.css" rel="stylesheet" />
```

Javascript snippet:

```
matchMedia('screen and (min-width: 500px)');
```

Why would I use `matchMedia`?

Trigger or remove functionality at breakpoints such as navigation, dialogs, images or use your imagination.

Anatomy of a MediaQueryList object

```
var mql = matchMedia('screen and (min-width: 500px)');
```

mql has the following properties:

matches	: <Boolean getter>
media	: <String>
addListener	: <Function>
removeListener	: <Function>

MediaQueryList + addListener

```
var mql = matchMedia('screen and (min-width: 500px)'),
    handleMediaQuery = function(mql) {
        if (mql.matches) {
            // Media query matches
        } else {
            // Media query does not match anymore
        }
    };

mql.addListener(handleMediaQuery);
```

What triggers a MediaQueryList listener

width:	<code>width, min-width, max-width</code>
height:	<code>height, min-height, max-height</code>
device-width:	<code>device-width, min-device-width, max-device-width</code>
device-height:	<code>device-height, min-device-height, max-device-height</code>
aspect-ratio:	<code>aspect-ratio, min-aspect-ratio, max-aspect-ratio</code>
device-aspect-ratio:	<code>device-aspect-ratio, min-device-aspect-ratio, max-device-aspect-ratio</code>
orientation:	<code>orientation</code>
resolution:	<code>resolution, min-resolution, max-resolution</code>
device-pixel-ratio:	<code>device-pixel-ratio, min-device-pixel-ratio, max-device-pixel-ratio</code>

Alternative to addListener

```
var mql = matchMedia('screen and (min-width: 500px)'),
    update = function() {
        // Debounced function, see slide links
        if (mql.matches) {
            // Media query matches
        } else {
            // Media query does not match anymore
        }
    };

window.addEventListener('resize', update, false);
```

Browser quirks: OSX Chrome 27 and Firefox 22

Incorrect property name

```
matchMedia(' (minwidth: 1800px) ');
```

Chrome { matches: false, media: "not all" }

Firefox { matches: false, media: "not all" }

Missing leading '('

```
matchMedia('width: 1800px)');
```

Chrome { matches: false, media: "invalid" }

Firefox { matches: false, media: "not all" }

Missing '()'

```
matchMedia('width: 1800px');
```

Chrome { matches: false, media: "invalid" }

Firefox { matches: false, media: "not all" }

No spaces. Spec indicates spaces are not required...

```
matchMedia(' (min-width:0px) and (max-width:1800px) ');
```

Chrome { matches: **true**, media: "(max-width: 1800px) and (min-width: 0px)" }

Firefox { matches: **false**, media: "not all" }

One space only

```
matchMedia(' (min-width:0px) and (max-width:1800px) ');
```

Chrome { matches: true, media: "(max-width: 1800px) and (min-width: 0px)" }

Firefox { matches: true, media: "(min-width: 0px) and (max-width: 1800px)" }

Notice how the properties are sorted

```
matchMedia('(min-width: 0px) and (max-width: 1800px)');
```

Chrome { matches: **true**, media: "(max-width: 1800px) and (min-width: 0px)" }

Firefox { matches: **true**, media: "(min-width: 0px) and (max-width: 1800px)" }

What support do we have for matchMedia?

- ✓ Android stock browser *
- ✓ Chrome 9+
- ✓ Chrome beta on Android *
- ✓ Firefox 6+
- ✓ Firefox mobile
- ✓ IE 10+
- ✓ Safari 5.1+ *
- ✓ Safari 5 on iOS *

* Note: doesn't support addListener

<http://caniuse.com/css-mediaqueries>

<http://caniuse.com/matchmedia>

<https://hacks.mozilla.org/2012/06/using-window-matchmedia-to-do-media-queries-in-javascript/>

What do we do for the rest?

Maybe nothing. Depends what you expect `matchMedia` to do.

If `matchMedia` is required, what can I do?

Polyfills:

A polyfill is code that provides functionality that is not native to the browser.

<https://github.com/weblinc/media-match>

<https://github.com/paulirish/matchMedia.js/>

That's all for this presentation. Questions?

Presentation links

<http://www.w3.org/TR/css3-mediaqueries/>

<http://davidwalsh.name/function-debounce>

<http://www.w3.org/TR/css3-mediaqueries/#syntax>

<http://dev.w3.org/csswg/cssom/#serializing-media-queries>

<http://caniuse.com/css-mediaqueries>

<http://caniuse.com/matchmedia>

<https://hacks.mozilla.org/2012/06/using-window-matchmedia-to-do-media-queries-in-javascript/>

<https://github.com/weblinc/media-match>

<https://github.com/paulirish/matchMedia.js/>

Thank you

Feedback is welcome and appreciated.

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<http://www.weblinc.com/about/careers/>