WEB DESIGNER WALL

A wall of design ideas, web trends, and tutorials

Responsive Design in 3 Steps

Dec 8, 2011 • Tutorials → *css*, *responsive design*

Responsive web design is no doubt a big thing now. If you still not familiar with responsive design, check out the list of responsive sites that I recently posted. To newbies, responsive design might sound a bit complicated, but it is actually simpler than you think. To help you quickly get started with responsive design, I've put together a quick tutorial. I promise you can learn about the basic logic of responsive design and media queries in 3 steps (assuming you have the basic CSS knowledge).

Step 1. Meta Tag (view demo)

Most mobile browsers scale HTML pages to a wide viewport width so it fits on the screen. You can use the viewport meta tag tc reset this. The viewport tag below tells the browser to use the device width as the viewport width and disable the initial scale. Include this meta tag in the <head>.

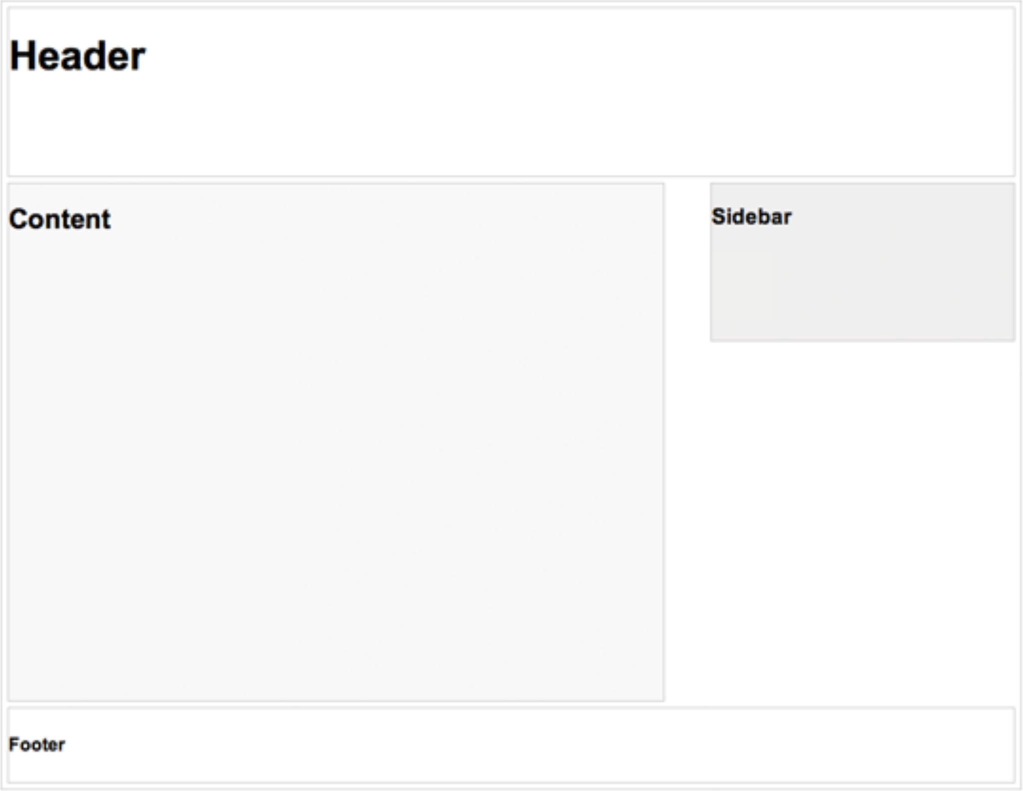
```
<meta name="viewport" content="width=device-width, initial-scale=1.0">
```

Internet Explorer 8 or older doesn't support media query. You can use media-queries.js or respond.js to add media query support in IE.

```
<!--[if lt IE 9]>
        <script src="http://css3-mediaqueries-js.googlecode.com/svn/trunk/css3-mediaqueries.js"></script>
<![endif]-->
```

Step 2. HTML Structure

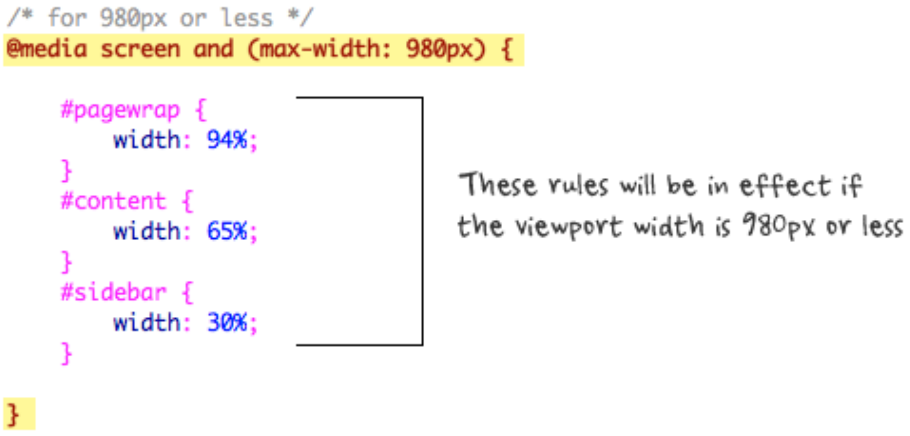
In this example, I have a basic page layout with a header, content container, sidebar, and a footer. The header has a fixed heigh 180px, content container is 600px wide and sidebar is 300px wide.



Step 3. Media Queries

CSS3 media query is the trick for responsive design. It is like writing if conditions to tell the browser how to render the page fo specified viewport width.

The following set of rules will be in effect if the viewport width is 980px or less. Basically, I set all the container width from pixel value to percentage value so the containers will become fluid.



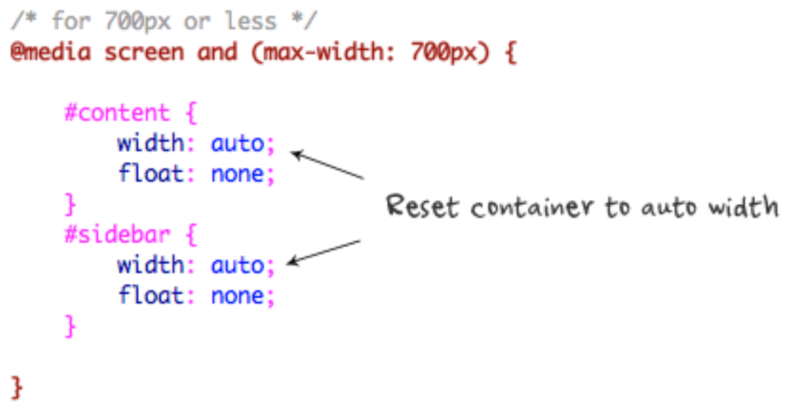
```
/* for 980px or less */
@media screen and (max-width: 980px) {

    #pagewrap {
        width: 94%;
    }
    #content {
        width: 65%;
    }
    #sidebar {
        width: 30%;
    }

}
```

These rules will be in effect if the viewport width is 980px or less

Then for viewport 700px or less, specify the #content and #sidebar to auto width and remove the float so they will display as full width.



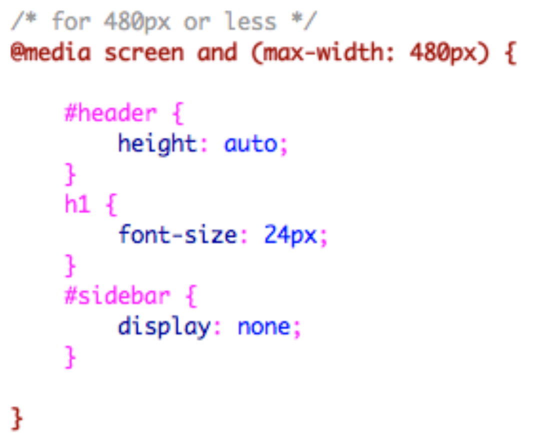
```
/* for 700px or less */
@media screen and (max-width: 700px) {

    #content {
        width: auto;
        float: none;
    }
    #sidebar {
        width: auto;
        float: none;
    }

}
```

Reset container to auto width

For 480px or less (mobile screen), reset the #header height to auto, change the h1 font size to 24px and hide the #sidebar.



```
/* for 480px or less */
@media screen and (max-width: 480px) {

    #header {
        height: auto;
    }
    h1 {
        font-size: 24px;
    }
    #sidebar {
        display: none;
    }

}
```

You can write as many media query as you like. I've only shown 3 media queries in my demo. The purpose of the media queries is to apply different CSS rules to achieve different layouts for specified viewport width. The media queries can be in the same stylesheet or in a separate file.

Conclusion

This tutorial is intended to show you the basics of responsive design. If you want more in-depth tutorial, check out my previous tutorial: Responsive Design With Media Queries.

208 COMMENTS

Harsh

DEC 06, 2012 @ 04:24

Really very nice and easy tutorial for basic understanding, my search ends here for understanding the basic for responsive website.. Thanks for sharing.. Thanks a lot.

Admin

JAN 31, 2013 @ 06:27

thanks for this tutorial it means a lot for me

Manaqib

FEB 01, 2013 @ 03:17

hanks for this tutorial. really helpful

Marvin

FEB 02, 2013 @ 04:35

Thank man. Really helpful.

Brian

MAY 08, 2013 @ 22:09

Hi,

Great tutorial. It’s great to see what could be a very daunting boiled down into such a simple tutorial.

I have one problem though. I tested this tutorial out on a simple “under-construction” page I needed to update. It worked perfectly, and when I narrowed the width of the browser window on my laptop it reformatted as it should have.

However, when I tried to view the page on my iPhone (iPhone 4 running iOS 6.1.3), the error message, “Safari cannot download this file”. Do you know of any common problems that may cause this?

Again, I love the tutorial. I’ve bookmarked this page for future reference.

Thanks,

Brian.

Afzal

MAY 27, 2013 @ 11:45

You have describe responsive designs in such a nice way or in a kind of series..

Snow & Ice Clearance

JUN 01, 2013 @ 06:29

Hello !
I am impressed with this technique of using meta tag. This is nice way for getting responsive design in just 3 steps.
Thanks.
Snow & Ice Clearance

Harry Pulau Tidung

JUN 04, 2013 @ 18:44

Very useful tutorial
Thaks alot

Sangita Chakraborty

JUN 05, 2013 @ 00:42

You have describe responsive designs in very simple way,this is really helpful..

ABOUT

Web Designer Wall is all about design, ideas, web trends, and tutorials. It is designed and maintained by Nick La, who also runs N.Design Studio, Themify, IconDock, and Best Web Gallery.