Differences Between Bootstrap 3 & 4

Bootstrap 4 brought some major changes, adding new components, scrapping others. Here's the difference between Bootstrap 3 and Bootstrap 4.

| Component | Bootstrap 3 | Bootstrap 4 |
| --- | --- | --- |
| Global | | |
| Source CSS Files | LESS | SCSS |
| Primary CSS Unit | px | rem |
| Media Queries Unit | px | px |
| Global Font Size | 14px | 16px |
| Default Fonts | Helvetica Neue, Helvetica, Arial, sans-serif | Uses a "native font stack" (user's system fonts), with a fallback to Helvetica Neue, Arial, and sans-serif |
| Grids | | |
| Grid Tiers | [4 tier grid system](https://www.quackit.com/bootstrap/bootstrap_3/tutorial/bootstrap_grid_system.cfm) (xs, sm, md, lg) | [5 tier grid system](https://www.quackit.com/bootstrap/bootstrap_4/tutorial/bootstrap_grid_system.cfm) (xs, sm, md, lg, xl).  Bootstrap 4 has removed the xs from the lowest break point. Therefore, col-\* covers all devices (no need to specify the size in this case). |
| Offsetting Columns | Uses col-\*-offset-\* classes to offset columns. For example, col-md-offset-4. | Uses offset-\*-\* classes to offset columns. For example, offset-md-4. |
| Tables | | |
| Dark/inverse Tables | Not supported. | Added dark/inverse tables with the .table-dark class.  Note: Prior to the Beta 2 release, these required the .table-inverse class. This class has been replaced with .table-darkin Beta 2. |
| Table Head Styles | Not supported. | Added table head styles with the .thead-light and .thead-dark classes.  Note: Prior to the Beta 2 release, these required the .table-default class and the .table-dark class. These classes have been replaced with .table-light and .table-dark in Beta 2. |
| Condensed Tables | .table-condensed | .table-sm |
| Contextual Classes | [Bootstrap 3](https://www.quackit.com/bootstrap/bootstrap_3/tutorial/bootstrap_tables.cfm) doesn't use the .table- prefix for its contextual classes.  For example, Bootstrap 3 uses .activewhereas Bootstrap 4 uses .table-active. Other than that, both versions use the same 5 contextual keywords (active, success, info, warning, danger). | Added the .table- prefix for its contextual classes. |
| Responsive Tables | The .table-responsive class must be added to a parent [div](https://www.quackit.com/html/tags/html_div_tag.cfm) element. | The .table-responsive class must be added to a parent [div](https://www.quackit.com/html/tags/html_div_tag.cfm) element.  ~~Can add .table-responsive to the actual~~[table](https://www.quackit.com/html/tags/html_table_tag.cfm)~~element.~~  Beta 2 has also introduced the .table-responsive-\* classes that can be used to specify a particular breakpoint. These are .table-responsive-sm, .table-responsive-md, .table-responsive-lg, and .table-responsive-xl. |
| Reflow Tables | Not supported. | ~~Added reflow tables with the .table-reflow class.~~  Reflow tables have now been dropped. |
| Forms | | |
| Horizontal Forms | Horizontal forms require the .form-horizontal class.  Forms don't require .row when using grids (although this class is still a requirement on [Bootstrap 3 grids](https://www.quackit.com/bootstrap/bootstrap_3/tutorial/bootstrap_grid_system.cfm) in general). | Bootstrap 4 dropped the .form-horizontal class — it is no longer needed to display horizontal forms.  Forms require either the .row class when using grids, or the .form-row class (introduced in Bootstrap 4), which makes the form more compact. |
| Use .control-label when using grids for form layout. | Bootstrap 4 uses .col-form-label \* when using grids for form layout.  \* Note that Bootstrap 4 initially used .form-control-label but subesquently changed this to .col-form-label. |
| Checkboxes and Radio Buttons | Uses .radio, .radio-inline, .checkbox, or .checkbox-inline to display checkboxes and radio buttons. | Uses .form-check, .form-check-label, .form-check-input, and .form-check-inline. |
| Form Control Size | Use .input-lg and .input-sm to increase or decrease the size of an input control. | Use .form-control-lg and .form-control-sm to increase or decrease the size of an input control. |
| Form Label Size | No specific classes for adjusting form label size. | Bootstrap 4 introduced .col-form-label-sm and .col-form-label-lg to increase or decrease the size of a label to match the size of the relevant form control. |
| Help Text | Use the .help-block class to display help text. | Bootstrap 4 uses the .form-text class to display help text. |
| Validation and Feedback Icons | Includes validation styles for error, warning, and success states on form controls (for example, .has-warning). To present icons on the input fields using Bootstrap 3, use [glyphicons](https://www.quackit.com/bootstrap/bootstrap_3/tutorial/bootstrap_glyphicons.cfm). | Validation styles are not available for Bootstrap 4 forms. Use custom Bootstrap form validation messages instead. |
| Legends | No classes for styling the form legends. | Provides the option of using .col-form-label on [legend](https://www.quackit.com/html/tags/html_legend_tag.cfm) elements to style it more like a label. |
| Static text | Uses .form-control-static to render static text instead of a control. | In Bootstrap 4, .form-control-static has been renamed to .form-control-plaintext. |
| Custom Forms | Not supported. | Bootstrap 4 introduced [custom forms](https://www.quackit.com/bootstrap/bootstrap_4/tutorial/bootstrap_custom_forms.cfm) — completely custom form elements that replace the browser defaults. |
| Buttons | | |
| Styles | Includes the .btn-default and .btn-infoclasses.  The .btn-secondary class isn't available in Bootstrap 3. | Introduced the .btn-secondary, .btn-light, and .btn-dark classes.  Dropped the .btn-default class.  Note that the .btn-info class was initially dropped in Bootstrap 4 but then reappeared again. |
| Outline Buttons | Not supported. | Introduced the .btn-outline-\* classes for styling buttons with an outline color.  ~~Introduced the .btn-\*-outline classes for styling buttons with an outline color.~~  (The .btn-\*-outline classes became .btn-outline-\* in Alpha 3). |
| Button Sizes | The .btn-xs class is available. | Dropped the .btn-xs class (only .btn-smand .btn-lg are available now). |
| Input groups | | |
| Classes | Bootstrap 3 uses the .input-group-addonand .input-group-btn classes. | Bootstrap 4 dropped .input-group-addonand .input-group-btn for two new classes: .input-group-prepend and .input-group-append.  Bootstrap 4 also introduced .input-group-text for text within an input group. |
| Images | | |
| Responsive Images | Use .img-responsive class. | Use .img-fluid class. |
| Image Alignment | Use .pull-right, .pull-left, and .center-block helper classes. | Uses .m-x-auto instead of .center-blockto align block-level images.  Can also use the various .pull-\*-rightand .pull-\*-left responsive helper classes, as well as the .text-\*-left, .text-\*-center, and .text-\*-righthelper classes on the image's parent.  Can use the various .pull-\*-none classes to disable floating. |
| Media Objects | | |
| Classes | Includes many different classes for media objects, including .media, .media-body.media-object, .media-heading, .media-right, .media-left, and .media-list and .media-body. | Uses just .media class. Margins can be applied using spacer utilities. Media objects are flexbox enabled in Bootstrap 4, so the various flexbox classes can also be applied (such as reordering, etc). |
| Dropdowns | | |
| Structure | Apply dropdowns to lists (i.e. using [ul](https://www.quackit.com/html/tags/html_ul_tag.cfm)and [li](https://www.quackit.com/html/tags/html_li_tag.cfm)). | Dropdowns can be built with [ul](https://www.quackit.com/html/tags/html_ul_tag.cfm) or [div](https://www.quackit.com/html/tags/html_div_tag.cfm)s.  Apply the .dropdown-item to a [a](https://www.quackit.com/html/tags/html_a_tag.cfm) or [button](https://www.quackit.com/html/tags/html_button_tag.cfm) element and wrap them all in a [div](https://www.quackit.com/html/tags/html_div_tag.cfm) (or [ul](https://www.quackit.com/html/tags/html_ul_tag.cfm)) with a .dropdown-menuclass applied. |
| Menu Headers | Apply .dropdown-header to the [li](https://www.quackit.com/html/tags/html_li_tag.cfm) tag. | Apply .dropdown-header to [h1](https://www.quackit.com/html/tags/html_h1_tag.cfm) - [h2](https://www.quackit.com/html/tags/html_h2_tag.cfm)tags (as Bootstrap no longer uses [li](https://www.quackit.com/html/tags/html_li_tag.cfm)tags to build dropdowns). |
| Dividers | Apply the .divider class to the [li](https://www.quackit.com/html/tags/html_li_tag.cfm)element (because it used lists to build dropdowns). | Apply the .dropdown-divider to the [div](https://www.quackit.com/html/tags/html_div_tag.cfm)element. |
| Disabled Menu Items | Apply the .disabled class to the [li](https://www.quackit.com/html/tags/html_li_tag.cfm)element. | Apply the .disabled class to the [a](https://www.quackit.com/html/tags/html_a_tag.cfm)element. |
| Button Groups | | |
| Justified? | Supports justified button groups (via the .btn-group-justified class). | Not supported. |
| Extra Small? | Supports extra small button groups (via the .btn-group-xs class). | Not supported (dropped the .btn-group-xs class). |
| Navs | | |
| Inline Navs | There is no .nav-inline class. | Can use the .nav-inline class to explicitly specify navs to be displayed inline. |
| Navbars | | |
| Colors | Limited (preset) color options. Supports inverse navbars but not the other classes. | New (preset) color options. Introduced the .navbar-light and the .navbar-darkclasses, and allows the .bg-\* classes to be used on navbars. |
| Navbar Alignment | Use .navbar-right, .navbar-left to align components within the navbar. | ~~Use the various .pull-\*-right and .pull-\*-left responsive helper classes.~~  ~~Can also use the various .pull-\*-noneclasses to disable floating.~~  Can either use spacing utilities such as .mr-auto, or any of the flexbox alignment utilities. |
| Navbar Forms | Add the .navbar-form class to forms within navbars. | Bootstrap 4 dropped the .navbar-formclass. It's no longer necessary. |
| Fixed Navbars | Uses .navbar-fixed-top and .navbar-fixed-bottom to fix navbars to the top or bottom. | Uses .fixed-top and .fixed-bottom. |
| Pagination | | |
| Default Pagination | Only requires .pagination to be added (to the [ul](https://www.quackit.com/html/tags/html_ul_tag.cfm) element that represents the list of pages). | Must also add .page-item to each [li](https://www.quackit.com/html/tags/html_li_tag.cfm)element and .page-link to each [a](https://www.quackit.com/html/tags/html_a_tag.cfm)element. |
| Pagers | Uses .previous and .next for aligning pagers. | Pagers have been dropped in Bootstrap 4 (Alpha 3).  ~~Uses .pager-prev and .pager-next for aligning pagers.~~ |
| Labels | | |
| Pill Labels | The .label-pill class is not available. However, Bootstrap 3 does have [badges](https://www.quackit.com/bootstrap/bootstrap_3/tutorial/bootstrap_badges.cfm)(which achieves a similar visual effect). | Labels have been replaced by [badges](https://www.quackit.com/bootstrap/bootstrap_4/tutorial/bootstrap_badge.cfm) in Bootstrap 4.  Badges can use the .badge-pill for rounded corners. |
| Tags | | |
| Supported? | No.  "Tags" are called "Labels" in Bootstrap 3 (i.e. they use the .label class). | ~~Yes.~~  ~~The .tag class was introduced in Bootstrap 4 (Alpha 3) to replace the .labelclass.~~  ~~This was done to disambiguate from the~~[label](https://www.quackit.com/html/tags/html_label_tag.cfm)~~element.~~  Tags have now been renamed to "badges". These replace labels from Bootstrap 3. |
| Jumbotron | | |
| Full-Width | The .jumbotron-fluid class is not required on full-width jumbotrons. | Introduced the .jumbotron-fluid class for full-width jumbotrons. |
| Progress Bars | | |
| Uses [progress](https://www.quackit.com/html/tags/html_progress_tag.cfm)? | Doesn't use the [progress](https://www.quackit.com/html/tags/html_progress_tag.cfm) for progress bars. Instead, applies progress bar classes to nested [div](https://www.quackit.com/html/tags/html_div_tag.cfm) elements. | ~~Uses the HTML5~~[progress](https://www.quackit.com/html/tags/html_progress_tag.cfm)~~element when working with progress bars.~~  Using the [progress](https://www.quackit.com/html/tags/html_progress_tag.cfm) element was abandoned in Alpha 6. Bootstrap 4 now uses the [div](https://www.quackit.com/html/tags/html_div_tag.cfm) element again. |
| Glyphicons | | |
| Supported? | Supported. | Not supported. |
| Typography | | |
| Blockquotes | Bootstrap styles are applied to the [blockquote](https://www.quackit.com/html/tags/html_blockquote_tag.cfm) element by default. | Introduced the .blockquote class for styling the [blockquote](https://www.quackit.com/html/tags/html_blockquote_tag.cfm) element (i.e. styling this element is now opt-in). |
| Blockquote Alignment | Use .blockquote-reverse to align a blockquote to the right. | Use the text utilities to align blockquotes (.text-center and .text-right). |
| Page Headers | The .page-header class is supported. | The .page-header class is not supported. |
| Description Lists | The .dl-horizontal class was used to declare a horizontal list. | Horizontal lists are now declared with the .row class on the [dl](https://www.quackit.com/html/tags/html_dl_tag.cfm) tag, then any of the grid system's predefined classes to the [dt](https://www.quackit.com/html/tags/html_dt_tag.cfm) and [dd](https://www.quackit.com/html/tags/html_dd_tag.cfm) tags. |
| Non-Responsive Usage | | |
| Supported? | Supported. You can specify a layout to be non-responsive. | Not supported. |
| List Groups | | |
| Linked List Items / Button List Items | Apply .list-group-item to the [a](https://www.quackit.com/html/tags/html_a_tag.cfm)element. | Apply .list-group-item-action to the [a](https://www.quackit.com/html/tags/html_a_tag.cfm) element. |
| Collapse | | |
| Show content | Uses .in to have content expanded upon page load. | Uses .show to have content expanded upon page load. |
| Cards | | |
| Supported? | Not supported. | Introduced in Bootstrap 4. Cards replace functionality that was previously provided by [panels](https://www.quackit.com/bootstrap/bootstrap_3/tutorial/bootstrap_panels.cfm), [wells](https://www.quackit.com/bootstrap/bootstrap_3/tutorial/bootstrap_wells.cfm), and [thumbnails](https://www.quackit.com/bootstrap/bootstrap_3/tutorial/bootstrap_thumbnails.cfm). |
| Panels | | |
| Supported? | Supported. | Not supported. Use cards instead. |
| Wells | | |
| Supported? | Supported. | Not supported. Use cards instead. |
| Thumbnails | | |
| Supported? | Supported. | Not supported. Use cards instead. |
| Breadcrumbs | | |
| Classes | Uses the .breadcrumb class against the [ul](https://www.quackit.com/html/tags/html_ul_tag.cfm) tag. | Also requires .breadcrumb-item to be applied against all [li](https://www.quackit.com/html/tags/html_li_tag.cfm) elements that make up the breadcrumb.  Breadcrumbs can also be used outside of lists. For example, the .breadcrumb-itemcould be applied to a bunch of [a](https://www.quackit.com/html/tags/html_a_tag.cfm)elements that are wrapped in a .breadcrumb element. |
| Carousels | | |
| Carousel Item | Use .item class. | Use .carousel-item class. |
| Affix | | |
| Supported? | Yes. | No. |