Bootstrap

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- Sleek, intuitive and powerful mobile first front-end framework
- Bootstrap's responsive CSS adjusts to Desktops, Tablets and Mobiles.
- Open Source
- Provide functional components which are easy to customise
- Can easily get started with Bootstrap with HTML and CSS
- Bootstrap 3 is mobile first in sense that code for Bootstrap now starts by targeting smaller screens like mobile, tablets and then expands components for larger screens like laptops, desktops..

Mobile First Strategy

- Content
  - Determine what is important

- Layout
  - Design for smaller width first
  - Base css addresses mobile device first, media queries for larger devices

- Progressive Enhancement
  - Add elements as screen size increases

File Structure

```
bootstrap/
├── css/
│   ├── bootstrap.css
│   ├── bootstrap.css.map
│   ├── bootstrap.min.css
│   ├── bootstrap-theme.css
│   ├── bootstrap-theme.css.map
│   └── bootstrap-theme.min.css
├── js/
│   ├── bootstrap.js
│   └── bootstrap.min.js
└── fonts/
    ├── glyphicons-halflings-regular.eot
    ├── glyphicons-halflings-regular.svg
    ├── glyphicons-halflings-regular.ttf
    ├── glyphicons-halflings-regular.woff
    └── glyphicons-halflings-regular.woff2
```

Supported browsers

	Chrome	Firefox	Internet Explorer	Opera	Safari
Android	✔ Supported	✔ Supported		✖ Not Supported	N/A
iOS	✔ Supported	N/A	N/A	✖ Not Supported	✔ Supported
Mac OS X	✔ Supported	✔ Supported		✔ Supported	✔ Supported
Windows	✔ Supported	✔ Supported	✔ Supported	✔ Supported	✖ Not Supported

List of known browser issues :

http://getbootstrap.com/browser-bugs/

HTML Templete with Bootstrap

```html
<!DOCTYPE html>
<html>
    <head>
        <title>Bootstrap 101 Template</title>
        <meta name="viewport" content="width=device-width, initial-scale=1.0">
        <!-- Bootstrap -->
        <link href="css/bootstrap.min.css" rel="stylesheet">

        <!-- HTML5 Shim and Respond.js IE8 support of HTML5 elements and media
            queries -->
        <!-- WARNING: Respond.js doesn't work if you view the page

            via file:// -->
        <!--[if lt IE 9]>
            <script src="https://oss.maxcdn.com/libs/html5shiv/3.7.0/
                html5shiv.js"></script>
            <script src="https://oss.maxcdn.com/libs/respond.js/1.3.0/
                respond.min.js"></script>
        <![endif]-->
    </head>
    <body>
        <h1>Hello, world!</h1>

        <!-- jQuery (necessary for Bootstrap's JavaScript plugins) -->
        <script src="https://code.jquery.com/jquery.js"></script>
        <!-- Include all compiled plugins (below), or include individual files
            as needed -->
        <script src="js/bootstrap.min.js"></script>
    </body>
</html>
```

Grid System

	Extra small devices Phones (<768px)	Small devices Tablets (≥768px)	Medium devices Desktops (≥992px)	Large devices Desktops (≥1200px)
Grid behavior	Horizontal at all times	Collapsed to start, horizontal above breakpoints		
Container width	None (auto)	750px	970px	1170px
Class prefix	.col-xs-	.col-sm-	.col-md-	.col-lg-
# of columns	12			
Column width	Auto	~62px	~81px	~97px
Gutter width	30px (15px on each side of a column)			
Nestable	Yes			
Offsets	Yes			
Column ordering	Yes			

Basic Grid Structure

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

Demo covers..

- Responsive Columns
- Offset Columns
- Nesting Columns
- Typography
- Codes
- Tables