

Building Responsive Websites with the Bootstrap 3 Framework

Michael Slater and Charity Grace Kirk



michael@webvanta.com
888.670.6793

Today's Presenters



Michael Slater

- ▶ President and Cofounder of Webvanta
- ▶ Has been creating content-rich websites since the web's early days
- ▶ Previously director of technology strategy at Adobe Systems



Charity Grace Kirk

- ▶ Senior web developer at Webvanta
- ▶ More than 5 years experience building sites for clients on the Webvanta platform
- ▶ Experience in content strategy, search engine optimization, and online marketing.

Asking Questions

Now

- Ask questions by entering the text in the GoToWebinar control panel

Later

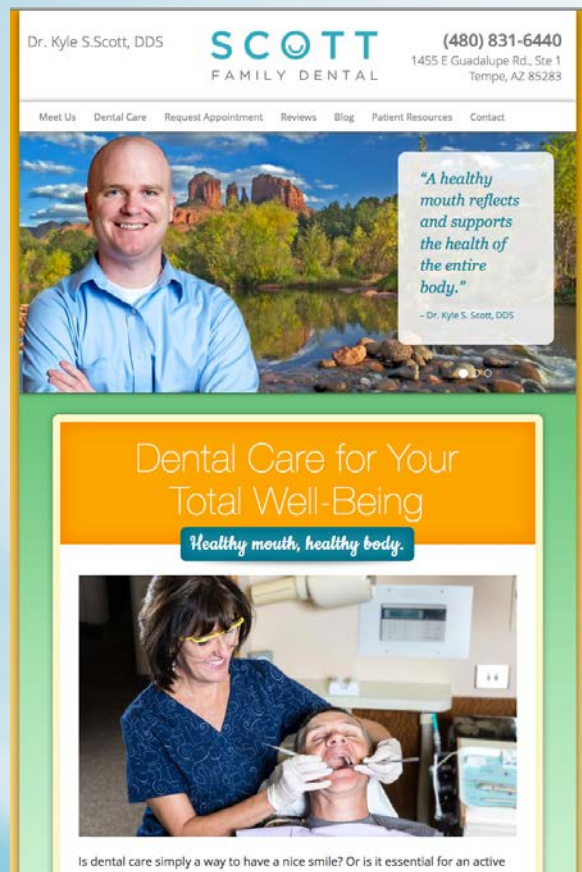
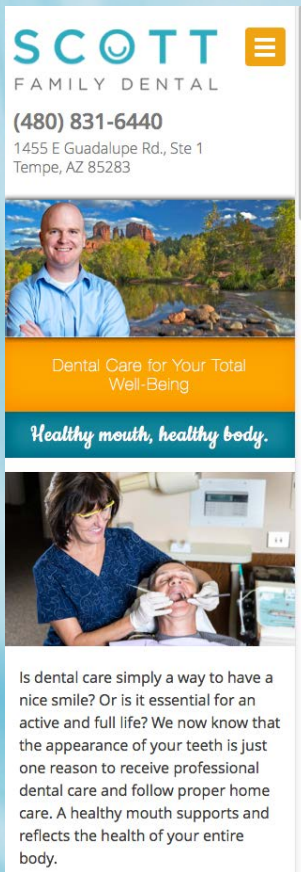
- Follow up with us afterwards (sales@webvanta.com) if you have questions that didn't get addressed
- Link to slides, video, and code will be emailed to you tomorrow

What is Your Role in Building Websites?

- Designer
- Developer
- Manager

Why Responsive Design?

Adapt to a wide range of screen sizes



<http://www.tempeazdentist.com>

Desktop-focused sites are hard to use on phones



Google encouraging responsive design



Searches on mobile phones should link to mobile-friendly content

How much of your browsing is on a phone or tablet?

- None
- Less than 10%
- 10% to 40%
- About half
- More than half

Mobile is Exploding!

Mobile devices (phones and tablets)

- ▶ Now account for ~20% of all web traffic
- ▶ Higher for restaurants, hotels

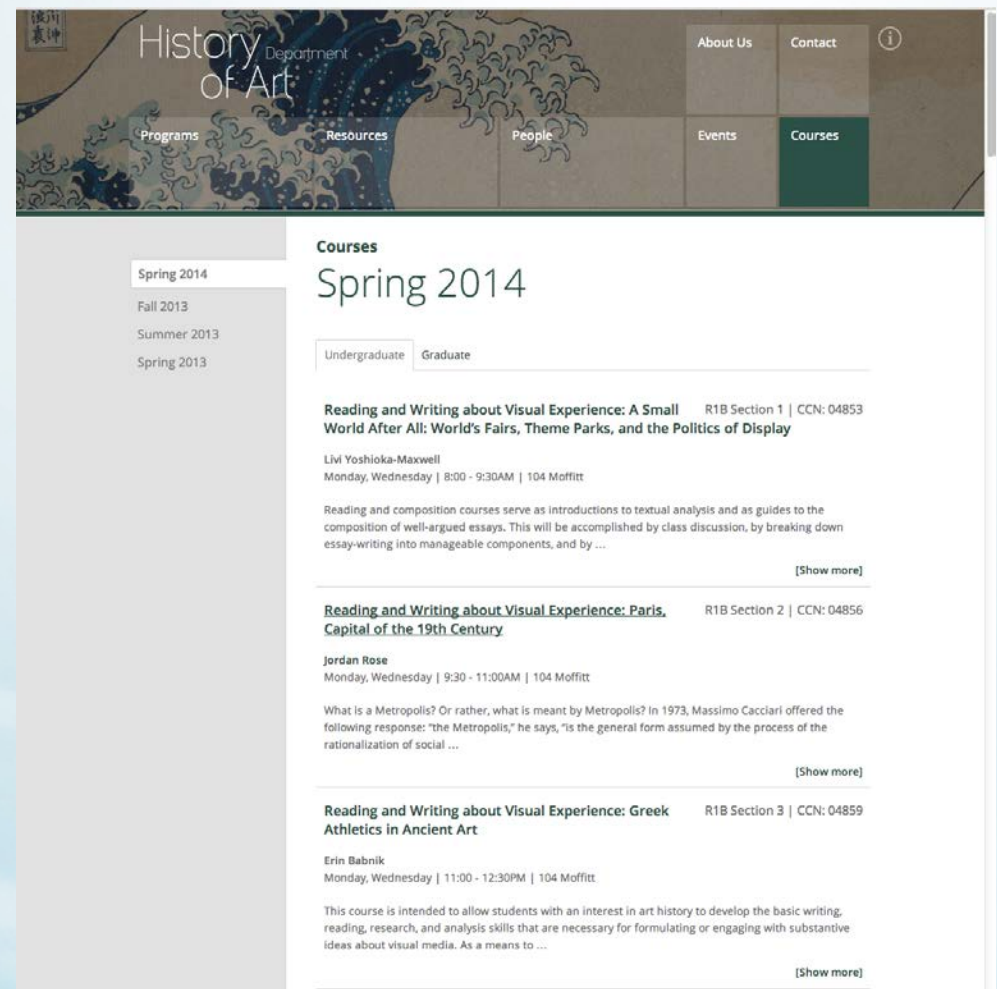
Black Friday mobile traffic

- ▶ Up 34% from last year, sales up 43%
- ▶ 21.6% of all online sales from mobile

The Mobile Site Alternative



*jQuery Mobile
with Server-side
mobile detection*



<http://arthistory.berkeley.edu>

 **Webvanta**

Responsive Design Basics

- Uses CSS Media Queries
- More than just fluid design
 - ▶ Columns can stack at smaller widths
 - ▶ Sizes, padding, margin ... all can adjust
 - ▶ Elements can be hidden or swapped out

CSS Media Queries

For Example:

```
@media (min-width: 440px) and (max-width: 767px) {  
  h1.logo {  
    text-align: center;  
  }  
  .subtitle {  
    display: none;  
  }  
}
```



*rule will only apply to screens
440px wide to 767 px wide*

Media Query Browser Support

- Chrome, Firefox, Safari, Opera
 - ▶ All reasonably recent versions
- IE10 fully supported
- IE9: except for a few CSS enhancements
- IE8: requires `respond.js` and `html5shiv.js`
- IE7: not officially supported, but “should look and behave well enough”

Why Bootstrap?

Speed up development

- ▶ Responsive grid system
- ▶ Quality default typography
- ▶ Common components
- ▶ Popular jQuery plugins
- ▶ Simplifies “bootstrapping” your design

What is Bootstrap?

- Created by Twitter, published as open source
- Consists of a CSS file, a JS file, and an icon font
- CSS is compiled from LESS source
- JS can be loaded in “everything” version or only selected pieces
 - ▶ Requires jQuery

Mobile-First Strategy

Content

- Determine what is most important

Layout

- Design to smaller widths first
- Base CSS addresses phones; media queries for tablet and desktop

Progressive enhancement

- Add elements as screen size increases

Bootstrap Break Points

```
/* Extra small devices (“phones”, less than 768px) */  
/* No media query need as this is the default Bootstrap */  
  
/* Small devices (“tablets”, 768px and up) */  
@media (min-width: 768px) { ... }  
  
/* Medium devices (“desktops”, 992px and up) */  
@media (min-width: 992px) { ... }  
  
/* Large devices (“large desktops”, 1200px and up) */  
@media (min-width: 1200px) { ... }
```

Responsive Grid

- Standard grid is 12 columns wide
- Fluid by default, then 3 fixed widths

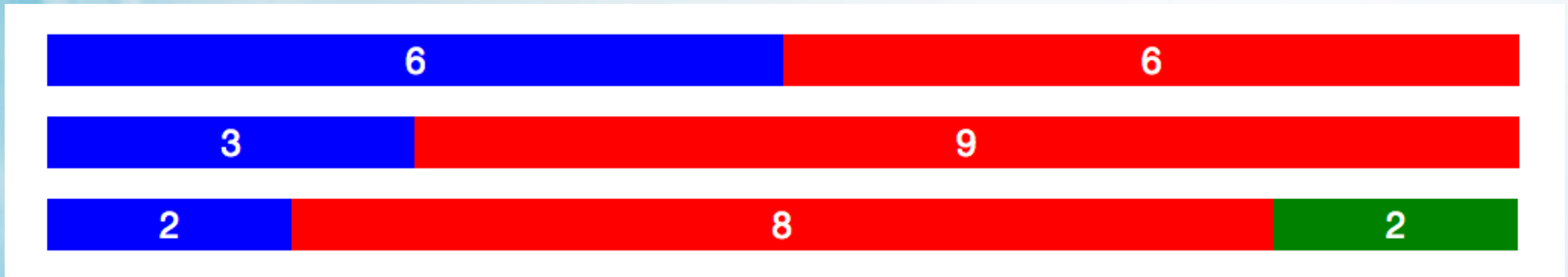
design width	fluid	750px	970px	1170px
max column	100%	60px	78px	95px

Basic Grid Structure

- `<div class="container">`
 - ▶ `<div class="row">`
 - `<div class="col-*-*"></div>`
 - `<div class="col-*-*"></div>`
 - ▶ `</div>`
 - ▶ `<div class="row">... </div>`
- `<div class="container">`
 - ▶ ...

Example 1

understanding .col-md-*



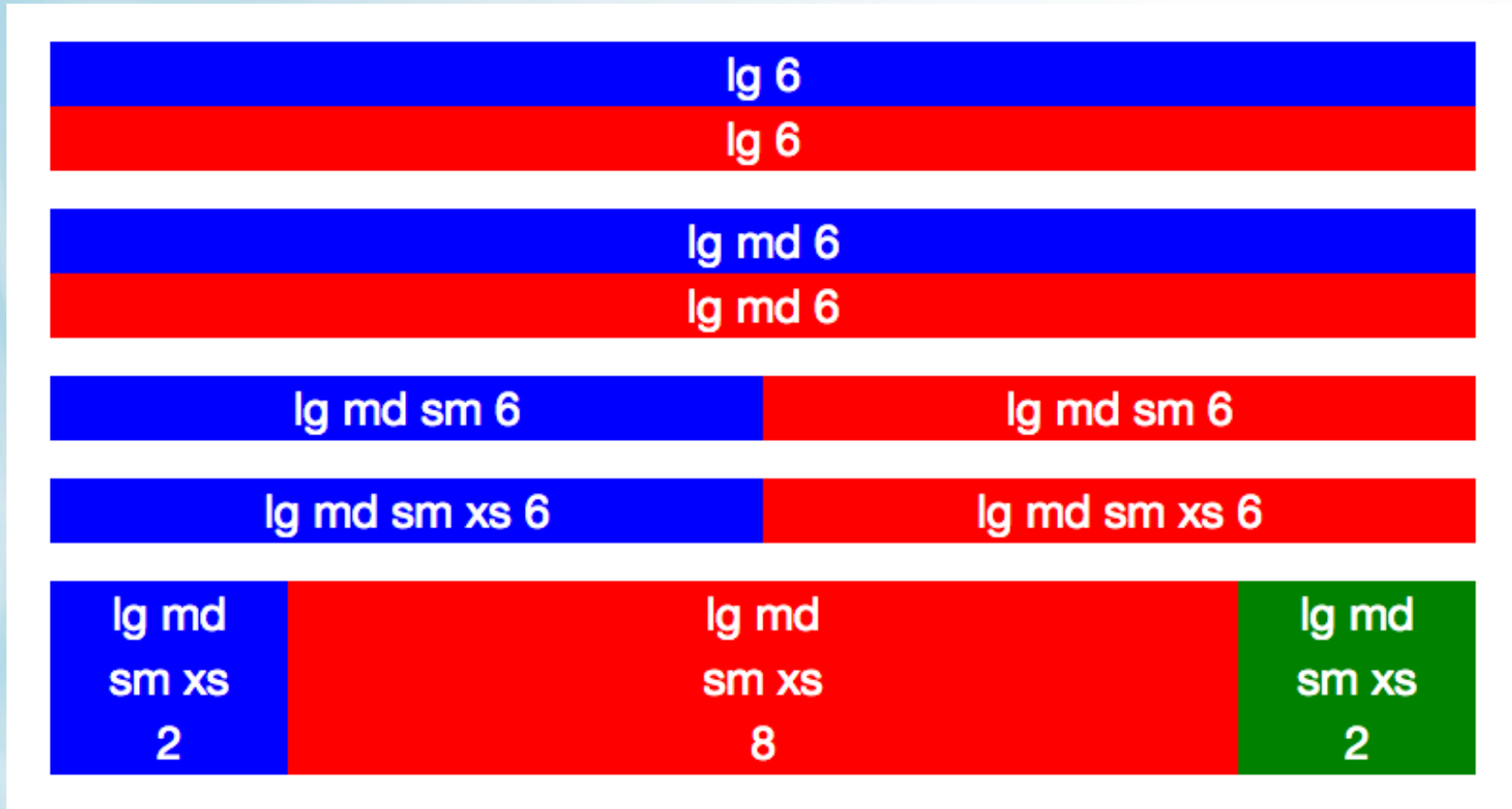
See [grid.html](#)

Controlling the Grid

- Each breakpoint has its own grid class
 - ▶ `.col-xs-*`, `.col-sm-*`, `.col-md-*`, `.col-lg-*`
- Below the smallest defined breakpoint for a column, it stacks vertically

Example 2

easy column scaling up and down



See [grid2.html](#)

Ordering the Grid

- Push and Pull columns to position on larger widths.
 - ▶ e.g. `.col-md-push-*` or `.col-md-pull-*`

Example 3

easy column positioning



See [grid3.html](#)

Responsive Images

- Background Images in CSS
 - ▶ Can load appropriate-size image based on viewport size (via media queries)
- Images in HTML ()
 - ▶ Class .img-responsive sets max-width to 100%
 - ▶ Browser scales images to fit container, but doesn't allow them to get pixelated

Helper Classes

- Bootstrap includes a variety of CSS classes to help make markup more semantic
 - ▶ pull-left, pull-right
 - ▶ center-block, text-right, text-center ...
 - ▶ clearfix
 - ▶ visible-xs, hidden-xs, visible-md ...

Navigation

Vertical Toggle Nav

Horizontal Nav

West County Health Centers
Caring for our Communities

Search

a californiahealthcenter

Main Menu

Providing comprehensive, quality and accessible health care services to the communities of Western Sonoma County.

We are a cohesive team of health care providers, support staff and volunteers dedicated to wellness, compassion, affordability and excellence of care.

Questions about the health insurance changes coming your way under the Affordable Care Act? Watch the video on this page for an overview.

THE YOUTOONS

Providing comprehensive, quality and

West County Health Centers
Caring for our Communities

Search

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Main Menu

LOCATIONS -

SERVICES -

- Primary Care
- Dental Care
- Wellness Services
- Teen Services
- HIV Services
- Mental Health Services
- Insurances and Program Eligibility
- Community Outreach Programs

West County Health Centers
Caring for our Communities

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LOCATIONS SERVICES PATIENT PORTAL NEWS ABOUT SUPPORT US ESPAÑOL

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THE YOUTOONS
READY FOR
OBAMA CARE

Above: The "YouToons Get Ready for Obamacare" video is a consumer resource helping to explain key aspects of the Affordable Care Act and the impact on the public.

Covered California Shop and Compare Calculator

The Covered California Shop and Compare Calculator shows the

<http://www.wchealth.org>

JavaScript Features

- Many common JavaScript-based plugins and functions included
 - ▶ Carousel, transitions
 - ▶ Modal, alert
 - ▶ Dropdown, tab, tooltip, popover, button
 - ▶ Collapse
 - ▶ Scrollspy

JavaScript without JavaScript

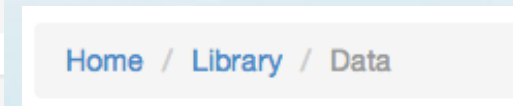
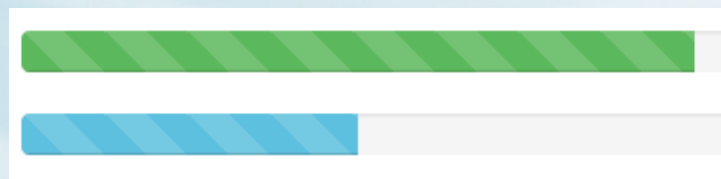
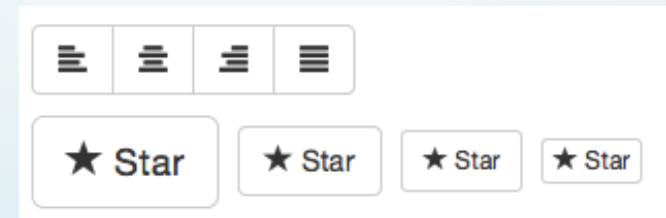
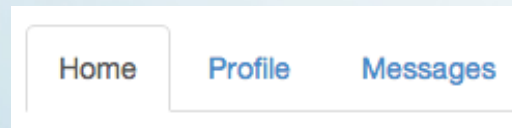
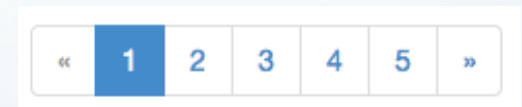
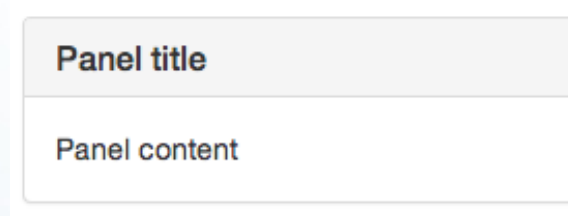
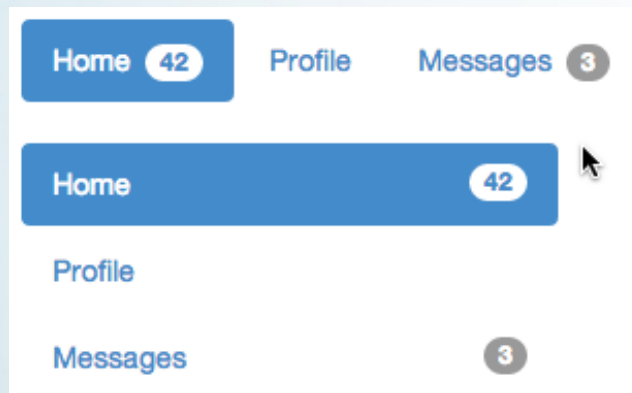
- CSS classes and HTML5 data attributes used to trigger behavior
- Bootstrap JS file finds these attributes and uses them to active JS and CSS code

JavaScript Plugin Examples

see [widgets.html](#)

Visual Components

- Icon library
- Buttons
- Breadcrumbs
- Pagination
- Navbar
- Progress bar
- ... and more



Does Bootstrap seem like a good fit for you?

- No (don't plan to support mobile)
- No (plan to support mobile differently)
- Probably, I need to learn more
- Yes, I can't wait!

Customizing

- Add your own CSS file after the Bootstrap file to override and add classes
- Can edit source LESS files and recompile into customized CSS
 - ▶ Upgrading to new Bootstrap version can be difficult

Other Responsive Frameworks

- Foundation (foundation.zurb.com)
- Skeleton (getskeleton.com)

Get Started!

getbootstrap.com

www.webvanta.com/trial

Webvanta SmartTheme

- Gives you an instant start
- Fully hosted, all code in place
- Integrate with database-driven content
- The fast way to a powerful, custom and responsive site
- Join our January webinar

What are your major questions?

- Let us know what more you'd like to know and we'll use it to guide our upcoming articles and webinars

We're Here to Help

- Webvanta specializes in creating content-rich sites that deliver on business goals
- Get your private consultation
 - ▶ Free 30-minute consultation
 - ▶ email sales@webvanta.com or call 888.670.6793
- Learn more online and stay in touch
 - ▶ www.webvanta.com/blog
 - ▶ www.facebook.com/webvanta



Webvanta

241 South Main Street
Sebastopol, CA 95472

sales@webvanta.com
888.670.6793

www.webvanta.com