

Learning Consolidation

Develop a Responsive Web Page Using Bootstrap





In this sprint, you learned to:

- Describe Bootstrap framework
- Develop responsive web pages using mobile-first approach
- Apply Bootstrap's mobile-first flexbox grid to build layouts
- Create responsive images, tables and forms using Bootstrap
- Utilize various Bootstrap components
- Apply Bootstrap utilities

What Is Bootstrap?


- Bootstrap is an open-source framework used for faster and easier web development.
- It is the world's most popular CSS framework created for building responsive, mobile-first websites and applications.
- It includes HTML and CSS-based design templates for typography, forms, buttons, tables, navbars, modals, image carousels, optional JavaScript plugins, etc.
- Bootstrap supports the latest, stable releases for all major browsers and platforms.
- It also gives you the ability to easily create responsive designs.

Responsive Web Design Example


New York, NY

Tuesday, April 15th

Overcast

58°F

Precipitation: 100%
Humidity: 97%
Wind: 4 mph SW
Pollen Count: 36

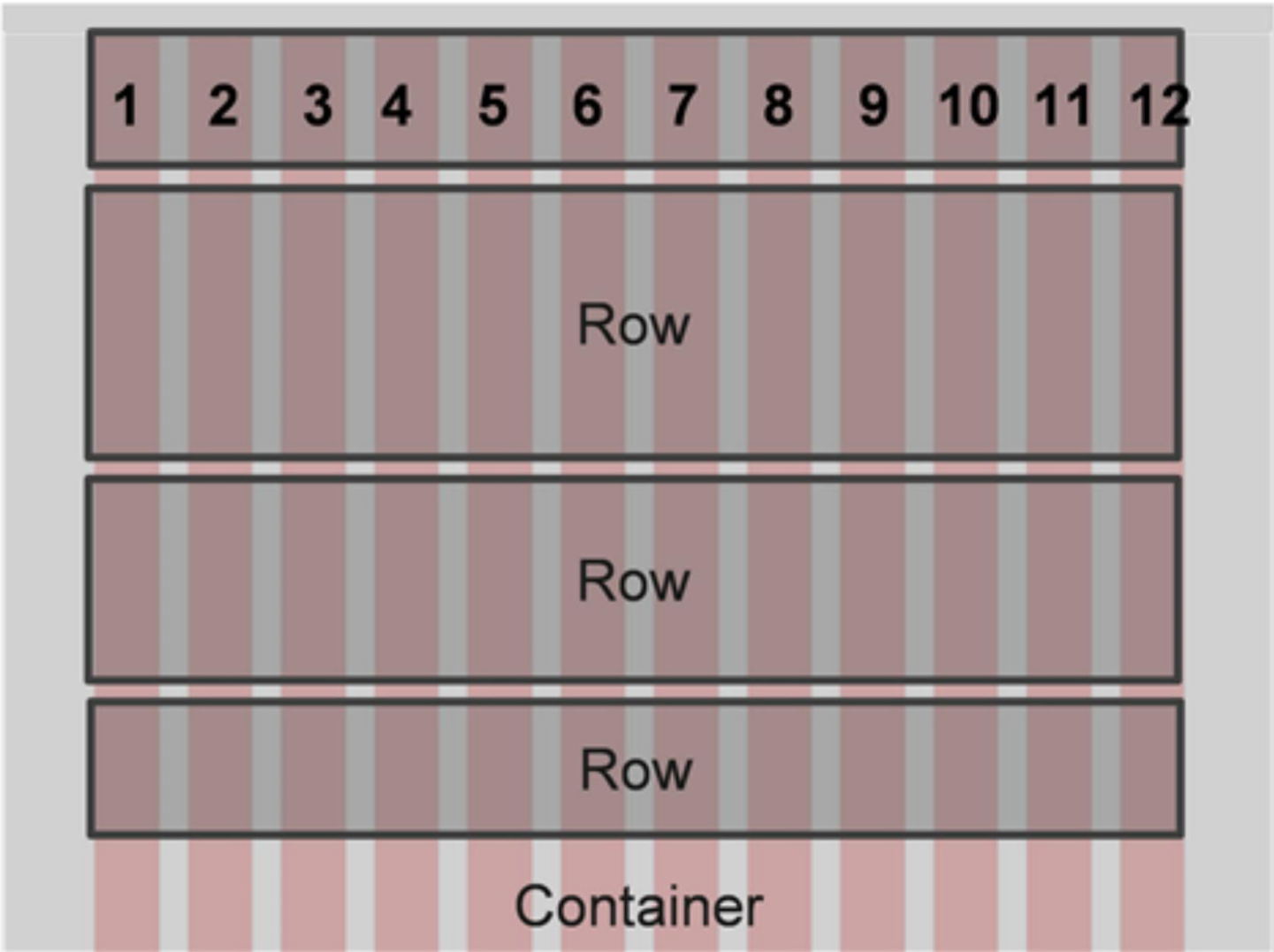
Today		68° 36°	Pollen 36
Wednesday		50° 39°	Pollen 36
Thursday		55° 39°	Pollen 36

Slide Note

Menu

Bootstrap Grid System

- Bootstrap’s grid system uses a series of containers, rows, and columns to layout and align content.
- It uses a 12-column system with six responsive tiers.
- It’s built with flexbox and is fully responsive. The columns, depending on the screen size, re-arrange automatically.



Bootstrap Grid System Example

col-sm \geq 567px

The screenshot displays a web browser window with the title 'Grid Example' and the URL 'file:///E:/BOOTSTRAP/Bootstrap/auto-width-example2.html'. It shows three rows of Bootstrap grid columns:

- Row 1: Three columns. The first is blue and labeled 'col-sm' with the text 'Long content'. The second is grey and labeled 'col-sm' with the text 'Short Content'. The third is green and labeled 'col-sm-2'.
- Row 2: Three columns. The first is blue and labeled 'col-sm-auto' with the text 'Long content'. The second is grey and labeled 'col-sm-auto' with the text 'Short Content'. The third is green and labeled 'col-sm-2'.
- Row 3: Three columns. The first is blue and labeled 'col-sm-auto' with the text 'Long content Long content'. The second is grey and labeled 'col-sm-auto' with the text 'Short Content'. The third is green and labeled 'col-sm-2'.

Source:07Planning

- Extra small (xs) - small phones
- Small (sm) - Medium phones
- Medium (md) -Tablets
- Large (lg) - Laptop
- Extra-large (xl) - Desktop
- Extra extra large (xxl) - Large Desktop

Grid System Breakpoints

Bootstrap’s grid system can adapt across all six default breakpoints and any breakpoint you customize. The six default grid tiers are:

- Extra small (xs) : Small Phones
- Small (sm) : Medium Phones
- Medium (md) : Tablets
- Large (lg) : Laptop
- Extra-large (xl) : Desktop
- Extra extra large (xxl) : Large Desktop

Standard rules for all three form layouts:

- Wrap labels and form controls in (needed for optimum spacing)
- Add class `.form-control` to all textual

, and `<select>` elements

In an inline form, all of the elements are inline, left-aligned, and the labels are alongside. This only applies to forms within viewports that are at least 768px wide!

Add class `.form-inline` to the element

A horizontal form means that the labels are aligned next to the input field (horizontal) on large and medium screens. On small screens (767px and below), it will transform into a vertical form (labels are placed on top of each input).

Additional rules for a horizontal form:

Add class `.form-horizontal` to the element

Add class `.control-label` to all elements

Bootstrap Forms

- The `<form>` HTML element represents a document section containing interactive controls for submitting information.
- It is used to collect user input which is most often sent to a server for processing.
- Bootstrap supports the following form controls:
 - input
 - textarea
 - checkbox
 - radio
 - select

Bootstrap Components

- Bootstrap provides a variety of components that can be customized and reused to provide a good user experience and user interactions.
- Few of them are listed below:
 - Jumbotron
 - Alerts
 - Buttons
 - Button Group
 - Badge
 - Progress Bar
 - List Group
 - Card
 - Carousel
 - Nav
 - Navbar
 - Breadcrumbs
 - Toast
 - Tooltip
 - Drop down
 - Collapse
 - Pagination
 - Spinner

Bootstrap Utilities

- Bootstrap provides various helper/utility classes for specifying the following properties:
 - Background
 - Borders
 - Colors
 - Display
 - Flex
 - Position
 - Shadows
 - Sizing
 - Spacing
 - Text

Self-Check

What happens when a Bootstrap CDN is used?

- A. The connection slows down
- B. The loading time gets reduced
- C. Extra http connection is made
- D. None of these



Many users have already downloaded Bootstrap from jsDelivr when visiting another site. As a result, it is loaded from the cache when they visit your site, leading to a faster loading time.

Self-Check: Solution

What happens when a Bootstrap CDN is used?

- A. The connection slows down
- B. **The loading time gets reduced**
- C. Extra http connection is made
- D. None of these

Explanation:

Users would have already downloaded Bootstrap from jsDelivr when visiting another site. As a result, it's loaded from the cache, leading to a faster load time.



Self-Check

Glyphicons are used for _____.

- A. using different icons like badges
- B. using animations
- C. using favicons
- D. using slideshows



Self-Check: Solution

Glyphicons are used for _____.

- A. **using different icons like badges**
- B. using animations
- C. using favicons
- D. using slideshows

Explanation:

Option B is wrong because Glyphicons are static icons and are not used for animations.

Option C is wrong since favicons are visible alongside the title.

Option D is wrong since the carousel is used for slideshows.

