

Set up your computer for today

Wifi Network: atomic-detroit-public
Password: atomic-public

Download slides and exercise files here:
<http://gopixelsgo.com/girldevelopit/>

Install Google Chrome, if you don't have it already.
<http://google.com/chrome>

Feel free to use whatever text editor you like.
Today we're using SublimeText2:
<http://sublimetext.com/2>



Responsive Design Workshop

Welcome!

Girl Develop It is here to provide affordable and accessible programs to learn software through mentorship and hands-on instruction.

Some "rules"

- We are here for you!
- Every question is important
- Help each other
- Have fun

Meet Nicole

- **1997:** Graphic design student. Discovered code via AOL while staying up late with my insomniac toddler.
- **1997-1999:** First real graphic design job, boss asked me to put together company website using Adobe PageMill.
- **2002-today:** Made the switch from print design to web design and development, learning much of what I know on the job. Have since worked on websites and apps for Ford, GM, UnitedHealth Group, and now DTE Energy.
- Twitter: [@gopixelsgo](https://twitter.com/gopixelsgo)
- E-mail: gopixelsgo@gmail.com

**Because Responsive is new-ish and
this workshop very new...**

...what do you hope to get out of it?

What is Responsive?

Cutting through the clutter to answer this was a challenge!

Because, we have this:



What is Responsive?

And we have this:

Responsive Web Design is Not the Future

Apr 1 2013 by **Josh Chan** |  [101 Comments](#)



RESPONSIVE WEB DESIGN
IS NOT THE FUTURE

What is Responsive?

And this

The screenshot shows a blog post with the following details:

- Category: RESPONSIVE WEB DESIGN FEATURE
- Date: Mar 25, 2013 • 15:59 pm
- Comments: 12 comments
- Shares: 174 (Twitter), 46 (Facebook), 9 (Google+), 27 (LinkedIn)
- Text: "Is your agency's website as cool as these? Check out these great examples of how to do responsive web design right..."
- Text: "Like it or not people do judge a book by its cover and your agency's website is crucial to how the business is perceived by the outside world."

What is Responsive?

And this

Posted on July 11, 2013 ← Previous Next →

Haters Gonna Hate: a user's take on Responsive Web Design



HATERS GONNA HATE

— Sometimes you just have to deal with it

TL;DR (Too Long; Didn't Read) Version – The Responsive Web Design (RWD) you're experiencing is probably built wrongly. Don't judge a whole methodology based on bad implementation.

What is Responsive?

And criticism and praise times a bazillion:

Karen Walters says:
June 18, 2013 at 7:49 am

Responsive Web Design also means that it is not just about the screen size, but also about the content and prioritizing content. And this is one of the most important aspects of responsive design, I believe. It's perfectly future of web design.

REPLY

Nigel Joy says:
June 8, 2013 at 12:03 am

lol, this is one of the most idiotic article EVER! You can't be someone with negative bland opinions about responsive design. It does only good. (in this case, responsive design)

get some common sense.

REPLY

Dave Warfel 9 Great article, Ethan. I've enjoyed watching this topic of yours progress over time and this article is another nice improvement on the approach.
I've been wondering though: do you think the resolution-based media query is a forward-looking solution? How can it scale to support higher resolution phones like the Nexus One (or perhaps even the next iPhone)? When handheld resolutions start to blur with screen resolutions, will device-max-width be relevant for delivering finger-friendly layouts?
REPLY

Dave Warfel 10 Great article, Ethan.
I just wanted to point out what I think is a small error in the article. When you talk about adding a query for larger screen sizes, your code reads "min-width: 1300px;... however, the caption for the example image reads, "By specifying a wider max-width..."
Don't you mean to say "...wider min-width" in the caption?
REPLY

Per Axbom All valid points. Great article. I guess the challenge for large websites is getting by with less-than-average website designs is achieved by doing things like this. An insight is that it's better to redo and do it right than throw in queries and call it a day. The latter is the quick and dirty solution, which can show off in meeting rooms, imitating the all-to-familiar performed user task of resizing the browser and going "ah". The former approach is scary and seemingly expensive. It's one of those "Follow the money" situations where organisations too often focus on connection between their website and the money.

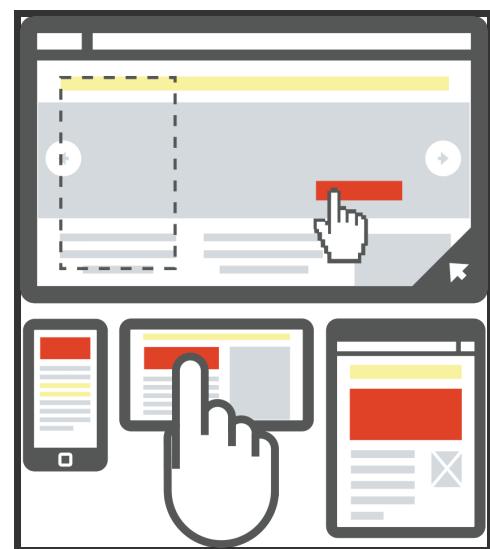
Ryan Sorry to get slightly off topic but this reminds me of the days when we moved from table based layouts to CSS. Many of people who did this didn't know what they were doing, there was massive discussion and lots of heated debate. Some people (some pretty harsh), some crazy techniques and stuff were used.

It's early days, in 5 or at worst 10 years time we'll have learned a lot from this current disruptive phase and levelled up 😊

So really, what is Responsive?

Responsive design is responsible design.

It's the theory and practice of crafting websites that allow the user to enjoy its features no matter what device they are viewing it on.



Responsive's roots

Responsive Web Design was first coined by Ethan Marcotte in the [May 2010 issue of A List Apart](#).



Responsive's ingredients

- flexible foundation
- fluid grids
- flexible images
- CSS3 media queries, an extension of the @media rule

Media queries

If you've ever created a print stylesheet for a website (`media="print"`) then you're already familiar with the idea of creating a specific stylesheet to come into play under certain conditions.

Media queries

Here's the CSS for #header-image

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

And here are the media queries that call for the larger image to be used for screens over 1200px wide, and to turn off the header image if the site is printed.

```
@media screen and (min-width: 1200px) {  
    #header-image {  
        background-image:url('large-image.gif');  
    }  
}
```

```
@media print {  
    #header-image {  
        display: none;  
    }  
}
```

Media Queries is just CSS for certain situations

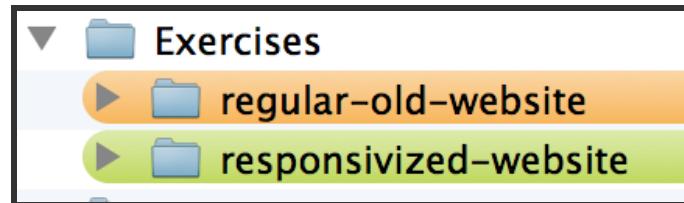
Rather than looking for a type of device they look at the capability of the device, and you can use them to check for all kinds of things.

- width and height (of the browser window)
- device width and height
- orientation – for example is a phone in landscape or portrait mode?
- resolution

Let's look at our Media Queries

We can make a few small changes right now to see what this does.

We've got 2 folders. We'll be working from the "responsivized-website" folder.



Examples of Responsive websites

If we visit these sites and "right-click - inspect" them,
you'll see their media queries in action.

- <http://createdm.com>
- <http://stuffandnonsense.co.uk>
- <http://www.starbucks.com/>

And speaking of which, Starbucks gets bonus points for documenting
and sharing their styleguide here:

<http://www.starbucks.com/static/reference/styleguide/>

The Responsinator!

To mimick device breakpoints, you can resize the browser window manually.

Or you can use one of many emulators like [The Responsinator](#).

A missed Responsive opportunity

This makes me sad, you guys! The Henry Ford is a museum that houses some of this country's most significant innovations. Their website underwent a much-needed redesign, but they forgot something.

<http://thehenryford.org/>

Let's see how it looks in Responsinator.

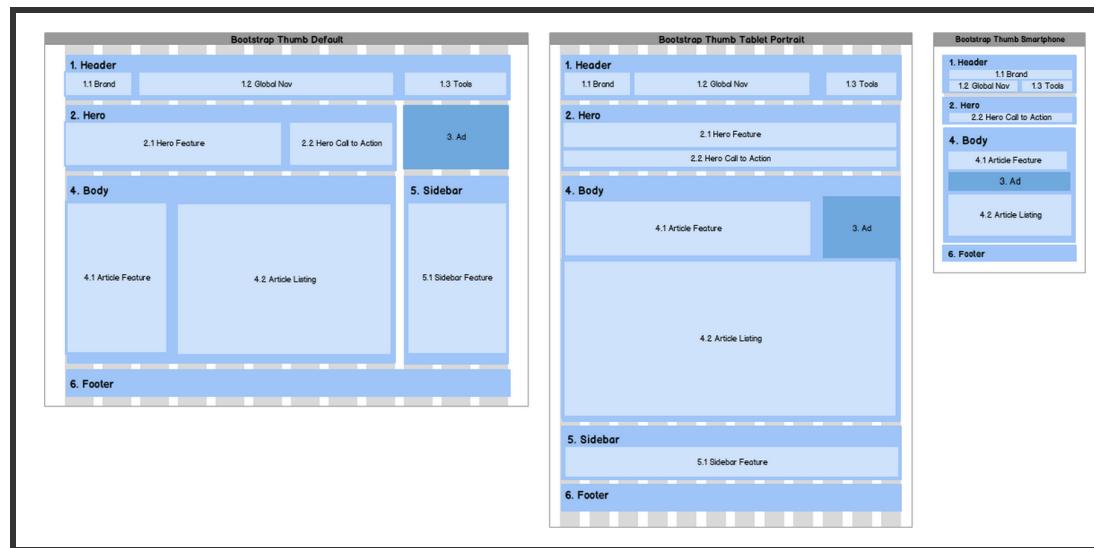
Before I forget!

There one more thing Responsive is: Disruptive

Before you can embrace Responsive, you have to update your processes. It also means educating clients and (for some) resetting their expectation that websites should look the same in every browser, on every device.

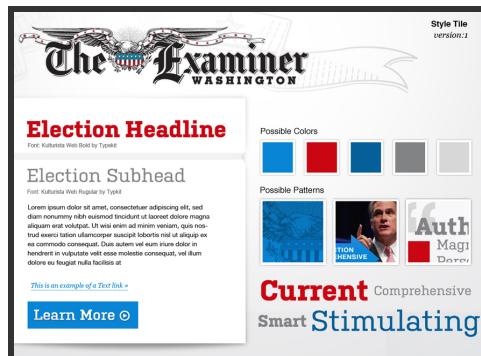
In support of Responsive

Lots of wireframing software such as [Balsamiq](#) now offer a plethora of responsive-capable tools.



In support of Responsive

New ways of presenting designs are also popping up, such as [Style Tiles](#). The mockup below was turned into the website on the right.



The Examiner WASHINGTON
ELECTIONS 2012

Beltway Confidential

THE RUNDOWN

From the Trail

Power Rankings

State Races

What Matters Most?

Advertising

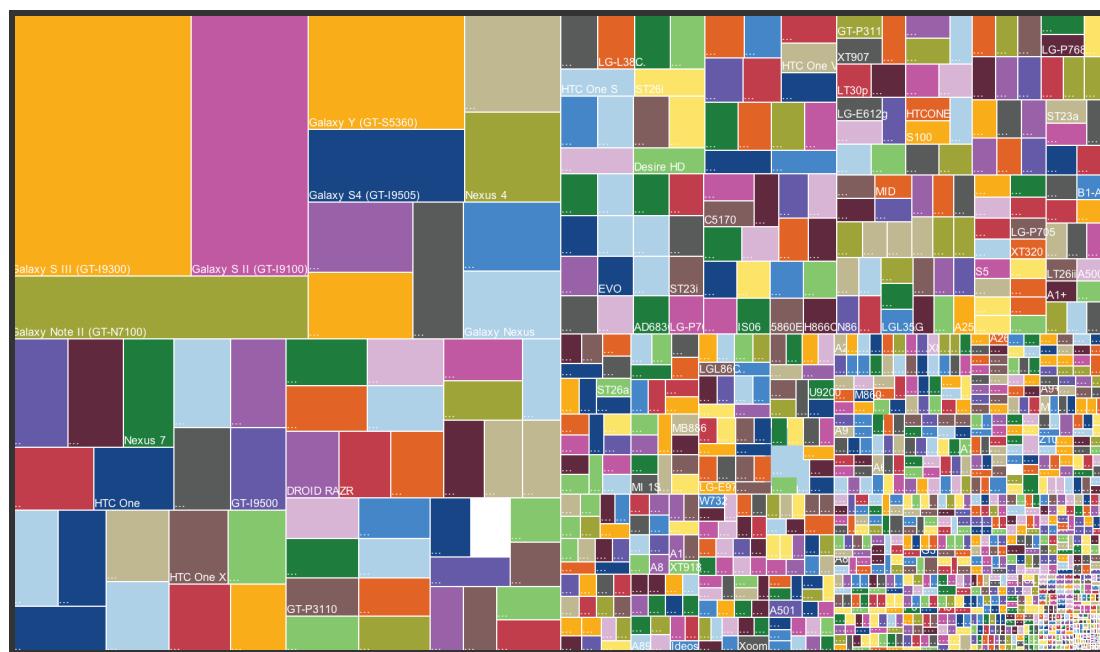
One web, for the love of humanity!

This is the idea that there shouldn't be a mobile web and a tablet web and desktop web. We should assume that people will try to view a website on whatever device they have with them.

Our users love their devices, and it's not their fault they've been given 1 billion to choose from!



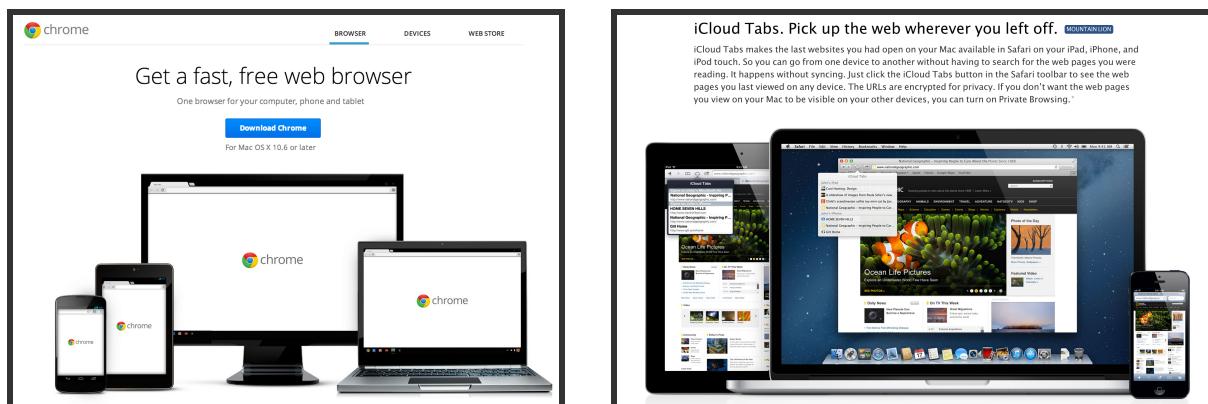
(Almost) 1 billion devices



(these are just Android phone, tablets, phablets.
[Here are the rest.](#))

A seamless web

Browsers like Chrome and Safari know that people want seamless web browsing experiences. Browse or bookmark something on your mobile phone, get home and view it on your desktop browser.



Which browsers support media queries?

The current versions of all major browsers support media queries. There will always be someone who is, for whatever reason, using an ancient browser.

Some examples:

- Internet Explorer 7 (3 versions back)
- Internet Explorer 8 (2 versions back)
- Safari 3.2 (4 versions back)

A complete list of media query support:
<http://caniuse.com/css-mediaqueries>

What if I need my site to be responsive in an old browser?

The best we can do for now is implement some sorcery using polyfills like these:

- [Modernizr](#)
- [Respond.js](#)

Responsive vs. Adaptive

Are these things archenemies? Cousins? They both respond and adapt, right?



Responsive vs. Adaptive

Nope, not the same! Here are the differences:

Responsive is more about content that fluidly changes and responds to fit any screen or device size.

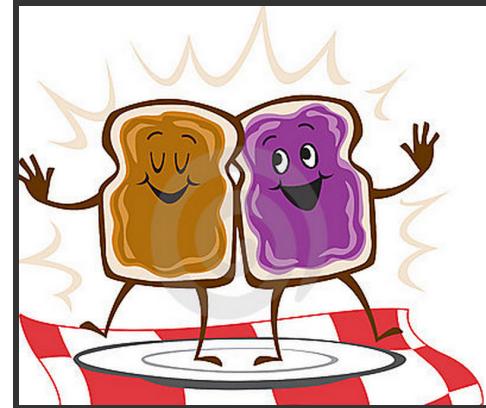
Adaptive is more about progressive enhancement as a best practice, with accessibility at its core.

- Content layer = rich semantic HTML markup
- Presentation layer = CSS and styling
- Client-side scripting layer = JavaScript or jQuery behaviors

Responsive + Adaptive

Turns out, these can (and should) coexist.

They go pretty good together, actually. They're fighting the good fight. :-)



And then what about "Mobile First"?

Google it and it probably has [Luke Wroblewski's](#) name attached to it.

What it means is, instead of offering "lighter" content or a seemingly restrictive experience to those viewing your site on a mobile device, stop. Regroup. Plan your site out thoughtfully enough that your content is already concise and simplified to begin with. Thinking "Mobile First" helps you accomplish this while you transition to Responsive Design.

What is Responsive NOT?

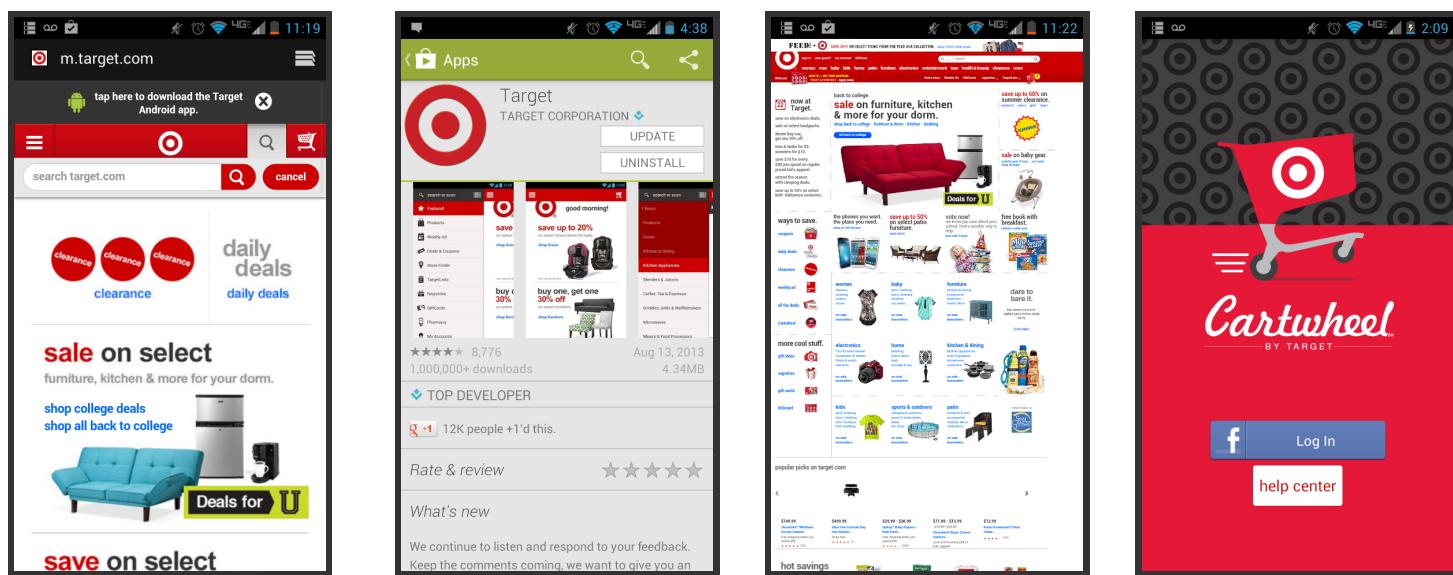
Responsive is not a fad, as it addresses a real need for planning our sites thoughtfully.



What is Responsive NOT?

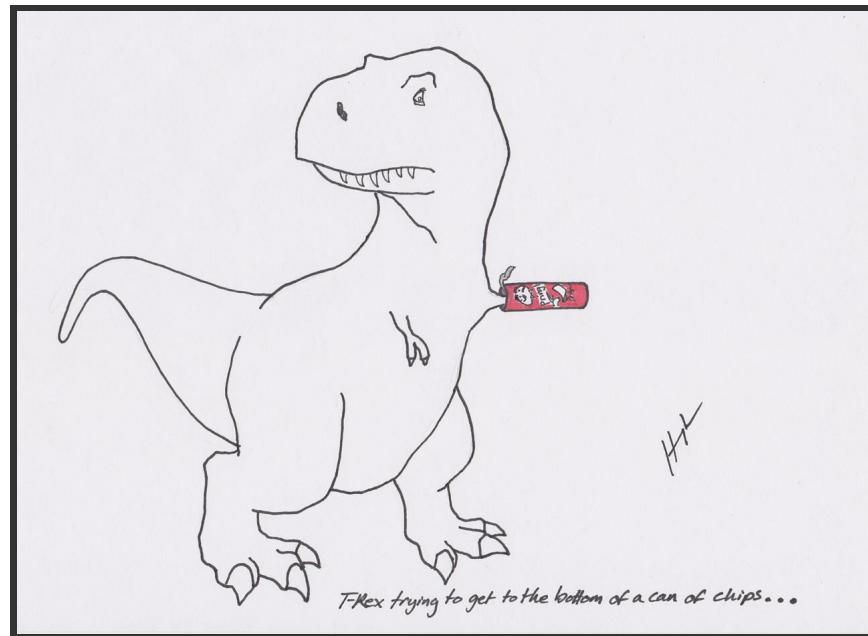
Responsive is not a replacement for mobile apps.
Responsive can save companies time and money by allowing for the development and maintenance of one set of code, but only if it's the appropriate solution.

Here's what Target is currently doing:



Questions? Break time?

Grab a snack! Coding is next!



Ready to code?

Let's code! We're going to turn this simple, fixed-width website into a responsive one.

Baby Animal Extravaganza!!!

[About](#) [Blog](#) [Contact](#)

Cute overload? Um... no such thing.

Here at Baby Animal Extravaganza we don't believe in cute overload. We provide images of the cutest and most adorable creatures for the sole purpose of making you smile, so why put limit on that? We should note that there is [scientific proof](#) that looking at cute baby animals increases productivity and improves your mood! Try it today!

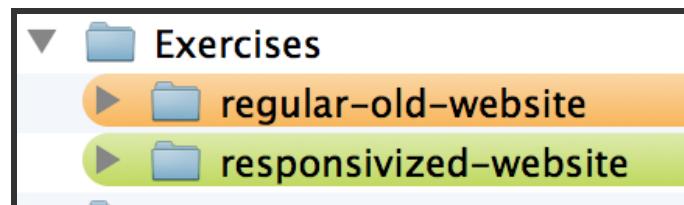
BEAST OF THE WEEK ❤

*"Look at me go!
I'm basically a mini-beast!"*

SUBMIT YOUR OWN BABY ANIMAL PHOTOS!

Exercise Files

Let's go back to our "responsivized-website" folder.



Editing, Previewing, Tweaking

As we add to mediaqueries.css, we'll have to keep going back and checking index.html in the browser.
Revise. Refresh. Repeat.

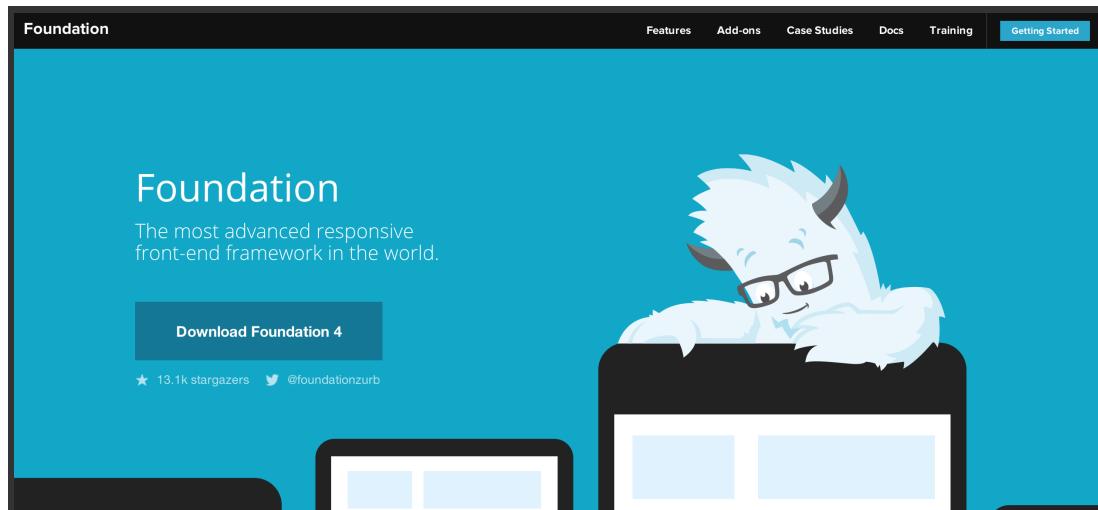
Starting from scratch: Framework

Maybe it turns out you've got a site that's going to be a bit more complex, or you just want to start with a clean slate. Here's where Responsive Frameworks come in. Here are a few. You may have to try out a few to find one that fits your needs.

- [Foundation](#)
- [Skeleton](#)
- [Gumby](#)
- [Bootstrap](#)

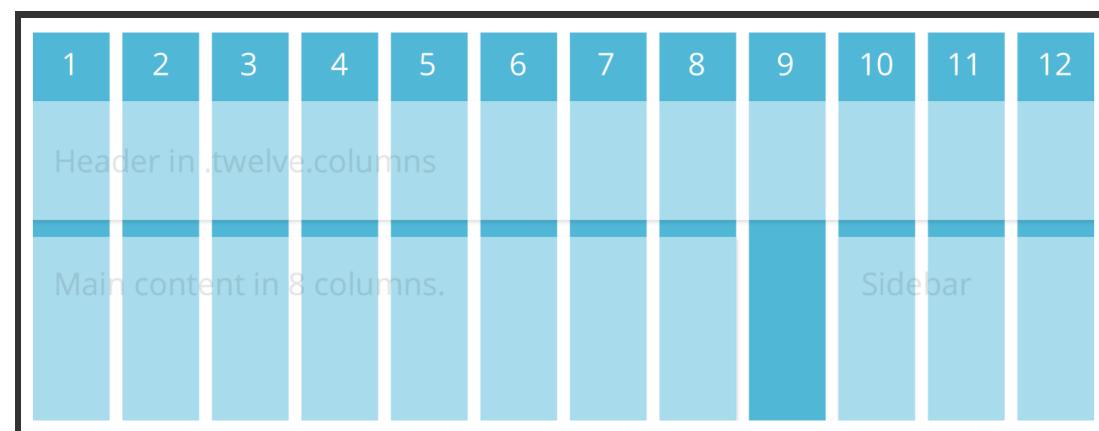
I pick frameworks same way I choose wine: prettiest label.

Kidding. But I really did want to check out Foundation, so let's [go there and download it](#).



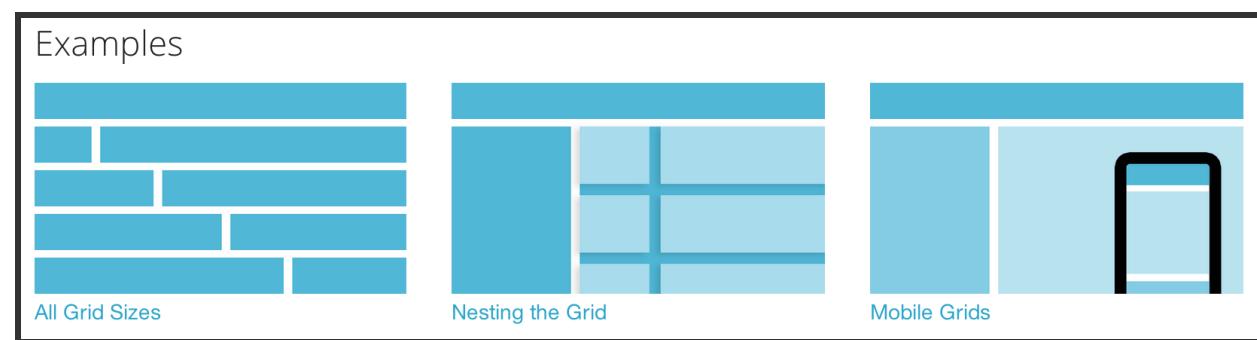
Frameworks give us: The Grid

This is simply a 12-column flexible grid that can scale out to an arbitrary size (defined by the max-width of the row) that's easily nested.



Frameworks give us: The Grid

Some examples of grids configurations.



Exploring The Grid

Let's take a look at what we downloaded from Foundation and see what we can do!

Testing Your Responsive Website

The best test is to use the actual device. Super impractical unless you have access to a device lab.

One alternative is to use an emulator like [Xcode](#), for testing on iOS devices (kind of a huge file to download - 1.65GB).

Other options:

- <http://www.browserstack.com/responsive>
- <http://quirktools.com/screenfly>

Resources

- Responsive Patterns:
<http://bradfrost.github.io/this-is-responsive/patterns.html>
<http://mobile.smashingmagazine.com/2011/07/22/responsive-web-design-techniques-tools-and-design-strategies/>
- Media Queries
<http://mediaqueries.net/>
- Responsive Images:
<http://filamentgroup.com/examples/responsive-image/>

Resources

- Making Videos Responsive
<http://css-tricks.com/NetMag/FluidWidthVideo/Article-FluidWidthVideo.php>
- Testing your Responsive Designs
<https://developer.apple.com/xcode/> (iOS only)
<http://www.browserstack.com/responsive>
<http://responsinator.com/>

Questions?

Thanks for Responsivizing with us!



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