

How the Course Works

- **Learn Through Observation**
 - See me build it
 - Understand the workflow and process
 - Make sense of how the different parts work together

Agenda

- **Why Bootstrap**
 - Developers and Designers
 - What is Bootstrap
 - The Mobile Web
 - Bootstrapping of the Web

Developers and Designers

- **Not every project has a designer**
 - This means well-meaning developers often do their best to create websites
 - It doesn't always go well...

Sins of the Internet

Firefox | CAR LEASING CHEAP LEASE CARS SA... | elbil, elsykkel, kamera, oversetter, tra... | New Tab

www.lingscars.com

Notes: I live inside this website Monday to Friday 9am-5pm, to give you the very best service and make your experience a happy one! - I am Ling, except no substitutes

CAR LEASING

Want a cheap new lease car? Start HERE!

↓

My cheapest leasing deals!

Click to chat is closed

ABARTH CAR LEASING

500
500 Convertible
595
595 Convertible
Punko Evo

LINGSCARS.COM

UK CONTRACT HIRE CARS FROM LING VALENTINE

Version 237.1. You can trust me! ... In 2012 I've rent over £30 million of cars (at RRP)

CAR LEASING - CONTRACT HIRE - CHEAP LEASE CARS

Home | Cars and Vans | How It Works | Price Lists | About Ling | Customers | Fun Stuff | Quote/Order

Business Customer Pricing | Personal Customer Pricing

NEW SEXY christmas pull rap HERE

FREE LINKS

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EU cookie law. Piss off Von Rumpy. Me... I hammer visitors to death with cookies, so I can find out what they want. Cookies allow my website to serve visitors the content they need. Get used to it. The EU cookie law is an azz. - Ling

Privacy and Electronic Communications (EC Directive) Regulations 2011 BLAH

cookie: regional ethnicity=ROONEY;
cookie:disposable age=50;
cookie:favourite=blatant=blatant;

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LING'S LIVE TWITTER FEED

fatlester: Weird British Car Rental Website <http://bit.ly/qjGyHnk>
<http://t.co/RQexjUJD>

erikitty: Umm... this is probably the greatest website EVER!!!
<http://t.co/80yJGSjp72>

jerodmetsall: RT @mb... you guys <http://t.co/dkVGMTq7e>

LIVE CHAT CAM

OFFICE CAM

CHICKEN CAM

You can't find a car? → Apply for a CAR QUOTE

AS SEEN ON TV

DRAGONS DEN

Richard Farleigh - "I wanted to invest; I was amazed by Ling's complete lack of nerves, and also by her business acumen."

Duncan Bannatyne - "I wanted to invest... but ye turn'd me doon!"

Deborah Meaden - "Harrumph! I'm out!"

UK WARNING: Customers reporting many other internet prices are hiding true lease costs! BEWARE DODGY COMPANIES SELLING HIGH INITIAL RENTAL "6+" LEASES

VIZ Ling is OFFICIAL VIZ ethnic business ambassador!

PLAY STUPID CRASH GAME!

CHEAP INSURANCE

Google Spider Food

Redemption

- **Learning from the community can help**
 - Most websites are made of the same basic parts
 - Navigation
 - Layout
 - Etc.

Reach a new audience.

Expand your user base by bringing your app to the Windows Store.

See how 

Explore opportunities:

I build .NET apps

I build Android apps

I build web apps

I build iOS apps

I build Windows apps

I design apps

Developer resources:

MSDN Subscriptions

Get Visual Studio

Developer centers

Library



Forums

Code samples

Ones to watch

[View more](#)

Buzz

 Microsoft Developer 
@msdev

1h

Perspectives

Download Windows 8.1 RTM Visual Studio 2013 RC and Windows Server 2012 R2 RTM

What is Bootstrap

- **Open Source Framework for Building Web Sites**
 - A bit of CSS
 - A bit of JavaScript
 - Modular
 - Covers the 80% of the Metaphors

The Mobile Web

- **Devices and PCs are equally important now**
 - Your website is just as likely to be viewed on a tablet or phone as on a PC
 - This used to mean building a 'mobile' version
 - No longer viable...
 - ...Your site needs to respond to the device it's viewed on

Responsive Web Design

- **What is it?**
 - Adapting Site to Mobile Devices
 - Approach usually has been to gracefully degrade
 - For Example...

Iron Man

Iron Man

Search

Clear

Found: 15

Iron Man (2008)



redbox instant
by verizon

epix

iTunes

amazon

Iron Man: Ris...

Iron Man: Ris...

David Knight ...

Marvel Actio...

The Invincibl...

Iron M

Found: 15

Iron Man (2008)



redbox instant
by verizon

epix

iTunes

amazon

xbox video

Iron Man: Anime S

IRONMAN



ear

ervices

Series...



S

fTech...



Responsive Web Design

Main CSS (Common Design)

960+ (Standard Browsers)

0-959 (Tablet Landscape)

0-767 (Mobile Sizes)

0-479 (Mobile Portrait)

480-767 (Mobile Landscape)

768-959 (Tablet Portrait and up)

Responsive Design

■ Media Queries

- Works because of cascading rules
- Later rules over-rule (pun!) earlier rules
- More specific rules overrule earlier rules

```
// your.css
#main { width: 989px; }

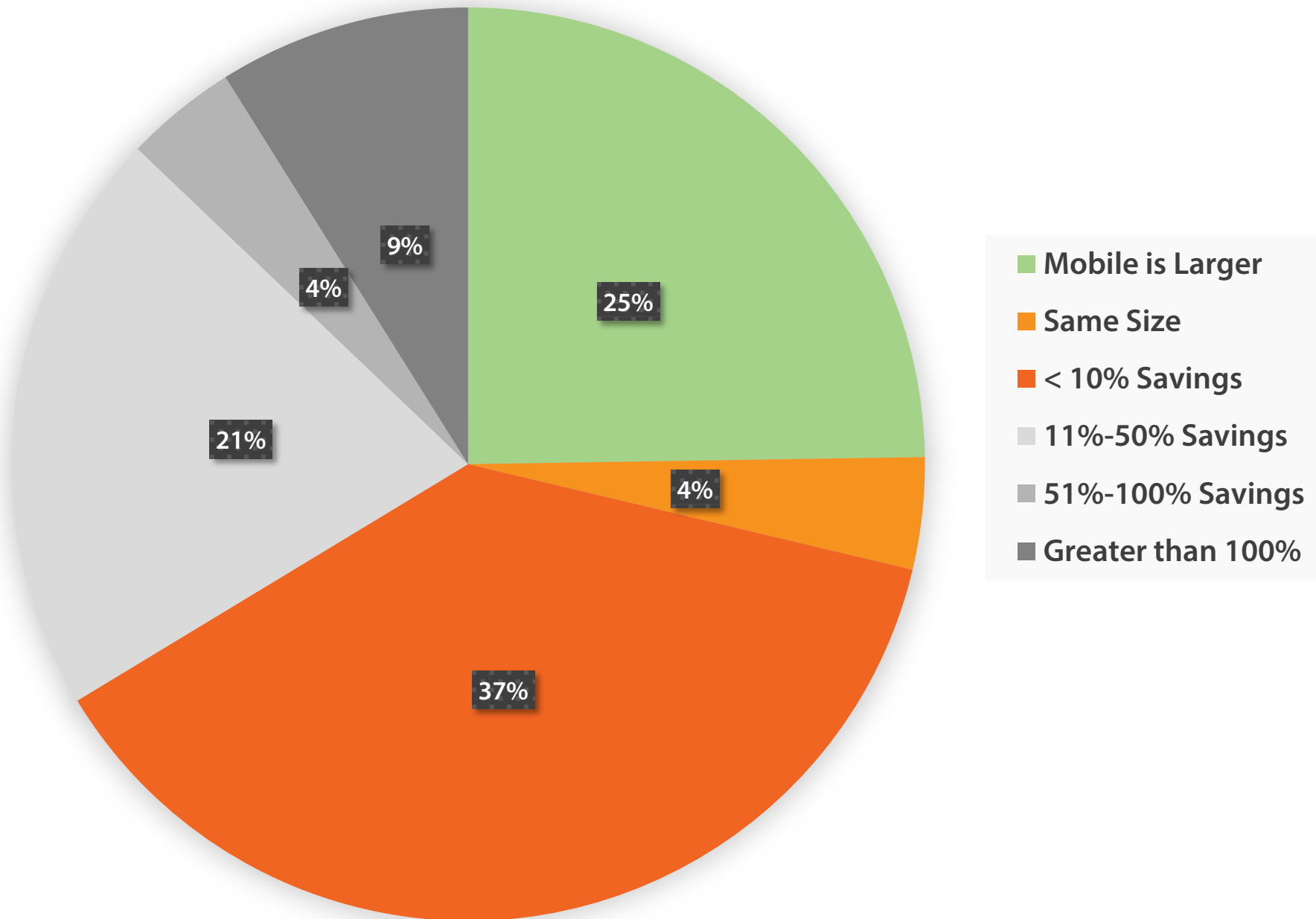
@media only screen and (min-width: 768px) and (max-width: 959px) {
  #main { width: 760px; }
}

@media only screen and (max-width: 767px) {
  #main { width: 470px; }
}
```

Responsive Web Design

- **Problems...**
 - Subtractive solution means too many resources
 - All JS code is running
 - On Platform that is least suited to handle it
 - Images are loaded but hidden

Comparison of Mobile and Desktop Views

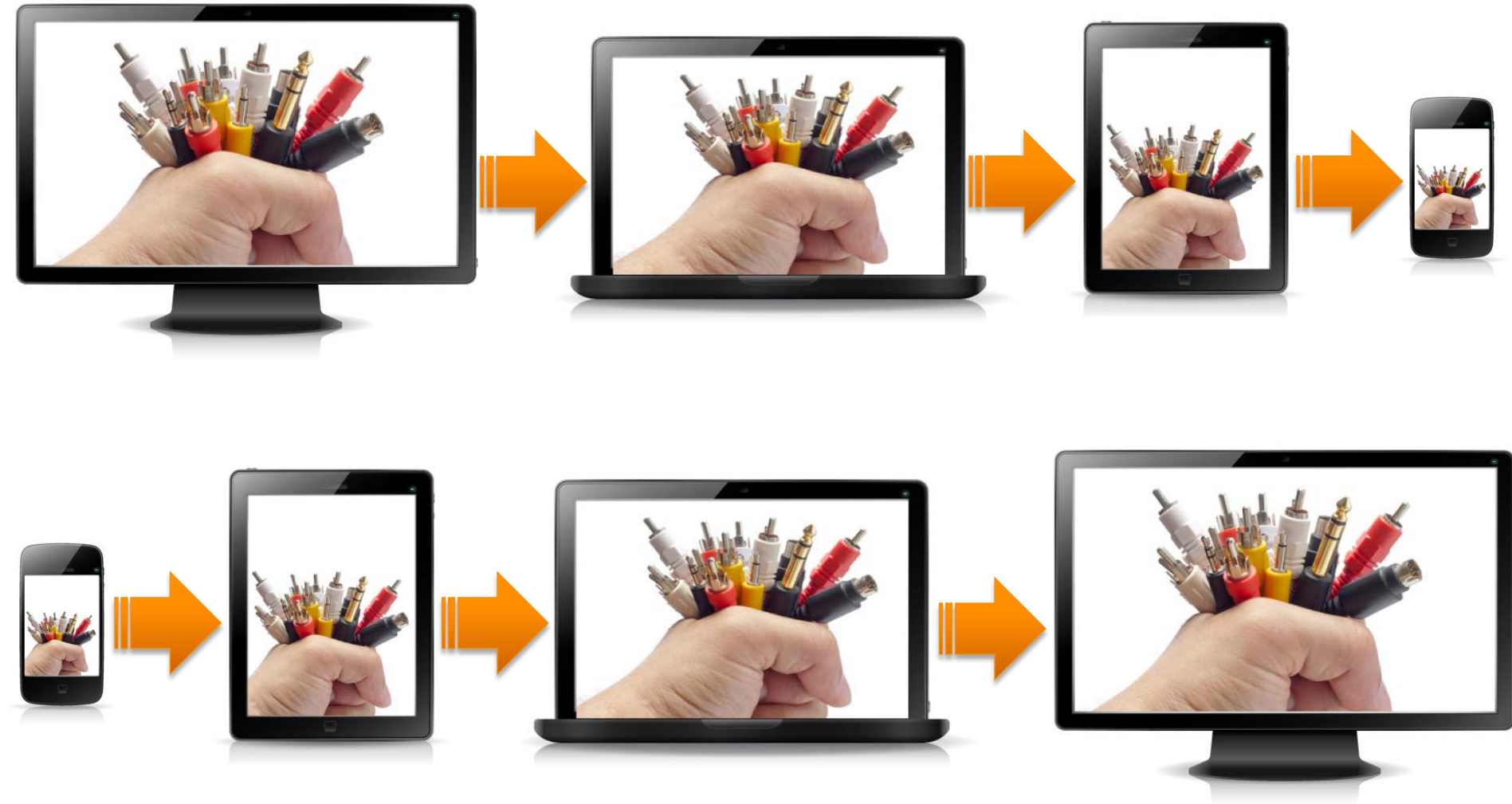


Mobile First Responsive Design

- **Philosophy created by Luke Wroblewski***
 - Focuses on Progressive Enhancement
 - Where RWD is typically Graceful Degradation
 - Scales Up...not down

* <http://www.lukew.com>

Progressive Enhancement



Mobile First Responsive Web Design

Main CSS (Common Design) (0-480)

> 480px

> 768px

> 992px

> 1200px

Bootstrap 3 and Mobile First Responsive Design

- **Bootstrap < 3**

- Supported optional Responsive Web Design
- Great help to a many sites
- But wasn't mobile first

- **Bootstrap 3**

- Major changes from prior versions
- Change to support Mobile First but...
 - ...breaks existing clients

The Bootstrapping of the Web

- **Bootstrap is very popular...**
 - But it also means that it is easy to look like a cookie cutter
 - Use Bootstrap as the basis but not the look of your site
 - Once you use bootstrap you'll start to see it everywhere
 - Avoid the temptation...

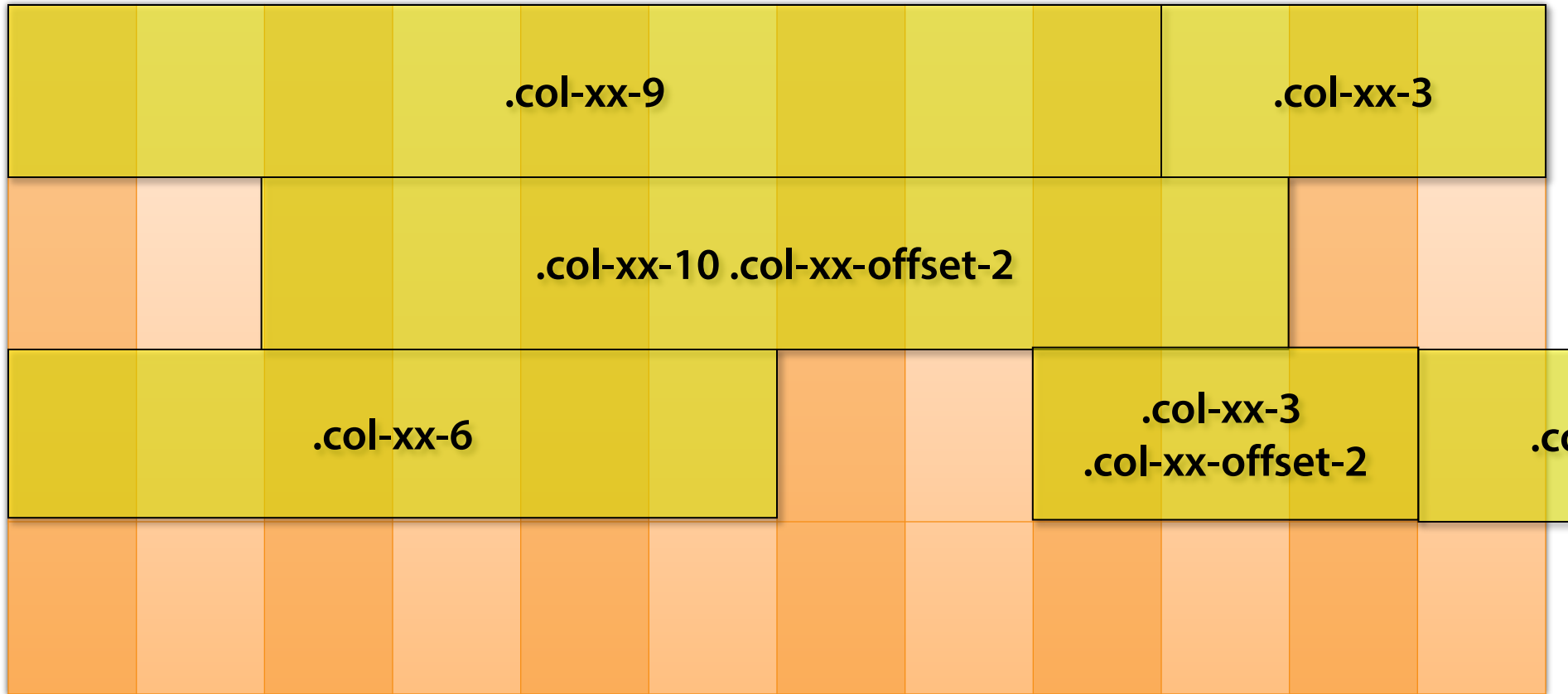
■ **Why Bootstrap 3**

- Websites often require common metaphors
- Using a framework to implement these metaphors is a good decision
- Bootstrap 3 is a great framework for building these metaphors
- But if you don't customize the CSS from Bootstrap, we might laugh at you

Agenda

- **Getting Started with Bootstrap**
 - Getting Bootstrap
 - Adding Bootstrap to a Page
 - What is the Grid System
 - Using the Grid System
 - Offsets and Rows
 - Images and Responsive Helpers
 - Theming Bootstrap
 - Customizing Your Bootstrap Package

The Bootstrap Grid System



Multiple Grids

- Grids have a type for screen size:
 - **.col-lg-xx:** $\geq 1200\text{px}$
 - **.col-md-xx:** $\geq 992\text{px}$
 - **.col-sm-xx:** $\geq 768\text{px}$
 - **.col-xs-xx:** $< 768\text{px}$

Multiple Grids

	<code>.col-md-6</code>	<code>.col-xs-12</code>	

<code>.col-lg-3</code>	<code>.col-md-6</code>	<code>.col-sm-4</code>	<code>.col-xs-3</code>

Summary

- **Getting Started with Bootstrap 3**
 - Adding Bootstrap to your project is simple
 - Getting your head around the grid system is crucial to making it all work
 - Bootstrap 3's support for multiple grid sizes is powerful...
 - ...but can be confusing
 - Customizing the Bootstrap theme is as simple as writing CSS

Agenda

- **Bootstrap 3 Basics**

- Typography
- Buttons
- Icons
- Navs and Navbars
- Lists
- Tables
- Forms

Summary

■ Bootstrap 3 Basics

- Out of the box experience with Bootstrap 3 is nice...
- ...but by embracing the class attributes, you can make it look exceptional
- First-class support for navigation, forms, lists and tables can be really helpful
- But don't be afraid to make it your own
- Bootstrap 3 is a box of goodies, you don't have to over indulge

Agenda

- **Components**

- Page Header and Breadcrumbs
- Button Groups
- Dropdowns
- Button Dropdowns
- Input Groups
- Pagination
- Thumbnails
- Panels
- Wells

Summary

- **Components**

- Building websites required knowledge of these common metaphors
- Bootstrap Components provide those metaphors
- The Components build on each other
- But still don't be afraid to customize the look and feel of the components

■ **Plugins**

- Collapse
- Accordion
- Modal
- Tab
- Tooltip
- Alert
- Carousel

■ Plugins

- Interactive elements can be powerful
- Bootstrap 3 Plugs into jQuery for most of these cases
- You can get far by utilizing a minimum of JavaScript and data-* attributes
- But dropping down into code can help you in specific use-cases

- **Migrating to Bootstrap 3**

- Overview of the Changes

- Migrate my Blog

- Moving to Bootstrap 3

- Migrating the Grid

- Migrating the NavBar

- Migrating the Blog Entry

- Migrating the SideBar

- Migrating Custom CSS

■ Overview of Changes

- Mobile First Responsive Web Design
- Responsive by Default
- Fewer classes
- Fluid is gone!
- Less collision with your own CSS

Mobile First Responsive Web Design

- **Since Bootstrap 3 is Mobile First, So Should Your CSS**
 - This is especially true if you're working from a template
 - Migrating from max-width to min-width:

```
@media (min-width: 480px) {  
  .portfolio-responsive h2 {  
    display: block;  
  }  
  .portfolio-responsive a.info {  
    margin-top: 20px !important;  
  }  
}
```

Responsive By Default

- **No longer need `bootstrap-responsive.min.css`**
 - This is true for your own extensions or bootstrap templates
 - Expect that your site will need to deal with different page widths
 - You can disable responsiveness with some specialized CSS

Class Renaming

- **Version 3 simplifies some of the naming**
 - All fluid classes are gone
 - Some classes are 'namespaced'
 - E.g. list-unstyled vs. unstyled
 - Sizes are standardized to lg, md, sm, xs
 - Naming Changes are Well Documented

Name Changes

Bootstrap 2.x	Bootstrap 3.0
.container-fluid	.container
.row-fluid	.row
.span*	.col-md-*
.offset*	.col-md-offset-*
.brand	.navbar-brand
.nav-collapse	.navbar-collapse
.nav-toggle	.navbar-toggle
.btn-navbar	.navbar-btn
.hero-unit	.jumbotron
.icon-*	.glyphicon .glyphicon-*
.btn	.btn .btn-default
.btn-mini	.btn-xs
.btn-small	.btn-sm
.btn-large	.btn-lg
.alert-error	.alert-danger
.visible-phone	.visible-xs
.visible-tablet	.visible-sm
.visible-desktop	.visible-md
.hidden-phone	.hidden-xs
.hidden-tablet	.hidden-sm
.hidden-desktop	.hidden-md

Bootstrap 2.x	Bootstrap 3.0
.input-small	.input-sm
.input-large	.input-lg
.control-group	.form-group
.checkbox.inline	.checkbox-inline
.radio.inline	.radio-inline
.input-prepend	.input-group
.input-append	
.add-on	.input-group-addon
.img-polaroid	.img-thumbnail
ul.unstyled	.list-unstyled
ul.inline	.list-inline
.muted	.text-muted
.text-error	.text-danger
.table .error	.table .danger
.bar	.progress-bar
.bar-*	.progress-bar-*
.accordion	.panel-group
.accordion-group	.panel .panel-default
.accordion-heading	.panel-heading
.accordion-body	.panel-collapse
.accordion-inner	.panel-body
.alert-error	.alert-danger

No Equivalency

- Some of the classes in v2.x simply don't exist:
 - Form Actions (**.form-actions**)
 - Form Search (**.form-search**)
 - Controls Wrapper (**.controls**)
 - Navbar Inner (**.navbar-inner**)
 - Navbar Dividers (**.divider-vertical**)
 - Submenu (**.dropdown-submenu**)
 - Tab Alignments (**.tabs-left, .tabs-right, .tabs-center**)
 - Nav Lists (**.nav-list**)

Summary

- **Migrating to Bootstrap 3**

- Version 3 is a big change, so migration isn't trivial
- Moving to Mobile-First is largest of the migration challenges
- Class renaming is simple though can be tedious
- Dealing with missing features from Bootstrap v2.x shouldn't be too difficult