Sql server, .net and c# video tutorial

Free C#, .Net and Sql server video tutorial for beginners and intermediate programmers.

Bootstrap 3 responsive utility classes

Suggested Video Tutorials
Part 5 - Bootstrap grid column offset
Part 6 - Bootstrap nested rows and columns
Part 7 - Bootstrap image gallery

In this video we will discuss **bootstrap responsive utility classes**

What are bootstrap responsive utility classes
Bootstrap responsive utility classes are useful for showing and hiding content by device via media query.

The following are some of the responsive utility classes available in bootstrap 3

Class	Device
visible-xs	Visible on extra small device
visible-sm	Visible on small device
visible-md	Visible on medium device
visible-lg	Visible on large device
hidden-xs	Hidden on extra small device
hidden-sm	Hidden on small device
hidden-md	Hidden on medium device
hidden-lg	Hidden on large device

Let us now understand the use of these classes with an example. Let us say we have the following 4 columns on a web page.

ALL Screens	Medium, Large & Small	Medium & Large	Large

The following is the HTML I used to produce these 4 columns
```
<div class="container">
  <div class="row">
    <div class="col-lg-3 col-md-4 col-sm-6 col-xs-12">
      <div class="customDiv">ALL Screens</div>
    </div>
    <div class="col-lg-3 col-md-4 col-sm-6 col-xs-12">
```

```html
      <div class="customDiv">Medium, Large and Small</div>
    </div>
    <div class="col-lg-3 col-md-4 col-sm-6 col-xs-12">
      <div class="customDiv">Medium and Large </div>
    </div>
    <div class="col-lg-3 col-md-4 col-sm-6 col-xs-12">
      <div class="customDiv">Large</div>
    </div>
  </div>
</div>
```

Here is the CSS for the **customDiv** class
```css
.customDiv{
   margin:10px;
   min-height:50px;
   background-color:silver;
   text-align:center;
   font-size:large;
   padding:10px;
}
```

Here is what we want to do
1. The column that displays "ALL Screens" must be visible on all screen sizes
2. The column that displays "Medium, Large and Small" must be visible only on medium, large and small screen sizes. It should be hidden on an extra small screen size.
3. The column that displays "Medium and Large" must be visible only on medium and large screen sizes. It should be hidden on small and extra small screen sizes.
4. The column that displays "Large" must be visible only on a large screen size. It should be hidden on all other screen sizes.

This can be very easily achieved by using the responsive utility classes
1. "ALL Screens" column must be visible on all screen sizes, so no change is required here.

2. "Medium, Large and Small" column must be visible only on medium, large and small screen sizes. It should be hidden on an extra small screen size. So applying "hidden-xs" class on this column will hide this column on an extra small device but will be visible across all other devices.

```html
<div class="col-lg-3 col-md-4 col-sm-6 col-xs-12 hidden-xs">
   <div class="customDiv">Medium, Large and Small</div>
</div>
```

We can also achieve exactly the same thing by using visible-lg, visible-md, and visible-sm classes instead of hidden-xs class. Since with "hidden-xs" we only need to use one class, where as with visible classes we have to use 3 of them, so I have chosen to use hidden-xs.

```html
<div class="col-lg-3 col-md-4 col-sm-6 col-xs-12 visible-lg visible-md visible-sm">
   <div class="customDiv">Medium, Large and Small</div>
</div>
```

3. "Medium and Large" column must be visible only on medium and large screen sizes. It should be hidden on small and extra small screen sizes. To achieve this apply visible-lg and visible-md

classes on this column.

```
<div class="col-lg-3 col-md-4 col-sm-6 col-xs-12 visible-lg visible-md">
  <div class="customDiv">Medium and Large </div>
</div>
```

We can also achieve exactly the same thing by using hidden-sm and hidden-xs classes instead of visible-lg and visible-md classes.

```
<div class="col-lg-3 col-md-4 col-sm-6 col-xs-12 hidden-sm hidden-xs">
  <div class="customDiv">Medium and Large </div>
</div>
```

4. "Large" column must be visible only on large screen sizes. It should be hidden on all other screen sizes. To achieve this apply visible-lg class on this column.

```
<div class="col-lg-3 col-md-4 col-sm-6 col-xs-12 visible-lg">
  <div class="customDiv">Large</div>
</div>
```

As you might have already guessed by now, you can also achieve exactly the same thing by using the hidden classes (hidden-xs hidden-sm and hidden-md), but with this approach you have to use 3 classes, where as with visible classes we have to use only one class (visible-lg)

```
<div class="col-lg-3 col-md-4 col-sm-6 col-xs-12 hidden-xs hidden-sm hidden-md">
  <div class="customDiv">Large</div>
</div>
```

As of bootstrap version 3.2.0, the .visible-*-* classes for each screen size come in three variations, one for each CSS display property value shown below.

Boostrap Classes	CSS display
visible-*-block	display: block;
visible-*-inline	display: inline;
visible-*-inline-block	display: inline-block;

The following article explains the difference between display: inline, display: inline-block and display: block
http://stackoverflow.com/questions/8969381/what-is-the-difference-between-display-inline-and-display-inline-block

The following classes also exist, but are deprecated as of v3.2.0.

Deprecated Classes
visible-xs
visible-sm
visible-md
visible-lg

Similar to the regular responsive classes, you can use the following utility classes to show or hide

certain elements for printing purpose

Print Class	Description
visible-print	Visible when printing
hidden-print	Visible only on the browser not when printing

Example : The column that has "hidden-print" class is visible only on the browser and not when printing. The column that has "visible-print" class is visible only during printing and not on the browser.

```
<div class="container">
  <div class="row">
    <div class="col-xs-12 hidden-print">
      <div class="customDiv">Visible on browser NOT when printing</div>
    </div>
    <div class="col-xs-12 visible-print">
      <div class="customDiv">Visible when printing</div>
    </div>
  </div>
</div>
```

As of bootstrap version 3.2.0, the visible-print class come in three variations, one for each CSS display property value shown below.

Print Class	CSS display
visible-print-block	display: block;
visible-print-inline	display: inline;
visible-print-inline-block	display: inline-block;

The visible-print class also exists but is deprecated as of bootstrap version 3.2.0.