

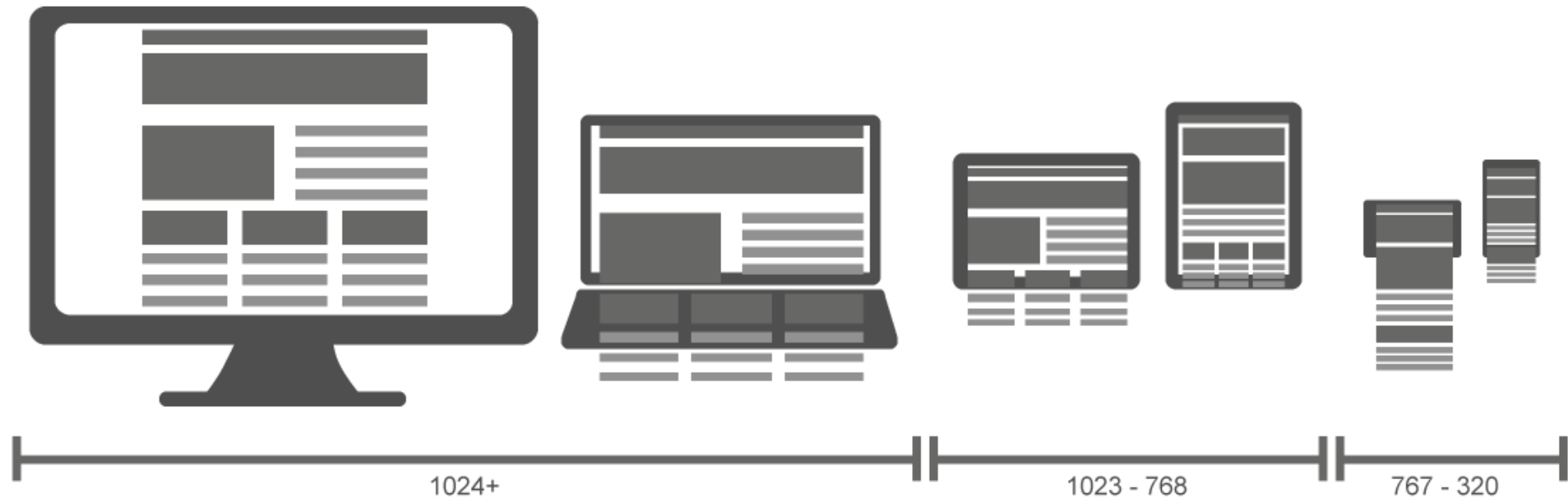
Web Application Development

❖ Bootstrap: CSS framework

Responsive Web Design



Responsive Web Design



The Viewport

- The **viewport** is the user's visible area of a web page.
- HTML5 introduced a method to let web designers take control over the viewport, through the **<meta>** tag.
 - The **width=device-width** part sets the width of the page to follow the screen-width of the device (which will vary depending on the device).
 - The **initial-scale=1.0** part sets the initial zoom level when the page is first loaded by the browser.

```
<head>  
<meta name="viewport" content="width=device-width, initial-  
scale=1">  
</head>  
<body>  
. . .
```

Size Content to the Viewport

On both desktop and mobile devices, users are used to scrolling websites vertically but not horizontally, and forcing the user to scroll horizontally or to zoom out in order to see the whole page results in a poor user experience.

- **Do not use large fixed width elements.**
 - Instead, consider using relative width values, such as `width: 100%`.
 - Similarly, beware of using large absolute positioning values that may cause the element to fall outside the viewport on small screens.
- Content **should not rely on a particular viewport** width to render well.
- Use **CSS media queries** to apply different styling for small and large screens.

CSS3 Media Queries

- Media queries consist of a **media type** and can contain one or more expressions, expressed as **media features**, which resolve to either true or false.

```
<!-- CSS media query on a link element -->
<link rel="stylesheet" media="(max-width: 800px)"
href="example.css" />
```

```
<!-- CSS media query within a stylesheet -->
<style>
@media (max-width: 600px) {
    .sidebar {
        display: none;
    }
}
</style>
```

CSS3 Media Queries

- CSS styling based on multiple screens width

```
@media screen and (max-width: 500px)
{
    p{font-size:12px}
}
@media (min-width: 501) and (max-width: 900px)
{
    p{font-size:15px}
}
@media screen and (min-width: 901px){
    p{font-size:16px}
}
```

CSS3 Media Queries

While there are several different items we can query on, the ones used most often for responsive web design are **min-width**, **max-width**, **min-height** and **max-height**.

Attribute	Result
min-width	Any browser width over the value defined in the query.
max-width	Any browser width below the value defined in the query.
min-height	Any browser height over the value defined in the query.
max-height	Any browser height below the value defined in the query.
orientation=portrait	Any browser where the height is greater than or equal to the width.
orientation=landscape	Any browser where the width is greater than the height.

BOOTSTRAP

BOOTSTRAP

What is bootstrap CSS?

- **Bootstrap** is a free and open-source front-end framework for designing websites and web applications.
- **Bootstrap** is a free front-end framework for faster and easier web development that helps you to create a responsive front-end design.

BOOTSTRAP

- CSS framework
- Page layouts using bootstrap CSS
- Built in style for HTML elements like buttons
- Built in elements

Why we need to use Bootstrap?

- **Easy to use:**
 - Anybody with just basic knowledge of HTML and CSS can start using Bootstrap
- **Responsive features:**
 - Bootstrap's responsive CSS adjusts to phones, tablets, and desktops
- **Mobile-first approach:**
 - In Bootstrap 5, mobile-first styles are part of the core framework
- **Browser compatibility:**
 - Bootstrap is compatible with all modern browsers (Chrome, Firefox, Internet Explorer, Edge, Safari, and Opera)

Bootstrap selectors

- Bootstrap contains wide range of selectors. Some very common selectors in bootstrap are as following
 - Bootstrap Grid System
 - Bootstrap typography
 - Bootstrap Tables
 - Bootstrap buttons
 - Bootstrap Pagination
 - Bootstrap Navbar

Creating shared layout using bootstrap

- For this purpose visit
- `<link
href="https://cdn.jsdelivr.net/npm/bootstrap@5.3.3/dist/css/bootstrap.min.css"
rel="stylesheet" >`
- `<script
src="https://cdn.jsdelivr.net/npm/bootstrap@5.3.3/dist/js/bootstrap.bundle.min.js"></script>`
 - Link above files in your `<head>` tag of web page to use bootstrap 5

```
<html>
<head>
  <title>Bootstrap Example</title>
  <meta charset="utf-8">
  <link rel="stylesheet" href="bootstrap.min.css">
  <script src="jquery.min.js"></script>
  <script src="bootstrap.min.js"></script>
</head>
<body>

  <div class="container">
    <table class="table">
      <thead>
        <tr>
          <th>Firstname</th>
          <th>Lastname</th>
          <th>Email</th>
        </tr>
      </thead>
      <tbody>
        <tr>
          <td>asad</td>
          <td>ameen</td>
          <td>asad@yahoo.com</td>
        </tr>
        <tr>
          <td>numan</td>
          <td>ahmed</td>
          <td>numan@yahoo.com</td>
        </tr>
        <tr>
          <td>Muhammad</td>
          <td>zahed</td>
          <td>mzahed@yahoo.com</td>
        </tr>
      </tbody>
    </table>
  </div>
</body>
</html>
```


Example

- Output

Firstname	Lastname	Email
asad	ameen	asad@yahoo.com
numan	ahmed	numan@yahoo.com
Muhammad	zahed	mzahed@yahoo.com

Bootstrap Example

- Alert boxes are used to notify about alert messages. For example

Alerts

Success! This alert box could indicate a successful or positive action.

Info! This alert box could indicate a neutral informative change or action.

Warning! This alert box could indicate a warning that might need attention.

Danger! This alert box could indicate a dangerous or potentially negative action.

Bootstrap Example

```
<html lang="en">
<head>
  <title>Bootstrap Example</title>
  <link rel="stylesheet" href="bootstrap.min.css">
  <script src="jquery.min.js"></script>
  <script src="bootstrap.min.js"></script>
</head>
<body>

<div class="container">
  <h2>Alerts</h2>
  <div class="alert alert-success">
    <strong>Success!</strong> This alert box could indicate a successful or positive action.
  </div>
  <div class="alert alert-info">
    <strong>Info!</strong> This alert box could indicate a neutral informative change or action.
  </div>
  <div class="alert alert-warning">
    <strong>Warning!</strong> This alert box could indicate a warning that might need attention.
  </div>
  <div class="alert alert-danger">
    <strong>Danger!</strong> This alert box could indicate a dangerous or potentially negative action.
  </div>
</div>

</body>
</html>
```

Bootstrap example

- Output

Alerts

Success! This alert box could indicate a successful or positive action.

Info! This alert box could indicate a neutral informative change or action.

Warning! This alert box could indicate a warning that might need attention.

Danger! This alert box could indicate a dangerous or potentially negative action.

Bootstrap example

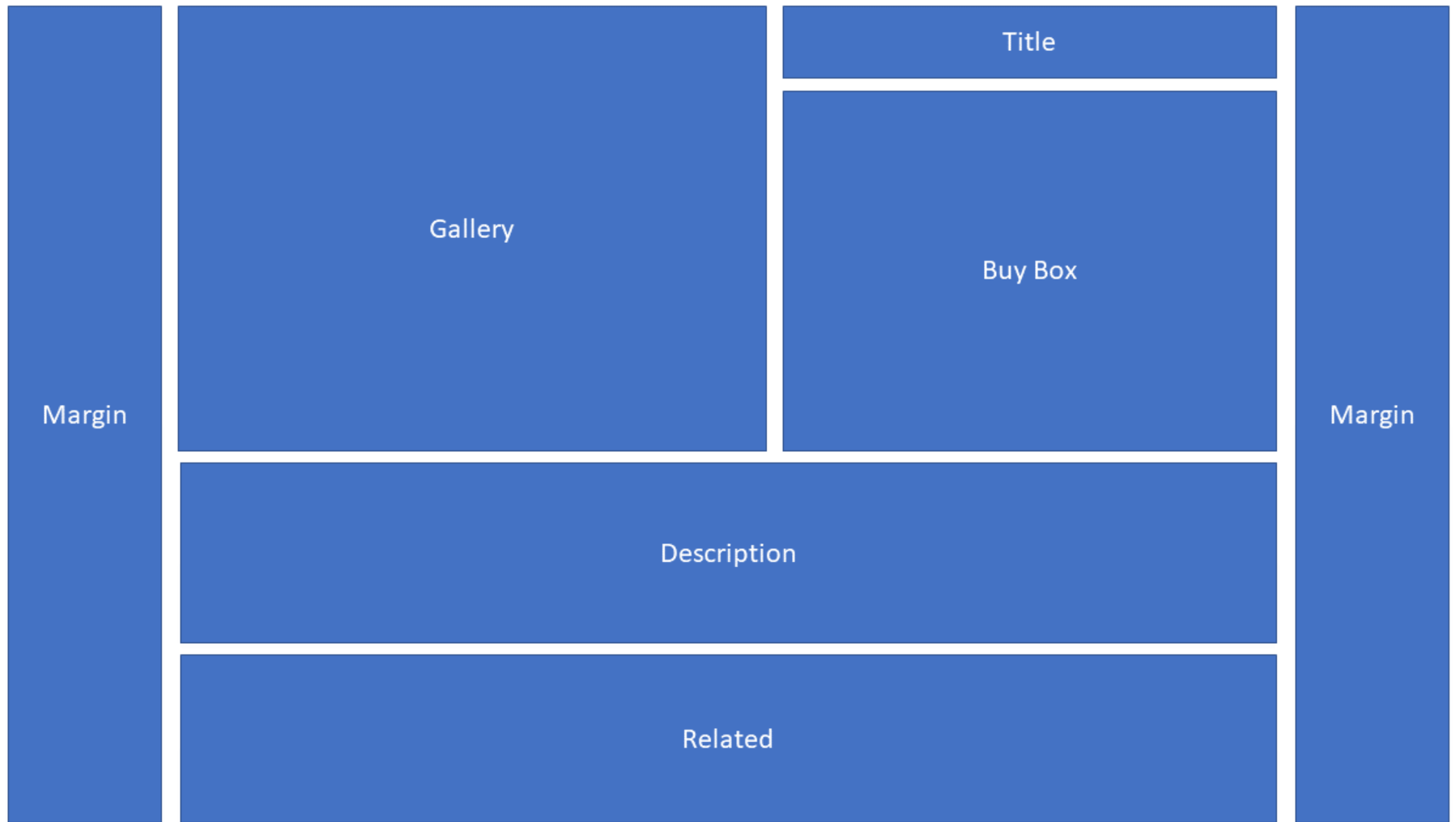
- List of Bootstrap alert classes

Class	Description
<code>.alert</code>	Creates an alert message box
<code>.alert-danger</code>	Red alert. Indicates a dangerous or potentially negative action
<code>.alert-dismissible</code>	Indicates a closable alert box. Together with the <code>.close</code> class, this class is used to close the alert (adds extra padding)
<code>.alert-info</code>	Light-blue alert. Indicates a neutral informative change or action
<code>.alert-link</code>	Used on links inside alerts to provide matching colored links
<code>.alert-success</code>	Green alert. Indicates a successful or positive action
<code>.alert-warning</code>	Yellow alert. Indicates caution should be taken with this action
<code>.close</code>	Styles the close button for the alert message (floats right with a specified font-size, color, etc.)

Bootstrap Grid Example

- Bootstrap Grid
 - Bootstrap Grid system allows you to create different size of columns in your application such as:
 - See Next Page

Bootstrap Grid Example



Bootstrap Grid Example

100 x 60

[Link](#)

[Link](#)

[Link](#)

[Link](#)

600 x 400

300 x 205

300 x 205

300 x 205

300 x 205

300 x 205

300 x 205

300 x 205

300 x 205

600 x 400

100 x 60

100 x 60

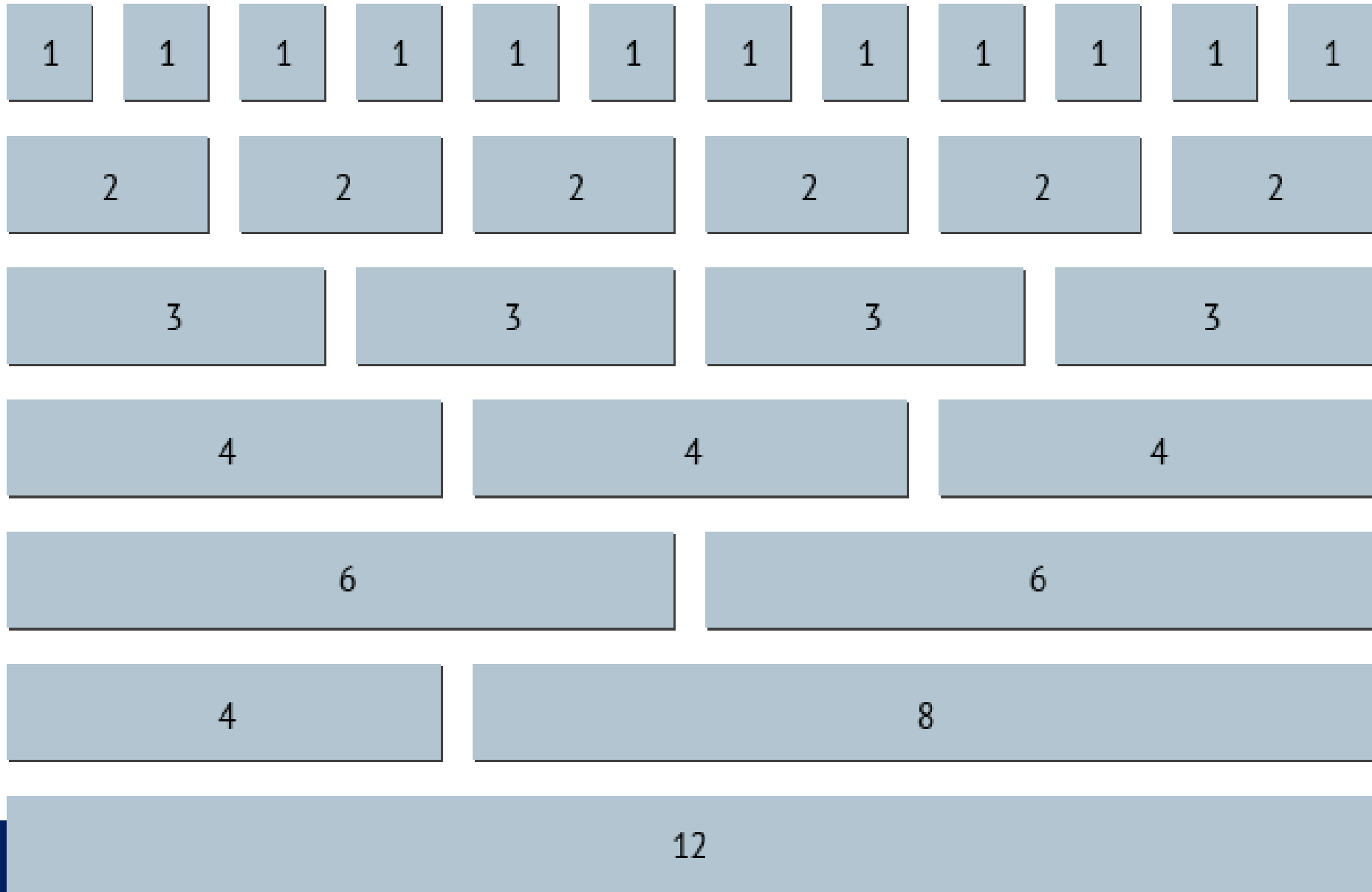
60 x 60

30 x 60

100 x 60



Bootstrap Grid Example



Bootstrap Grid

- Bootstrap Grid Example
 - The Bootstrap grid system has four classes:
 - **xs**
 - for phones - screens less than 768px wide
 - **sm**
 - for tablets - screens equal to or greater than 768px wide
 - **md**
 - for small laptops - screens equal to or greater than 992px wide
 - **lg**
 - for laptops and desktops - screens equal to or greater than 1200px wide
 - The classes above can be combined to create more dynamic and flexible layouts.

Bootstrap Grid Example

- The following table summarizes how the Bootstrap grid system works across multiple devices: (See Next page)

Bootstrap Grid Example

```
<!DOCTYPE html>
<html lang="en">
<head>
  <title>Bootstrap Example</title>
  <meta charset="utf-8">

  <link rel="stylesheet" href="bootstrap.min.css">
  <script src="jquery.min.js"></script>
  <script src="bootstrap.min.js"></script>
</head>
<body>

<div class="container">
  <div class="container">
    <div class="row">
      <div class="col-sm-1" style="background-color:Green;">col-sm-1</div>
      <div class="col-sm-2" style="background-color:red;">col-sm-2</div>
      <div class="col-sm-3" style="background-color:blue;">col-sm-3</div>
      <div class="col-sm-4" style="background-color:grey;">col-sm-4</div>
      <div class="col-sm-5" style="background-color:yellow;">col-sm-5</div>
    </div>
    <div class="row">
      ...
    </div>
  </div>
</div>
```

Bootstrap Grid Example

- Output (code is written on Notepad)



- After resizing page

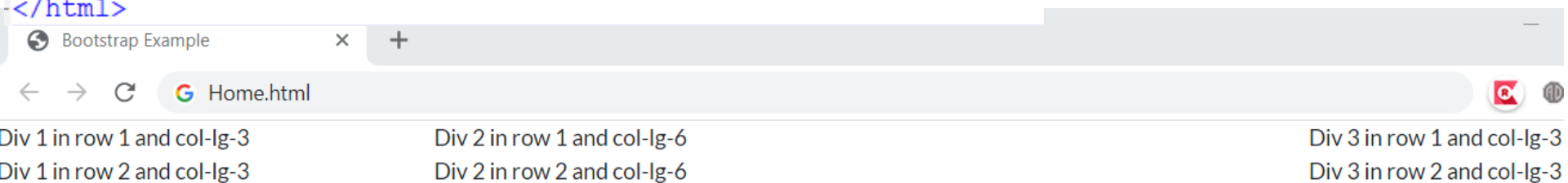


Bootstrap rows and column

- Row and column are bootstrap classes that helps to design a layout
 - Rows
 - Create vertical position with each other
 - Columns
 - Creates horizontal position with each other

Example: Bootstrap rows and column

```
<html>
<head>
  <title>Bootstrap Example</title>
  <link rel="stylesheet" href="bootstrap.min.css">
</head>
<body>
  <div class="row">
    <div class="col-lg-3">Div 1 in row 1 and col-lg-3
    </div>
    <div class="col-lg-6"> Div 2 in row 1 and col-lg-6
    </div>
    <div class="col-lg-3"> Div 3 in row 1 and col-lg-3
    </div>
  </div>
  <div class="row">
    <div class="col-lg-3">Div 1 in row 2 and col-lg-3
    </div>
    <div class="col-lg-6"> Div 2 in row 2 and col-lg-6
    </div>
    <div class="col-lg-3"> Div 3 in row 2 and col-lg-3
    </div>
  </div>
</body>
</html>
```



Example: Bootstrap rows and column

- Imagine the output of following html

```
<html>
  <head>
    <title>Bootstrap Example</title>
    <link rel="stylesheet" href="bootstrap.min.css">
  </head>
  <body>
    <div class="container">
      <Header class="row" style="border:1px solid">
        Thisvis a heading row
      </Header>
      <Section class="row"style="border:1px solid">
        This is section row
      </Section>
      <footer class="row"style="border:1px solid">
        This is footer row
      </footer>
    </div>
  </body>
</html>
```

Thisvis a heading row
This is section row
This is footer row


```

<html>
  <head>
    <title>Bootstrap Example</title>
    <link rel="stylesheet" href="bootstrap.min.css">
  </head>
  <body>
    <div class="container">
      <Header class="row" style="border:1px solid">
        <h1> This is a heading row </h1>
      </Header>
      <Section class="row" style="border:1px solid">
        <div class="col-lg-3">

```

This is a heading row

this is left section	this is center	this is left section
This is footer row		

```

        </div>
      <div class="col-lg-3">
        this is left section
      </div>
    </Section>
    <footer class="row" style="border:1px solid">
      This is footer row
    </footer>
  </div>
</body>
</html>

```

Adding horizontal menu

- **Bootstrap Tabs**

```
<!DOCTYPE html>
<html lang="en">

<head>
  <title>Bootstrap Example</title>
  <link rel="stylesheet" href="bootstrap.min.css">

</head>
<body>

<div class="container">
  <h3>Tabs</h3>
  <ul class="nav nav-tabs">
    <li class="active"><a href="#">Home</a></li>
    <li><a href="#">Menu 1</a></li>
    <li><a href="#">Menu 2</a></li>
    <li><a href="#">Menu 3</a></li>
  </ul>
</div>

</body>
</html>
```

Tabs

Home

Menu 1

Menu 2

Menu 3

Bootstrap CSS Example

• Bootstrap Tabs

```
<!DOCTYPE html>
<html lang="en">

<head>
  <title>Bootstrap Example</title>
  <link rel="stylesheet" href="bootstrap.min.css">
  <script src="jquery.min.js"></script>
  <script src="bootstrap.min.js"></script>
</head>
<body>

<div class="container">
  <h3>Tabs</h3>
  <ul class="nav nav-tabs">
    <li class="active"><a href="#">Home</a></li>
    <li><a href="#">Menu 1</a></li>
    <li><a href="#">Menu 2</a></li>
    <li><a href="#">Menu 3</a></li>
  </ul>
</div>

</body>
</html>
```

Tabs

[Home](#)[Menu 1](#)[Menu 2](#)[Menu 3](#)

Bootstrap CSS Example

- Bootstrap Pills
 - Pills are used to make a horizontal menu.
 - Pills are straight menu that looks like a horizontal table cells.

```

<html>
  <head>
    <title>Bootstrap Example</title>
    <link rel="stylesheet" href="bootstrap.css">
  </head>
  <body>
    <div class="container">
      <Header class="row" style="border:1px solid">
        <ul class="nav nav-pills">
          <li class="nav-item">
            <a class="nav-link active" href="#">Home</a>
          </li>
          <li class="nav-item">
            <a class="nav-link" href="#">Gallery</a>
          </li>
          <li class="nav-item">
            <a class="nav-link" href="#">About</a>

```

Home

Gallery

About

Contact

this is left section

this is center

this is left section

This is footer row

```

    </div>
    <div class="col-lg-3">
      this is left section
    </div>
    <div class="col-lg-6">
      this is center
    </div>
    <div class="col-lg-3">
      this is left section
    </div>
  </Section>
  <footer class="row" style="border:1px solid">
    This is footer row
  </footer>
</div>
</body>
</html>

```

Adding Pagination to the page

- Bootstrap Pagination

```
<div class="container">
  <h2>Pagination - Sizing</h2>
  <p>Add class .pagination-lg for larger blocks or .pagination-sm for smaller blocks.</p>

  <p>Large:</p>
  <ul class="pagination pagination-lg">
    <li><a href="#">1</a></li>
    <li><a href="#">2</a></li>
    <li><a href="#">3</a></li>
    <li><a href="#">4</a></li>
    <li><a href="#">5</a></li>
  </ul>

  <p>Default:</p>
  <ul class="pagination pagination">
    <li><a href="#">1</a></li>
    <li><a href="#">2</a></li>
    <li><a href="#">3</a></li>
    <li><a href="#">4</a></li>
    <li><a href="#">5</a></li>
  </ul>

  <p>Small:</p>
  <ul class="pagination pagination-sm">
    <li><a href="#">1</a></li>
    <li><a href="#">2</a></li>
    <li><a href="#">3</a></li>
    <li><a href="#">4</a></li>
    <li><a href="#">5</a></li>
  </ul>
</div>
```

Bootstrap CSS Example

- Bootstrap Pagination

Pagination - Sizing

Add class `.pagination-lg` for larger blocks or `.pagination-sm` for smaller blocks.

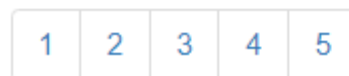
Large:



Default:



Small:



```

<html>
  <head>
    <title>Bootstrap Example</title>
    <link rel="stylesheet" href="bootstrap.css">
  </head>
  <body>
    <div class="container">
      <Header class="row" style="border:1px solid">
      <Section class="row" style="border:1px solid">
        <div class="col-lg-3">
          this is left section
        </div>
        <div class="col-lg-6">
          <div >
            <ul class="pagination pagination-lg">
              <li class="page-item active">
                <a class="page-link" href="#">1</a>

```

Home Gallery About Contact

this is left section

1

2

3

4

5

this is left section

This is footer

```

                <a class="page-link" href="#">4</a>
              </li>
              <li class="page-item">
                <a class="page-link" href="#">5</a>
              </li>
            </ul>
          </div>
        </div>
        <div class="col-lg-3">
          this is left section
        </div>
      </Section>
      <footer class="center row" style="border:1px solid">
    </div>
  </body>
</html>

```


Adding list to the page

- List Group Items

```
<body>

<div class="container">
  <h2>List Group With Badges</h2>
  <ul class="list-group">
    <li class="list-group-item">New <span class="badge">12</span></li>
    <li class="list-group-item">Deleted <span class="badge">5</span></li>
    <li class="list-group-item">Warnings <span class="badge">3</span></li>
  </ul>
</div>

</body>
```

List Group With Badges

New	12
Deleted	5
Warnings	3

Bootstrap CSS Example

- List group items with col-lg class

```
<div class="container">
  <div class="col-lg-3">
    <h2>List Group With Badges</h2>
    <ul class="list-group">
      <li class="list-group-item">New <span class="badge">12</span></li>
      <li class="list-group-item">Deleted <span class="badge">5</span></li>
      <li class="list-group-item">Warnings <span class="badge">3</span></li>
    </ul>
  </div>
<div class="col-lg-3">
</body>
```

List Group With Badges

New	12
Deleted	5
Warnings	3

```

<html>
  <head>
    <title>Bootstrap Example</title>
    <link rel="stylesheet" href="bootstrap.css">
  </head>
  <body>
    <div class="container">
      <Header class="row" style="border:1px solid">
      <Section class="row" style="border:1px solid">
        <div class="col-lg-3">
          <ul class="list-group">
            <li class="list-group-item">Electronics<span class="badge">20</span></li>
            <li class="list-group-item">Bakery<span class="badge">10</span></li>
            <li class="list-group-item">Sea Foods<span class="badge">15</span></li>
          </ul>
        </div>

```

[Home](#)
[Gallary](#)
[About](#)
[Contact](#)

Electronics

20

Bakery

10

Sea Foods

15

1

2

3

4

5

this is left section

This is footer

```

      <li class="page-item">
        <a class="page-link" href="#">5</a>
      </li>
    </ul>
  </div>
</div>
<div class="col-lg-3">
  </Section>
  <footer class="center row" style="border:1px solid">
</div>
</body>
</html>

```

```

<html>
  <head>
    <title>Bootstrap Example</title>
    <link rel="stylesheet" href="bootstrap.css">
  </head>
  <body>
    <div class="container">
      <Header class="row" style="border:1px solid">
      <Section class="row" style="border:1px solid">
        <div class="col-lg-3">
        <div class="col-lg-6">
          <div class="row">
          </div>
          <div class="row">
            <div >
              <ul class="pagination pagination-lg">
                <li class="page-item active">
                  <a class="page-link" href="#">1</a>
                </li>
                <li class="page-item">
                  <a class="page-link" href="#">2</a>
                </li>
                <li class="page-item">
                  <a class="page-link" href="#">3</a>
                </li>
                <li class="page-item">
                  <a class="page-link" href="#">4</a>
                </li>
                <li class="page-item">
                  <a class="page-link" href="#">5</a>
                </li>
              </ul>
            </div>
          </div>
          <div class="col-lg-3">
        </div>
      </Section>
      <footer class="center row" style="border:1px solid">
    </div>
  </body>
</html>

```

Create 2 rows in central column : col-lg-6

```
<html>
<head>
  <title>Bootstrap Example</title>
  <link rel="stylesheet" href="bootstrap.css">
</head>
<body>
<div class="container">
  <Header class="row" style="border:1px solid">
  <Section class="row" style="border:1px solid">
    <div class="col-lg-3">
    <div class="col-lg-6">
      <div class="row">
        <div class="panel panel-primary">
          <div class="panel-heading">
            this is panel heading
          </div>
          <div class="panel-body">
            this is panel body
          </div>
        </div>
      </div>
      <div class="row">
        <div >
          <ul class="pagination pagination-lg">
          </div>
        </div>
      </div>
    <div class="col-lg-3">
      <div class="panel panel-info">
        <div class="panel-heading">
          this is panel heading
        </div>
        <div class="panel-body">
          this is panel body
        </div>
      </div>
    </div>
  </div>
  <div class="center row" style="border:1px solid">
  </div>
</body>
</html>
```

Home

Gallary

About

Contact

Electronics

20

Bakery

10

Sea Foods

15

this is panel heading

this is panel body

this is right section

1

2

3

4

5

This is footer

Electronics

20

Bakery

10

Sea Foods

15

this is panel
heading

this is panel
body

this is right section

1

2

3

4

5

Bootstrap Example

- **Bootstrap CSS Buttons**
 - Provides different types of button design. For example
 - See next slide

Bootstrap CSS Example

Button Colors

Basic Default Primary Success Info Warning Danger [Link](#)

Button Sizes

Large Small XSmall

Active/Disabled Buttons

Info Button Active Info Button Disabled Info Button

Block-level Button

Block-level Button

Button Groups

Apple Samsung Sony

Bootstrap CSS Example

```
<!DOCTYPE html>
<html lang="en">
<head>
  <title>Bootstrap Example</title>
  <link rel="stylesheet" href="bootstrap.min.css">
  <script src="jquery.min.js"></script>
  <script src="bootstrap.min.js"></script>
</head>
<body>
  <div class="container">
    <h2>Button</h2>
    <p>The .btn class adds basic styling to a button:</p>
    <button type="button" class="btn">Basic Button</button>
    <h2>.btn-default</h2>
    <p>Indicates a default/standard button:</p>
    <button type="button" class="btn-default">Basic Default</button>
    <h2>.btn-primary</h2>
    <p>Provides extra visual weight and identifies the primary action in a set of buttons: </p>
    <button type="button" class="btn-primary">Basic Primary</button>
    <h2>.btn-link</h2>
    <p>Makes a button look like a link (will still have button behavior):</p>
    <button type="button" class="btn-link">Basic Link</button>
    <h2>.btn-block</h2>
    <p>Makes a block-level button (spans the full width of the parent element):</p>
    <button type="button" class="btn-block">Basic Block</button>
  </div>
</body>
</html>
```

Button

The `.btn` class adds basic styling to a button:

Basic Button

`.btn-default`

Indicates a default/standard button:

Basic Default

`.btn-primary`

Provides extra visual weight and identifies the primary action in a set of buttons:

Basic Primary

`.btn-link`

Makes a button look like a link (will still have button behavior):

Basic Link

`.btn-block`

Makes a block-level button (spans the full width of the parent element):

Basic Block

Bootstrap CSS Example

- Bootstrap Images
 - Bootstrap image class provides different image styles.
For example

- Circle



- Rounded Corner



Bootstrap CSS Example

- Rounded Corner Images

```
<html lang="en">
<head>
  <link rel="stylesheet" href="bootstrap.min.css">
  <script src="jquery.min.js"></script>
  <script src="bootstrap.min.js"></script>
</head>
<body>

<div class="container">
  <h2>Rounded Corners</h2>
  <p>The .img-rounded class adds rounded corners to an image (not available in IE8):</p>
  
</div>
</body>
</html>
```



Bootstrap Example: Rounded corner img

```
<html lang="en">
<head>
  <link rel="stylesheet" href="bootstrap.min.css">
  <script src="jquery.min.js"></script>
  <script src="bootstrap.min.js"></script>
</head>
<body>
<div class="container">
  <h2>Rounded Corners</h2>
  <p>The .img-rounded class
  
</div>
</body>
</html>
```

Rounded Corners

The .img-rounded class adds rounded corners to an image (not available in IE8):



Bootstrap CSS Example

• Bootstrap Tabs

```
<!DOCTYPE html>
<html lang="en">

<head>
  <title>Bootstrap Example</title>
  <link rel="stylesheet" href="bootstrap.min.css">
  <script src="jquery.min.js"></script>
  <script src="bootstrap.min.js"></script>
</head>
<body>

<div class="container">
  <h3>Tabs</h3>
  <ul class="nav nav-tabs">
    <li class="active"><a href="#">Home</a></li>
    <li><a href="#">Menu 1</a></li>
    <li><a href="#">Menu 2</a></li>
    <li><a href="#">Menu 3</a></li>
  </ul>
</div>

</body>
</html>
```

Tabs

[Home](#)[Menu 1](#)[Menu 2](#)[Menu 3](#)

Bootstrap CSS Example

- **Bootstrap Form**

basic form

Email:

Password:

☐ Remember me

Bootstrap CSS Example

```
<!DOCTYPE html>
<html lang="en">

<head>
  <title>Bootstrap Example</title>
  <link rel="stylesheet" href="bootstrap.min.css">
  <script src="jquery.min.js"></script>
  <script src="bootstrap.min.js"></script>
</head>
<body>

<div class="container">
  <h2>basic form</h2>
  <form action="xyz.com">
    <div class="row">
      <label for="email">Email:</label>
      <input type="email" class="form-control" id="email" placeholder="Enter email" name="email">
    </div>
    <div class="row">
      <label for="pwd">Password:</label>
      <input type="password" class="form-control" id="pwd" placeholder="Enter password" name="pwd">
    </div>
    <div class="row">
      <label><input type="checkbox" name="remember"> Remember me</label>
    </div>
    <button type="submit" class="btn btn-default">Submit</button>
  </form>
</div>

</body>
</html>
```

Bootstrap CSS Example

- If you tried to remove form-control class, then

```
<label for="email">Email:</label>
<input type="email" id="email" placeholder="Enter email" name="email">
</div>
<div class="row">
  <label for="pwd">Password:</label>
  <input type="password" id="pwd" placeholder="Enter password" name="pwd">
</div>
<div class="row">
  <label><input type="checkbox" name="remember"> Remember me</label>
</div>
<button type="submit" class="btn btn-default">Submit</button>
</form>
</div>

</body>
</html>
```

basic form

Email:

Password:

☐ Remember me

Bootstrap CSS Example

- Checkboxes
 - Checkboxes are used if you want the user to select any number of options from a list of preset options.
 - The following example contains three checkboxes. The last option is disabled:

Form control: checkbox

The form below contains three checkboxes. The last option is disabled:

- ☒ Option 1
- ☒ Option 2
- ☐ Option 3

Bootstrap CSS Example

```
<!DOCTYPE html>
<html lang="en">

<head>
  <title>Bootstrap Example</title>
  <link rel="stylesheet" href="bootstrap.min.css">
  <script src="jquery.min.js"></script>
  <script src="bootstrap.min.js"></script>
</head>
<body>

<div class="container">
  <h2>Form control: checkbox</h2>
  <p>The form below contains three checkboxes. The last option is disabled:</p>
  <form>
    <div class="checkbox">
      <label><input type="checkbox" value="">Option 1</label>
    </div>
    <div class="checkbox">
      <label><input type="checkbox" value="">Option 2</label>
    </div>
    <div class="checkbox disabled">
      <label><input type="checkbox" value="" disabled>Option 3</label>
    </div>
  </form>
</div>

</body>
</html>
```

Layouts

Create a Layout using row and column property in bootstrap

row		
Col-lg-3	Col-lg-6	Col-lg-3
row		

Layout

- Create HTML file and download .css, .css.js and jquery.js file as mentioned before