

Bootstrap

1. Bootstrap is a powerful mobile first front-end framework for faster and easier web development. It uses HTML, CSS and JavaScript.
2. Bootstrap was developed by Mark Otto and Jacob Thornton at Twitter. It was released as an open source product in August 2011 on GitHub.
3. It is supported by all popular browsers.
4. Why use Bootstrap?
 - a. Easy to get started
 - b. Responsive design - Bootstrap responsive CSS adjusts to Desktops, Tablets and Mobiles.
5. Bootstrap provides a basic structure with Grid System, link styles, background.
6. Bootstrap comes with feature of global CSS settings, fundamental HTML elements styled and enhanced with extensible classes, and an advanced grid system.
7. Bootstrap contains over a dozen reusable components built to provide iconography, dropdowns, navigation, alerts, popovers, and much more.
8. What Bootstrap Package Includes
 - a. JavaScript Plugins: Bootstrap contains over a dozen custom jQuery plugins.
 - b. Customize: You can customize Bootstrap's components

```
<!DOCTYPE html>
<html lang="en">
<head>
  <title>Bootstrap Example</title>
  <meta charset="utf-8">
  <meta name="viewport" content="width=device-width, initial-scale=1">
  <link rel="stylesheet"
href="https://maxcdn.bootstrapcdn.com/bootstrap/3.3.7/css/bootstrap.min.css">
  <script src="https://ajax.googleapis.com/ajax/libs/jquery/3.3.1/jquery.min.js">
</script>
  <script src="https://maxcdn.bootstrapcdn.com/bootstrap/3.3.7/js/bootstrap.min.js">
</script>
</head>
<body>

<div class="container">
  <h1>My First Bootstrap Page</h1>
  <p>This is some text.</p>
</div>
```

- 9.
10. What is Bootstrap Grid System
 - a. Bootstrap includes a responsive, mobile first fluid grid system that appropriately scales up to 12 columns as the device or view port size increases.
 - b. It includes predefined classes for easy layout options, as well as powerful mixins for generating more semantic layouts.
 - c. Here's how the Bootstrap grid system works:

- i. Rows must be placed within a `.container` class for proper alignment and padding.
 - ii. Use rows to create horizontal groups of columns.
 - iii. Content should be placed within columns, and only columns may be immediate children of rows.
 - iv. Predefined grid classes like `.row` and `.col-xs-4` are available for quickly making grid layouts. LESS mixins can also be used for more semantic layouts.
 - v. Columns create gutters (gaps between column content) via padding. That padding is offset in rows for the first and last column via negative margin on `.rows`.
 - vi. Grid columns are created by specifying the number of twelve available columns you wish to span. For example, three equal columns would use three `.col-xs-4`.
- d. Basic grid structure

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

i.

11. Media queries

- a. Media query is a really fancy term for "conditional CSS rule". It simply applies some CSS based on certain conditions set forth. If those conditions are met, the style is applied.

```
/* Extra small devices (phones, less than 768px) */
/* No media query since this is the default in Bootstrap */

/* Small devices (tablets, 768px and up) */
@media (min-width: @screen-sm-min) { ... }

/* Medium devices (desktops, 992px and up) */
@media (min-width: @screen-md-min) { ... }

/* Large devices (large desktops, 1200px and up) */
@media (min-width: @screen-lg-min) { ... }
```

b.

12. Responsive images

- a. Bootstrap 3 allows to make the images responsive by adding a class `.img-responsive` to the `` tag.



b.

13. Containers

- a. Use class `.container` to wrap a page's content and easily center the content's as shown below.
 - i. `<div class="container"> ... </div>`

14. Typography

- a. Bootstrap uses Helvetica Neue, Helvetica, Arial, and sans-serif in its default font stack. Using typography feature of Bootstrap you can create headings, paragraphs, lists and other inline elements.
- b. To add an inline subheading to any of the headings, simply add `<small>` around any of the elements or add `.small` class and you will get smaller text in a lighter color
- c. Lists
 - i. Ordered lists
 - ii. Unordered lists

15. Tables

- a. If you want a nice, basic table style with just some light padding and horizontal dividers, add the base class of `.table` to any table - `.table`
- b. Table-striped
- c. Table-bordered
- d. Table-hover
- e. Table-responsive

16. Forms

- a. Vertical (default) form

```
<form role="form">
  <div class="form-group">
    <label for="name">Name</label>
    <input type="text" class="form-control" id="name"
      placeholder="Enter Name">
  </div>
</form>
```

i.

Name

File input

No file selected.

Example block-level help text here.

☐ Check me out

ii.

b. Inline form - form-inline

i.

c. Horizontal form - form-horizontal

No file selected. ☐ Check me out

First Name

Last Name

☐ Remember me

i.

17. Buttons

Class	Description
Btn	Default/ Standard button.
btn-primary	Provides extra visual weight and identifies the primary action in a set of buttons.
btn-success	Indicates a successful or positive action.
btn-info	Contextual button for informational alert messages.
btn-warning	Indicates caution should be taken with this action.
btn-danger	Indicates a dangerous or potentially negative action.
btn-link	Deemphasize a button by making it look like a link while maintaining button behavior.

a.

18. Images

- .img-rounded: adds border-radius:6px to give the image rounded corners.
- .img-circle: makes the entire image round by adding border-radius:500px.
- .img-thumbnail: adds a bit of padding and a gray border:

19. Helper classes

- a. Close - Use the generic close icon for dismissing content like modals and alerts.
- b. Carets - Use carets to indicate drop down functionality and direction. To get this functionality use the class caret with a element.

Assignments

1. Convert to responsive HTML -
https://drive.google.com/file/d/1Sz64xOiJprO_PwFt2O7tAJaASMTxvffj/view?usp=sharing
2. Convert to responsive HTML -
https://drive.google.com/file/d/1_PaJMSFUglrZ0EZor1O257LuBb9Ts8k2/view?usp=sharing
- 3.