

The background of the slide is a light beige color. In the top left corner, there is a corkboard with a few papers pinned to it. In the center, there is a large, stylized illustration of a laptop. The laptop screen displays a colorful bar chart with several bars of different heights and colors (red, orange, yellow, green, blue, purple). Above the laptop, there are several colorful circles (bubbles) containing text: 'www' in a blue circle, 'HTML5' in a red circle, 'js' in a red circle, 'XML' in an orange circle, 'Cloud' in a grey circle, and 'PHP' in a green circle. Dotted lines connect some of these circles. To the left of the laptop, there is a red mechanical device with two gauges and a pipe. The overall theme is web technologies and data visualization.

ECAP472

WEB TECHNOLOGIES

Dr. Pritpal Singh

Associate Professor

Learning Outcomes



After this lecture, you will be able to

- understand Bootstrap Grid.
- go over Bootstrap Navigation Bar

What is Bootstrap?



Bootstrap is a free front-end framework for faster and easier web development

Also gives you the ability to easily create responsive designs

What is Bootstrap?

Bootstrap is a free front-end framework for faster and easier web development



Also gives you the ability to easily create responsive designs



Bootstrap includes HTML and CSS based design templates for typography, forms, buttons, tables, navigation, modals, image carousels and many other, as well as optional JavaScript plugins.

Advantages of Bootstrap

1 Easy to use

Anybody with just basic knowledge of HTML and CSS can start using Bootstrap

2 Responsive features

Bootstrap's responsive CSS adjusts to phones, tablets, and desktops.

Advantages of Bootstrap

3 Mobile-first approach

In Bootstrap 3, mobile-first styles are part of the core framework

4 Responsive features

Bootstrap is compatible with all modern browsers (Chrome, Firefox, Internet Explorer, Safari, and Opera)

Where to Get Bootstrap?

EITHER

Download Bootstrap from getbootstrap.com

- If you want to download and host Bootstrap yourself, go to getbootstrap.com, and follow the instructions there.

Where to Get Bootstrap?

OR

Include Bootstrap from a CDN

- If you don't want to download and host Bootstrap yourself, you can include it from a CDN (Content Delivery Network).
- MaxCDN provides CDN support for Bootstrap's CSS and JavaScript. You must also include jQuery.

Bootstrap Grid

In graphic design, a grid is a structure (usually two-dimensional) made up of a series of intersecting straight (vertical, horizontal) lines used to structure the content. It is widely used to design layout and content structure in print design. In web design, it is a very effective method to create a consistent layout rapidly and effectively using HTML and CSS.

Bootstrap Grid System

The Bootstrap Grid System allows up to 12 columns across the page. You can use all 12 columns individually or you can group the columns together to create wider columns.

Example

.col-md-1	.col-md-1	.col-md-1	.col-md-1	.col-md-1	.col-md-1	.col-md-1	.col-md-1	.col-md-1	.col-md-1	.col-md-1	.col-md-1
.col-md-8								.col-md-4			
.col-md-4				.col-md-4				.col-md-4			
.col-md-6						.col-md-6					

Bootstrap Grid System

Bootstrap Grid System is responsive, and the columns are re-arranged automatically according to the screen size

Grid Classes

There are four classes in Bootstrap Grid System:

- xs (for phones)
- sm (for tablets)
- md (for desktops)
- lg (for larger desktops)

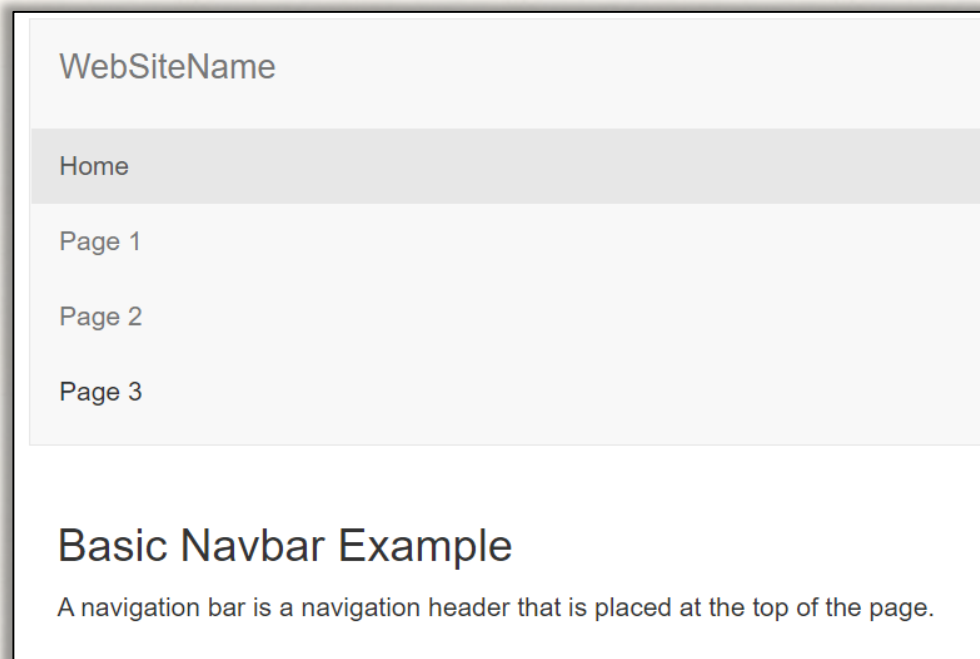
You can combine the above classes to create more dynamic and flexible layouts.

Instructions while creating a Bootstrap Grid

- Create a row (`<div class="row">`).
- Add the number of columns, you want in the grid (tags with appropriate `.col-*-*` classes).
- Note that numbers in `.col-*-*` should always add up to 12 for each row.

Bootstrap Navigation Bar

- A navigation bar is like a navigation header that is placed at the top of the page. You can collapse or extend it according to the screen size.



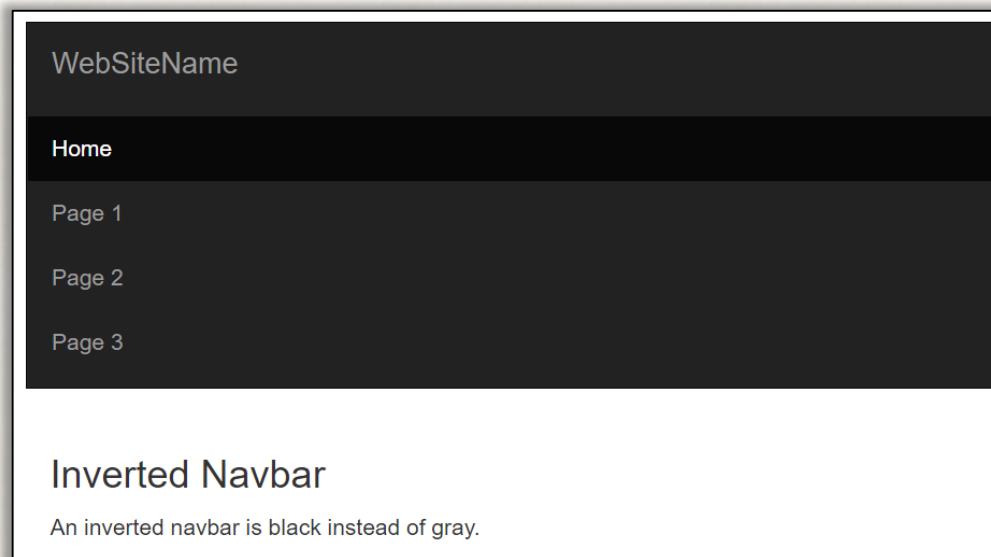
Bootstrap Navigation Bar

You can create a standard navigation bar at the top of the page with with :

```
<NAV CLASS="NAVBAR NAVBAR-DEFAULT">.
```

Bootstrap Inverted Navigation Bar

- Inverted navigation bar provides an alternative black navbar. It can be used to style the default navigation bar by changing `.navbar-default` class into `.navbar-inverse` class.



That's all for now...