Understanding the Changes

Understanding the mobile-first approach

One of the biggest announcements for Bootstrap 3 isn’t a new feature but a new approach to building websites called Mobile First.

Mobile First is an approach coined by Luke Wroblewski and it means thinking of how websites should be designed for a mobile device first, before beginning to code it to work for a desktop. Doing this causes you to focus on the critical information users are looking for on your site and suggests that your design focus on that information first. So how does Bootstrap 3 do this?

In the old version of Bootstrap, to activate the responsive features, you had to add a different CSS document. In the new version of Bootstrap, there is a single CSS file that is responsive by default.

There's a single fluid-grid system which uses percentages over pixels and is mobile first. That means that it starts out stacked and scales up instead of starting with a 940-pixel width and scaling up and down, as before.

Responsiveness has also been added to modals, which are the pop-up dialogue boxes. The height class is no longer necessary on modals, they also show up larger on bigger displays than the current version. Form input fields also default to 100% width, which means your forms automatically look great on mobile devices.

With the mobile focus, Bootstrap also gains a few additions, including two new components: Panels and List Groups. Panels allow you to encapsulate an element within a box and easily add a heading. List Groups are for creating mobile-like lists with chevrons, badges, and other mobile-like sections.

With these new additions and changes, Bootstrap 3 changes its focus from a desktop-centric to a mobile-first approach, and although there aren't a lot of new components, List Groups and Panels do add some much-needed mobile features.

Getting and installing Bootstrap 3

As before, the quickest way to get Bootstrap is by going to the getbootstrap.com website and clicking on this download Bootstrap link.

You can also go to the GitHub project by clicking on this link, and if you go to Getting Started, you can see a few more options. If you're into package managers, you can install Bootstrap with a single command using Bower. Now, you can also simply call the files from NetDNA's CDN, or content delivery network.

This should let you use Bootstrap without having to install or download any files into your local directories. The theory behind CDN's is that browsers cache CDN files so that if a user comes from a site that uses these links they won't have to be reloaded for your site. CDN files do not work without a net connection so they don't make for the best development environments.

Now the directory structures are pretty similar to what you got with Bootstrap 2 except that, of course, there are no responsive files since everything is responsive in Bootstrap 3. Plus, there are no PNG files for icons. All icons are now drawn from font files, and so, instead of an Image folder, you have a Fonts folder. The fonts will draw perfectly regardless of the device, so this makes your icons display perfectly on retina and high-resolution displays. Now if you look at the default template for Bootstrap, it's much simpler in Bootstrap 3.

You pretty much add a viewport tag to your document, and you still have to add jQuery, which you can get from this website. Now optionally, if you want to responsive features to IE8, you can call a respond.js file which you'll need to get from this website.

So there's a few additional options for getting and installing Bootstrap. A lot of advanced developers enjoy using a workflow tool like Bower to install frameworks, so it's nice to see that it's documented in this version.

I also like the option of adding a CDN. Sometimes it's the quickest way to start a project without having to download or install anything on your local machine.

Using the new grid system

In the old Bootstrap website, the grid used to be in a separate section called Scaffolding. In the new version, this lists in the CSS section. The grid is, overall, a lot simpler. The new grid is responsive, mobile first, and percent-based. What that means, practically, is that instead of assuming a 940 pixel grid, as before, the CSS starts by assuming a mobile layout and then scales everything up. This is not going to look any different in practice, it's just that the approach in the CSS is now completely backwards. Functionally, what you'll notice is that columns now use a different class. So, where as before, you used to use a div with a class of row, or if you were using it fluid grid, you would use a div with a class of row fluid, now all columns are fluid.

So you simply use a class of row for everything. The amount of columns remains the same, but whereas before you used to specify a class as span and then a number, like four or eight, and those columns added to 12. In the new version, those classes have been renamed, and so you have to add a class of col, and then a class of col-lg and then the number. This means that if you upgrade to the new Bootstrap, all of your layouts and columns will break, so be careful and don't just upgrade to the new version without testing things out. Offsetting is the same as before, but you use the new class called col-offset. Nesting, which means putting columns inside other columns, looks pretty similar at first. In the old version of Bootstrap there used to be two ways of nesting, a fluid way and a static way. The difference was in fluid nesting, the columns inside other columns always added to 12. With static columns, they always added to number of the container. Since everything is fluid now, the columns in other columns always add to the number 12. So that's also important to remember when you're migrating your layouts.

There's a couple of other features that you might find interesting as well. There's a way of reordering columns by using a col-push class, you can see it in this section. It sounds a bit confusing but it allows you to reorder the way columns work in a layout. It might be useful to be able to reorder columns triggered by some Javascript commands. Also there is a small column grid with tighter spacing for iPhones and tablet devices. Now, if you're coming from Bootstrap 2, this new grid system is a bit of an adjustment and it's probably the first thing you'll notice when you migrate a layout. Everything will immediately break. But frankly, it does tend to simply things, and because it gets rid of the non-responsive layout, it will be quicker to pick up. I like and dislike the new col-lg classes, but using the span for a column name in the old Bootstrap always seemed a little bit weird to me, so that's a welcome change.

Working with Bootstrap typography

There's just a few minor changes to typography in the new Bootstrap. The most noticeable is the use of a lighter version of Helvetica for the headings. So here it is on the new version and here it is on the old version. You can see that it really lightens up the page to use a medium or semi bold weight for all the headings. The other minor things that you might notice is a few of the LESS variables have changed.

So, for example, things like @baseFontSize have been renamed to font-size-base. And you'll find that a lot of things in Bootstrap have been prefixed to organize them a little better. Another example that you may notice is, in the emphasis section, the emphasis classes have changed a little bit. Notice that the muted class is now called text muted, and we've also lost the text info class. Also, the text error class has been changed to text danger. That's a change that also happens in other places, so sometimes you'll see things that were called error being called danger. It's not a major thing, but it's definitely something that you need to watch out If you upgrade to a new version. So, although there's just very few changes in this typography section, I really like that the whole Bootstrap layout now uses a lighter version of the headings. It really makes everything a lot cleaner and that small change makes a big difference in readability.

Updating your forms

The big thing about forms is that all form controls, including input, text area, and select element, are set to 100 width by default. So you can see the difference right here. You'll see that this field takes up the whole width of the container, whereas in the old version of Bootstrap, it would just default to a certain width. That's certainly more mobile friendly, so that's a great upgrade. Something you'll have to watch out for is that because all widths default to 100%, to use inline forms, you'll have to set the width of the form controls manually. One of the cool features of Bootstrap is the ability to create horizontal forms. Where the labels and fields are side by side.

In the new Bootstrap, this is treated like any other layout, so you create a form with a class of form-horizontal, and then you use the col, col-lg, and then a number, just like this right here. Now this is different than the old version of Bootstrap, where you used to create a series of control groups. This makes a lot more sense now but it's definitely different than before so it means that you should check the forms on your old Bootstrap website if you're upgrading. One thing that you'll notice throughout the Bootstrap upgrade is a series of warnings like this one right here. This one tells you, for example, that inputs will only be fully styled if they're type attribute is properly declared. Now that used to be true of the old version of Bootstrap, but there was no warning, so you sort of found out about these kind of problems by trial and error, so it's nice to see them available by default on the documentation. Something else that changes is checkboxes and radio buttons. In the old version of Bootstrap, you used to define checkboxes by adding a check box class to your labels and wrapping your input fields. It's a bit different in the new version, you still wrap your input fields but you also wrap another separate div with the check box class. Inlining forms is also a bit different. Instead of two classes for checkbox and inline, you use a separate checkbox inline and checkbox radio class. You can now disable not just an individual control, but also an entire field set. You have to be careful because this won't work in IE or Safari. The rest of the form changes in this section are pretty much the same things applied to other elements. Classes have been simplified and hyphenated, layouts are done with columns, and classes have been renamed. If you've been using a lot of the functionality in forms, you'll be doing a lot of updating when you upgrade.

Using buttons, images, and icons

Some parts of the new Bootstrap have less updates than others, so I combined a few of the ones that don't have a ton of upgrades into this group.

The first one is Buttons. With Buttons, the main change is the redesign into a flatter look, so this is one of the first things you'll notice about the new Bootstrap. All gradients are absent from the redesign. Also the Inverse button is now gone, and surprisingly, unlike on most of Bootstrap, the classes for Buttons aren't changed at all. So this is one thing you won't have to worry about when upgrading your website.

Most of the image classes remain the same except for the img-polaroid class. That now changes to the img-thumbnail class. I'm not really sure about that change, not that polaroid was a good name, it's just that thumbnail has some semantic connotations. Another big change in the new Bootstrap is that icons are no longer rendered via a PNG sprite. They are now icon fonts, which is really awesome because they can be resized and will display perfectly even if the resolution of screens increase in the future. That also gives you the ability to color and even stack icons. Before you could only use a black or a white version of the icons, so that's a huge improvement. Bootstrap uses icons from the Glyphicons halflings set, and that gives you about 20 more icons than the old Bootstrap.

One thing you have to watch out for is that the icon names start with the Glyphicon prefix instead of the icon prefix, like before. So if you're using icons on an existing Bootstrap website, you'll have to update the names. Also in the old version of Bootstrap you use the i tag for icons and in the new version you use the span tag with two classes, the Glyphicon class and then the Glyphicon with a hyphen and then the icon name. So although there's not a lot of changes in icons, images, and buttons, some of them are really important and you need to watch out for them especially if you're upgrading.

Learning responsive class updates

One of the cool features of the old Bootstrap was the ability to mark content so that it only appeared in certain devices. That remains in the new version, but the class names have changed. And that's really important because you'll have to modify all your classes if you upgrade. So instead of using classes like visible phone, visible tablet, visible desktop, hidden phone, etc., you're now using classes called visible-sm for small, visible-md for medium, and visible-lg for large. Bootstrap 3 also adds classes for print design, and that's really cool, because it will let you decide whether certain elements in your layout will show up only when printed. So, although this is not a huge change, it's super-important and deserves separate mention, because it's something that you'll have to replace or adapt to in your older layouts.

Understanding component changes

The ability to use prebuilt components is one of the cool things about the Bootstrap library. In the new version of Bootstrap, components, surprisingly enough, stay pretty similar but there are a few important changes you have to watch out for, especially when you're upgrading an old site. So, for example, drop downs which are super popular, are pretty much unchanged but you have to watch out for certain things. So for example, if you add a drop down to a button, you just have to remember that the buttons take two classes instead of just one. So you have to add a class of BTN and then something like BTN default or one of the other button types. The navbar code is a little bit different, so if you take a look at the old navbar code, you'll see that it's just a simple unordered list with a class of nav. Li class active so if you look at the new code you'll see that it's slightly different. We're using a class of navbar to wrap around the entire thing, and then we have a link right here with the brand which now is called navbar brand. And then we have the on order list like before. Again, you have to watch out for these very tiny class changes throughout the whole library. Now, another thing that's changed is what we used to call the hero unit which is now in the typography section. The hero unit is now called jumbotron. So other than that, it stays pretty much the same. Again, if you use any buttons, you have to watch out for the new button classes. Also if you go to Thumbnails they pretty much use the same mark up as regular columns, so we're using the same style as columns called col and then the name of the column with an lg and then a number, so that's a little bit different than before. Now there's another small change in the Progress bars. I really didn't use that feature very much before. The inside class is now called, of course, progress bar, instead of just bar. And also, the classes for inside color changes also get the progress prefix. There's a lot of very small adjustments to the components in the new version of Bootstrap. So you'll notice there's only a few things that may not work, and you have to watch out for those changes when you're upgrading your Bootstrap.

Reviewing JavaScript changes

Bootstrap uses a lot of JavaScript dependent components, and just like with regular components, there's not a lot of changes, especially in the JavaScript part. On occasion, you do see a few adjustments, but it's really just to the HTML. Classes will sometimes change names, elements might get a little bit more encapsulated, but overall the coding stays pretty similar.

So let's take a look at a couple of examples so you can see the way things have changed. One of the most common used features in Bootstrap is the modal and that has changed just a little bit, so if you look at the code now and you look at the code from before, it's a little more wordy now. Before you would just create a div with a class of modal, and inside that you would create a div with a class of modal header, modal body, and modal footer. Now, if you look at the code now, you can see that it's grown a little bit. You still have the div with the class of modal, and you still have the header, the body and the footer. But they've added a couple of new wrappers, one called modal content and another one called modal dialogue.

Another place where I notice big changes is the Button's checkbox and the Button's radio section. So, if we go to this Button part right here, scroll down to the checkbox and radio section, you'll notice some big changes. So if you look at the code for the previous version of Bootstrap, you'll notice that, for these, Bootstrap was using the Button tag. In the new version, they're treated more like forms and they use the input fields type checkbox and radio. Now one JavaScript element that changes a lot in the new version is the carousel, which is also one of the most popular features of Bootstrap. Now it doesn't change programmatically or even in the HTML implementation. The look and feel has certainly been updated. In the old version of Bootstrap, the indicators were to the top right of the carousel and the buttons were made from PNGs. In the new version of Bootstrap, the buttons are using icon fonts and the indicators are down and to the center of the carousel. There's also a slight shadow behind the arrows. There's also an additional class you can use to create items within the carousel. These are now under this Optional Caption section. And you can use the carousel caption element with any item. Carousels are also hidden by default and will only show up on viewports that are 768 pixels wide or bigger. Luckily, not a lot of stuff is going to break when you import your old site to the new Bootstrap when it comes to JavaScript. You should watch out for a couple of changes to the way things are coded. I really like the new carousels, and I'm glad they've implemented Glyphicon fonts everywhere.

2. Reviewing New Features

Working with panels

The new version of Bootstrap doesn't really have a ton of new features. It's more of a realignment towards flat and mobile first design. But there's a couple of new additions to components worth looking at.

The first is panels. Panels are sort of similar to the old wells. But don't worry; if you've used wells before, the coding for those stays exactlythe same. This is just an addition. To create a panel, you simply create a div with a class of panel. And let me show you how that works. So we've got, a basic HTML page. It just calls the bootstrap.css, as well as the bootstrap.js, files, and I'm going to add myself a panel here, so I'll create a div, with a class of panel, and then I can just put some content in there. So I'm going to save this and you can see that it's coming in in here however my body tag right now doesn't have any padding because the bootstrap that CSS file is going to clear that, so I'm just going to add some in there so you can see it. So style Is going to be padding and then 10 pixels. And now you can see the panel in all it's glory, it's really just taken some content and putting it in a rounded edge box. It sort of has a mobile device feel to it.

Now you can also add headers and footers, so to do that, you create another div with

a class of panel heading, and in here you can put a, some headings, I'll put in

heading, save it, and there, you can see that it looks sort of like what you would

see on a mobile device, and of course, the footer is going to be pretty similar, but

it's going to be called panel-footer, and I'll put in just the word footer here for now.

Capitalize that, save it. You can see that it looks a little bit different.

But there's really not a lot of difficult code.

You can use an H1 class here, if you want to, and you can also color the different

panels by adding another class here. So you can say panel - primary and that

will coat the panel blue. And there's other classes you can use, as well.

So you can look those up in the manual, they're right here.

You have things like panel primary, panel success, panel warning, danger and info.

Panels work pretty well with list groups. They're sort of meant to go together.

Well take a look at those in the next video.

Using list groups

Those groups are a new type of component that lets you create mobile-like lists

with a lot of different options. You see the markup is pretty simple.

You can create a list by using an unordered list, the class of list-group,

and then a list item with list-group-item classes.

And you can add chevrons pretty easily, as well as badges, to the right, and also

make these into clickable components by making them into anchor tags.

So let's take a look how that works. So starting off with the file from the

movie Working With Panels. And the first thing we're going to do is

just create a list, so we'll go ahead and remove this content right here and I'm

going to give plenty of spacing. And I'll create a list, list will have a

class of list group. And we're, we'll go ahead and add some

list items and the list items will have a class of list-group-item.

Go in and make about five of those. Alright, so inside each one of these I'm

going to type in just some text. So I'll just do first and so on and so forth.

And I'll save that, and I'll refresh this page.

Looks like I missed a hyphen here, so let me go ahead and fix that.

I'll just add a hyphen, and refresh the page, and it should look like this.

It just looks like a series of mobile device list elements.

That's pretty cool. Notice that there's a little bit of

padding around the list, and if you want that that's cool.

You can also add another class that is unordered list to make those flush, so

I'll add a list-group-flush class there. And you can see that everything kind of

goes up to the edge. So either way, whichever way you want to

style them, that's great. Now let's go ahead and add some chevrons

and then maybe some badges. They're pretty easy to do and it actually

doesn't matter where you put them, so If I can do a span, with a class of glyphicon,

and then I add another class of glyphicon, and then chevron-right, and I save that.

I get a chevron right here to the right hand side, which is pretty cool.

I can also add a badge pretty easily, I'll just create a span with a class of badge,

and then I can put a number in here, so I'll put the number ten and save that, and refresh.

You can see the badge appears. Notice that the order does matter a little bit.

I want to do the chevrons first and then the badge next, but it doesn't matter that

I have the content before or after. It's just placing these where they need to

go on the right-hand side. So that's actually pretty cool.

Now if I want to get more complicated with my content, I can also define some sort of heading.

So I'll do an h4 with a class of list-group-item-heading, and let me put

this content here inside. So I'll paste that, and then I'm just

going to put some text here. So I'll put some long text and I'll save

this and you can see that it aligned pretty well.

I really do want to put in another class inside my text called

list-group-item-text, and I know this is getting a little bit wordy but it really

pays off to use these classes. It knows how to align things properly if

you use them. So you can also make these into clickable

elements by adding some anchor tags. And as a matter of fact, what I'm going to

do is, I'll take the on order list here and change it to a div, and I'm going to

take my list items and change them to anchor tags.

So I'm going to select this one, and I'm using sublime text here so you can do

Cmd+D, Cmd+D, Cmd+D to get all the other ones.

And then hit the right arrow and make a selection, and I'll change that to an

anchor tag right here. Now because this is an anchor tag, I need

to do an href, of, I'll just do #, because we don't really need to, link them to

anywhere, we just need to show how they work.

And then I need to find all the closing list items.

This one's right here; select that one, Cmd+D a few times and then hit the right arrow.

I have multiple cursors, and I can close all my anchor tags at the same time.

Save, and refresh, and now, you can see that these actually highlight.

It's showing me the little hand icon, and these are actually clickable, and it made

sure that it styled everything correctly when I did that, which is pretty awesome.

You can also add a class of active to any element that you want to highlight as

being an active link, and that's pretty cool.

These additions to Bootstrap are very mobile-focused, but they give you a lot of

power without having to do a lot of CSS. So I really like this addition to the

Bootstrap framework.

3. Migrating a Bootstrap Site

Comparing Bootstrap 2.3 with 3.0

If you're like me, when I see a new version of a framework I love, my first

instinct is to upgrade my site by installing the new version of that library.

With Bootstrap, that's extremely dangerous because so many things have changed in the code.

This chapter, I'm going to review some of the issues you'll run into.

When upgrading from Bootstrap two to Bootstrap three.

In this movie, we'll just take a look at a Bootstrap 2.0 website, and then take look

at the migrated Bootstrap 3.0 version. So let's take a look at what's on this page.

This is a Bootstrap 2.0 website. You can sort of tell a little bit by the

fact that it's got the nice menus right here.

We've got a drop down menu here. And we've got the carousel that works

really well. And if we scroll down, we can see also

there's a moto, if I click on one of these images, it darkens the background and it

shows you this image. I can click to click that off.

And we have, also, a collapse or an accordion menu right here.

You can see that the buttons also have that gradient that Bootstrap two gives you.

You can tell that some of these elements have icons, and those will actually change

a little bit when we go to Bootstrap three.

So, let's go ahead and switch this to the Bootstrap three version.

So I'm managing this website using something called Git.

So what I can do in Git is just do a check out of a different branch, so I'm going to

check out the Boostrap 3 branch. And there it goes and what it actually

did, and it's that quick. It actually modify all the files on this

website to be at a different place or almost like a different place in time, so

if I refresh this site, you can see that this is the new Bootstrap 3.0 version.

Looks super similar, there's a few things that I visually changed here.

But you can see that the menus are much flatter, they still work with the drop

downs and the carousel looks a little bit different.

You can see the new font icons it uses instead of the arrows it used to have.

You can see the darkening of these buttons when you roll over them.

And if you scroll down, you can see that the buttons are a lot flatter.

The motiles look exactly the same, but if I click on these, you'll see that they're

actually a lot bigger than before, which is one of the things I like about this Bootstrap.

And everything else is pretty much the same.

The buttons here are flatter, and you can't really tell, but instead of an icon

right here, that's a PNG, it's actually using a font to display these icons.

So that's pretty cool. Everything else looks pretty much the

same, and that's kind of the difference between how the sites look between

versions two and three. There's a lot of things that are going on

in the code right here that I have to modify, to make them look pretty similar.

But overall, you're just going to notice visually, that the design is flatter, and

some things change in functionality. Now, if you want to learn more about how

to manage your sites with Git, make sure you check out Git Essential Training.

Git is a really cool technology that lets you create different branches of things,

and it might be really useful on something like this, because you may be able to just

create a branch for how your website currently looks.

And then start another branch, that's your Bootstrap three transition, and then work

on that without screwing up your original websites.

If you're interested in learning how I put this website together using Git, Hiroku,

and the new version of Bootstrap, watch for an upcoming course on Lynda.com.

Which you'll be able to find in my author section of the website.

As I mentioned before, you can see that visually not a lot has changed.

But if you looked at the chapter on understanding changes in Bootstrap, you'll

know that there's a lot of stuff that's different under the hood.

We'll start a migration of this site in our next movie.

Migrating to the new version

So, now it's time to install the new version of Bootstrap.

If you're following along with my previous movie, you'll know that this is the

Bootstrap 3.0 version of my website, and that I'm managing everything with Git.

So, the first thing I need to do is switch to the right branch.

So, I'm going to do a Git checkout, and check out my Bootstrap 2 branch and switch

back over here and refresh. And this is the Bootstrap 2 version of the website.

So the next thing we need to do is actually create a new branch.

So, this is the way that I manage my projects and it's definitely something you

may want to look into. I'm using a virtual control system called

Git, and if you want to learn how to use that, we've got a great course called Git

Essential Training with Kevin Skoglund, be sure you check that out.

So, what I want to do here is actually go through and create a separate branch and

I'm going to call this branch bt2migration.

So what I want to do now is check out this version of the website, so that any

changes that I made will be made under this new branch.

And I'll leave my Bootstrap 2 branch alone just in case I want to revert back to the

original version of that branch. So I'll do git checkout, and then do

bt2migration, and that should check me out to the new branch.

If I do git branch, I can see all the branches of my project and I've got a

bootstrap2 branch, a bootstrap3, and a bt2migration branch which is where I'm on.

Next thing I will do is, go to the Bootstrap website and click on this

Download Bootstrap link. Now, you can install Bootstrap in a number

of different ways. If you go to Getting started, it's going

to show all the different ways you can download Bootstrap maybe using the

original less files or using CDNs now with the new version of Bootstrap, but the

easiest way to download is just to go to the top of the site and then click on

Download Bootstrap. Now, what that will do is it'll give you a

folder with three different folders inside it.

Now, this is a little bit different than before.

It's going to give you a css folder, a js folder, as well as a fonts folder.

Before, we used to have an img folder. So what I need to do is copy the fonts

folder to the same place that my css and js folder are.

Now, before, we used to have this img. You can get rid of it if you want to.

I'm going to leave it there. It's not really hurting anything.

For production, I might go ahead and delete it before I publish everything.

So I'm going to grab this fonts folder and put it right here.

Then I'm going to open up the js and css files.

I usually use the minified versions of these files, so I'll delete the regular

versions and rename these bootstrap.css and bootstrap.js.

And then I'm going to copy them into the folders with the current versions of those files.

That means that I'm going to replace the JavaScript and the CSS from Bootstrap, so

this is going to modify the way my site looks.

Let's go ahead and do that. I'll drag this in here, and yes, I do

want to replace. And then I will drag this one right here

into the js folder, and yes, I do want to replace.

And awesome. We are done with that part, so let me go

ahead and switch back to my website, and I'll refresh, and we'll see what happens.

And, at this point, you're probably thinking either, Dear Lord, what have I done?

My website is all screwed up. My columns are gone.

Everything is gone. Or the other reaction you may have is,

well, since I watched the rest of the movies in this course, I knew that some of

this was coming. So this isn't that bad.

It, the site looks pretty good, carousel looks a little different, the arrows don't

quite look well, but they actually work. Like, if you click on these, you can see

that the carousel itself is still working just fine.

Let's check on the motiles, I'll click on one of these.

sort of working, so we definitely have some work to do there.

I'm going to refresh the page, and if you click on these collapse menus, the

accordions, they seem to be working just fine.

So, that's actually pretty cool. I'll click on this full schedule thing,

and these are mostly working. So, a lot of the JavaScript you'll find is

going to work just fine. The buttons, actually, are working pretty well.

Some of the styles are going to have to be redone, but overall, this isn't too bad.

At least, it wasn't as bad as what I expected would happen when I just upgraded

the library, based on what I had read about the new changes.

So we've got a good starting point, what we need to do now is focus on individual

updates that we have to perform to the HTML to make this transition properly to

the new version of Bootstrap.

Dealing with grid changes

So we've migrated our site from Bootstrap 2 to Bootstrap 3 by installing the new CSS

and the new JavaScript files. And the first thing you probably want to

fix is the basic layout of your pages, and that's actually extremely easy to do.

Before we do that, I'm going to show you how I coded this page because it's

important to understand. If you look at my index.php page, you'll

see that I'm using PHP components here. To make sure that I separate the part of

my content from my layout, and that's going to make it really easy to understand

what's changed. Because if you look at this page, there's

only a few tags that you need to worry about.

So for example, we've got the main content right here and we've got the sidebar

content in this section and each one of these different parts are separated into

different articles or aside items. So what we have in this HTML is

essentially two sections and each of the sections has a band with different numbers.

Now, if we want to update that into the new version of Bootstrap, you know that

what we need to do is change the class from span and whatever number, then add

col and then col-lg-1, which is really all wee need to do to update our layouts.

So, let's go ahead and do that. This is the index page, and I'm going to

change this span8 to col col-lg, and then 8.

And then do the same thing for this other span, and this one's going to be changed,

of course, to a number 4 and that should be it.

So let me go ahead and save this page and go into our website and refresh.

And you'll see that my columns return just fine.

So it's really just that easy, it's going to be a lot of these very simple

types of changes that you need to do in your layout.

And, if you do something like what I've done here, use PHP to separate your

content from your layout, it's going to be really easy for you to find this kind of

issue and resolve it when you upgrade to the new version.

All you have to do is find anywhere were you see a span tag and change it to the

new layouts that appear in Bootstrap 3.

Fixing carousels

Now we're upgrading from Bootstrap 2 to Bootstrap 3, and one of the things that

doesn't look quite right is the Carousel. That's because the new Carousels are coded

slightly differently, so we need to go ahead and fix that.

Let's go into our code and you'll notice that I've placed the Carousel inside a PHP

component called snippet-carousel, and that's in the underscore folder, in the

PHP folder, and it's called snippet-carousel, so all the code for it

is right here. Let me go ahead and hide this sidebar.

Compare this with the new code for carousel.

We'll go to the Bootstrap site, click on JavaScript, and then go down to Carousel.

You'll see that the code is pretty much the same, except, that now we have to use

these different chevrons, instead of the right arrows and left arrows that we used before.

So what I'm going to do is, I'm going to grab this right here, it's this span with

a class of glyphicon and glyphicon-chevron-left, and I'm going to

copy that, and switch over to our code. And all you gotta do is replace this part

right here with the new chevron, and I'll also replace this one.

I'll paste the new code. And this is just going to be the right arrow.

So we'll save this and go back into our page.

And I'm going to refresh, and you'll see that this was working just fine before.

The cool thing was that it wasn't really the functionality of Bootstrap that was

broken, it's just a little bit of the code and you'll find that when going from

Bootstrap 2 to Bootstrap 3 a lot of the changes are going to be this minor.

Another thing that you may watch out for is, if you're using a class of hide SM or

some other class that hides the Carousel at a different size, you don't have to

worry about that now because the carousel will automatically now hide at smaller sizes.

Updating modals

One of the first things I noticed when I updated to this new version of Bootstrap

is that my modals weren't working. So, if I click on one of these, I should

be seeing the picture come up right here. It wasn't working, and it was a little bit

tough to figure out why. So, my first impression was, that this may

have something to do with the JavaScript, so as usual, I right-clicked and went to

Inspect element, and I noticed that there are no console errors here.

So there's nothing on the console, there is no JavaScript errors, so that couldn't

really be the problem. So next, I thought there might be

something wrong with how I structured the html for the modals.

So I went into the documentation for Bootstrap and here's Bootstrap 2.3.

You'll see how you make a modal right here on this code.

Now, if I go to Bootstrap 3, you'll see a similar piece of code, but there is one

very important different. So I don't know if you can see what it is,

but look at 2 and look at 3, and let's go back to 2, and I'll show you where it is.

It's right here. In Bootstrap 2.3, you used to add an

additional class to your modal to make sure that it hides whenever the page loads.

You don't have to do that with the new version of Bootstrap.

There's nothing that really says that in here that you're not supposed to put that

class, but it's just the way that it works.

So that was a superdifficult problem to find.

So now that I know that, all I have to do is go into my code and find a section that

has the modal code, and that is in this header.php section.

So I'm going to open that up. It's in components, php and it's called header.php.

And, if you look at my code for the modal right here, you'll see that it has that

additional hide class, which I don't need for the new version of Bootstrap.

One thing that I do have to mention is that you may notice that we're missing a

lot of the code that normally would go in a modal.

That's because my modal Is driven by JavaScript.

Really, all I have to do is hide this thing right here, so let's just delete

that, save it, and go back into my website.

And I'm going to refresh and show you. And if you click on this, you can see the

big version of the picture. Everything works as expected.

You also may have noticed that I have very little code here.

Notice that I just have the div for the modal right here plus a class of

modal-body and a div for that and then I put an image in there.

If you look at the full code for modal, you'll see that there is additional divs

right here. There's modal dialog and modal content.

All I really need for mine was the modal body.

If you don't put these two divs, then you're not going to get that little white

border that it would normally give you and the image come out a lot bigger which is

something that I really liked. So this is not the only place that this happens.

What you may want to do when updating your sites is look for other places in your

code where you're using the hide class.

Adjusting our navigation

So we obviously need to do something about this navbar.

It doesn't look very good. Our brand is sort of over to the

right-hand side, and obviously the colors aren't looking correct.

Now take a look at the code for the code on the Bootstrap website in version 2.3,

which is what this is, and compare it with version three.

So you can see here that the first div is a class of Navbar.

Which, on the 3.0 version, is exactly the same way.

If we go back to 2.3, and we look at the next div, it has a class of navbar inner.

In version three, that is no longer necessary.

So it's not even there. So we need to watch for that.

Next is the brand itself. And anchor tag in 2.3 had a class of brand.

This anchor tag has a class of navbar brand.

So these kind of changes can drive you a little crazy in the new version of Bootstrap.

They seem to sort of reclassify a lot of things, and you need to watch out for those.

So, let's see, the unordered list has a class of nav and Navbar-nav.

And in the old version, it was just called nav.

So we also need to watch out for that one. Let's go into our code, and look at the

components, and then php, and look for our header.

There it is. We need to fix some of these.

Now, one thing I said is that you no longer need this Navbar inner div right here.

So I'll take that out, and of course, I need to take off.

The closing diff, so that's gone. We'll change the class for the brand.

Right now, it's called brand, and it needs to be called navbar-brand.

And the unordered list needs to have a class of nav like it used to before, but

then we also need to add Navbar-nav. So if we save that, and we go over to our

site, we'll refresh, and everything's looking pretty good.

I can see that there are some CSS problems that I need to deal with.

I don't know if this is because this is an early version of Bootstrap, but for some

reason, this right here is not short in my version.

This is normally not this long on the Bootstrap website, so it's going on two

lines, and it doesn't look very good. For that, really, we need to get into some CSS.

Let me just pull up the delevoper tools. I'm using Chrome, so I'm going to

right-click and choose Inspect Element. And I actually want to inspect element

right here, on the brand and see what's happening.

If we scroll down on the right-hand side, eventually we'll get to something that has

this element as having a max width of 200 pixels.

So if we take that out, you'll see that it's now the proper width.

And if you want to do that on your website, it means that we're going to have

to add a class. So to overwrite that, you just go into

your CSS somewhere. I'm just going to put it here in the Style

section, and change the maxed width here to none.

That'll take care of that problem. Then obviously, we need to modify the

padding that it's adding at the top and bottom.

So I'll just do that here to show you you can do this in your CSS file, padding

bottom, and I'll just set it to zero. I don't really need padding at the bottom,

and then padding top, and we'll set that to four pixels.

See how that looks. That looks good, and it looks pretty good

and that fixes most of my problems. Now there's going to be lots of other

little things that you're going to have to fix.

You probably noticed that I have customized my CSS quite a bit.

You may want to get rid of these rounded edges, that one's going to be actually in

this class of Navbar. And then we can just say, border radius,

take out border radius here. And set to zero, that makes it nice and square.

Obviously, this is going to be different on your website, really every website is

going to be different. There's some other CSS style.

Changes that you're going to have to make, like you can tell the fonts aren't quite

right, you probably need to create a style that makes all these fonts.

Kind of like what they used to be, custom fonts.

So you're still going to have to go in and modify lots of other things but hopefully,

I've been able to catch most of the big problems that you're going to have when

you migrate your old website into version 3.0 of Bootstrap.

Looking out for class changes

Something you need to watch out for when you upgrade an old site to the new version

of Bootstrap is that one of the classes in Images has changed a little bit in the new version.

So, you may have noticed that these pictures don't look like polaroids, which

is what they're supposed to look like. Now if we take a look at the manual,

you'll see that in the old Bootstrap, the class for creating this effect right here

was called img-polaroid. In the new version of Bootstrap, this is

now called img-thumbnail. So if you've got any Polaroids that you're

using, you need to make sure that you watch out for that class change.

Now, in my website, I was using JavaScript to generate those, so notice that right

here, what I'm doing is, I'm just saying any photos from last year class in the

aside section that is an image I want you add the class img-polaroid.

So I need to modify that to thumbnail, and Save it, and let me go back into my

website, and you'll see that it's refreshed to the proper version.

Now, this is going to be different on your website because you may not be using

JavaScript at classes to things. But it's still something you're going to

have to watch out for. If you're using any classes of

img-polaroid , they have to be updated to img-thumbnail in the new version of Bootstrap.