

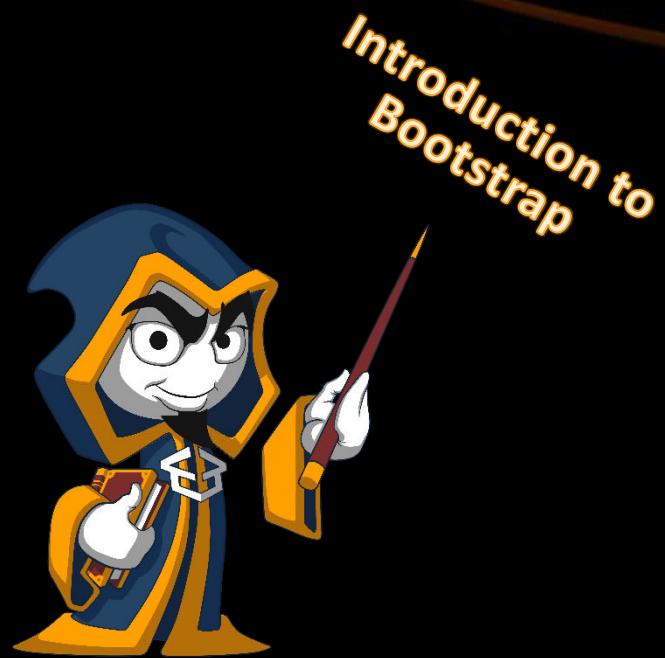
# Introduction to Bootstrap

The most popular front-end component library



**SoftUni Team**  
Technical Trainers

Software University  
<http://softuni.bg>



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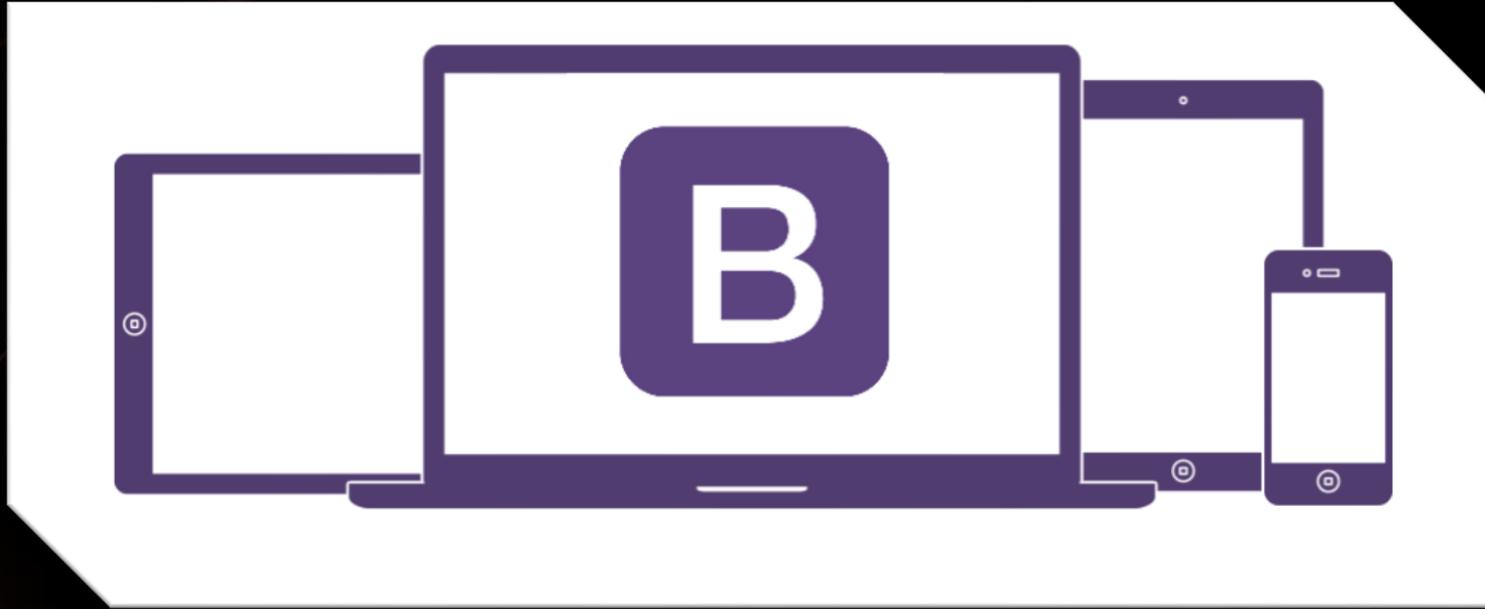
Styling Components  
Styling most Used Components

Have a Question?



sli.do

#front-end



# What is Bootstrap?

Build responsive, mobile-first projects

# What is a Responsive Design?

- Presentation layers that adjust according to the screen size of the different devices



- World's most popular front-end component library
- Open source toolkit for developing with HTML, CSS, and JS
- Works with
  - Responsive grid system
  - Extensive prebuilt components
  - Powerful plugins built on jQuery





# How to Import Bootstrap?

## Import Options

# Include from a BootstrapCDN – CSS

- Sometimes you need to include only a specific module
  - You can do that, using BootstrapCDN
  - Include Bootstrap's compiled and minified **CSS**

Only CSS



```
<link rel="stylesheet"  
      href="https://stackpath.bootstrapcdn.com/bootstrap/4.1.2/  
           css/bootstrap.min.css" />
```

# Include from a BootstrapCDN – JS

- Be sure to place **jQuery** and **Tether** first, as the Bootstrap code depends on them

JavaScript, Popper.js  
and jQuery

```
<script src="https://code.jquery.com/jquery-3.3.1.slim.min.js"></script>
<script
src="https://cdnjs.cloudflare.com/ajax/libs/tether/1.4.0/js/tether.min.js"></script>
<script
src="https://stackpath.bootstrapcdn.com/bootstrap/4.1.2/js/bootstrap.min.js"></script>
```

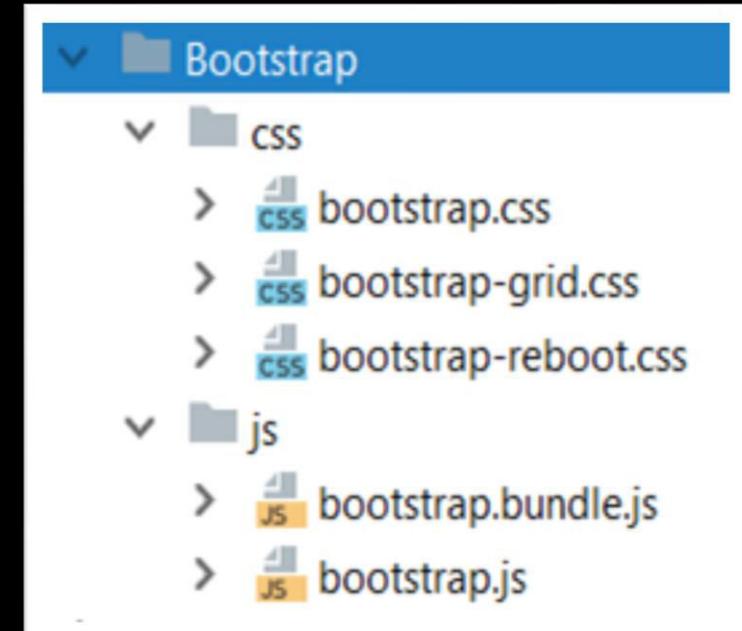
# Download Resources

- Compiled and minified CSS, JavaScript, and fonts. No docs or original source files are included

```
<link rel="stylesheet"  
      href="..../bootstrap/css/bootstrap.min.css"/>
```

```
<script src="..../jquery/jquery.3.2.1.min.js">  
</script>
```

```
<script  
src="..../bootstrap/js/bootstrap.min.js"></script>
```



1 2 3 4 5 6 7 8 9 10 11 12

BOOTSTRAP 4 GRID SYSTEM

# Bootstrap Grid System

Build layouts with grid - twelve column system

# Bootstrap Grid System Demo

index.html

```
...
<div class="container">
  <div class="row">
    <div class="col-xs m-3">Column one</div>
    <div class="col-xs m-3">Column two</div>
    <div class="col-xs m-3">Column three</div>
  </div>
</div>
...

```

Container

Row

Columns



# Bootstrap Containers

- Rows must be placed in containers
  - .container has one fixed width for each screen size in bootstrap (xs,sm,md,lg)
  - .container-fluid expands to fill the available width



Responsive  
pixel width

width:  
100%

# Column Classes

- Determines how many columns to use on different screen sizes

index.html

```
<div class="col-sm-8 col-lg-4">Column one</div>
<div class="col-sm-2 col-lg-4">Column two</div>
<div class="col-sm-2 col-lg-4">Column three</div>
```

- .col-xs: width less than 768px
- .col-sm: width between 768px and 992px
- .col-md: width between 992px and 1200px
- .col-lg: width over 1200px



## ■ Handful of color utility classes

### index.html

```
<p class="text-primary">.text-primary</p>
<p class="text-secondary">.text-secondary</p>
<p class="text-success">.text-success</p>
<p class="text-danger">.text-danger</p>
<p class="text-warning">.text-warning</p>
<p class="text-info">.text-info</p>
<p class="text-light bg-dark">.text-light</p>
<p class="text-dark">.text-dark</p>
<p class="text-muted">.text-muted</p>
<p class="text-white bg-dark">.text-white</p>
```

.text-primary

.text-secondary

.text-success

.text-danger

.text-warning

.text-info

.text-light

.text-dark

.text-muted

.text-white

# Background Color

- Easily set the **background** of an element to any contextual class

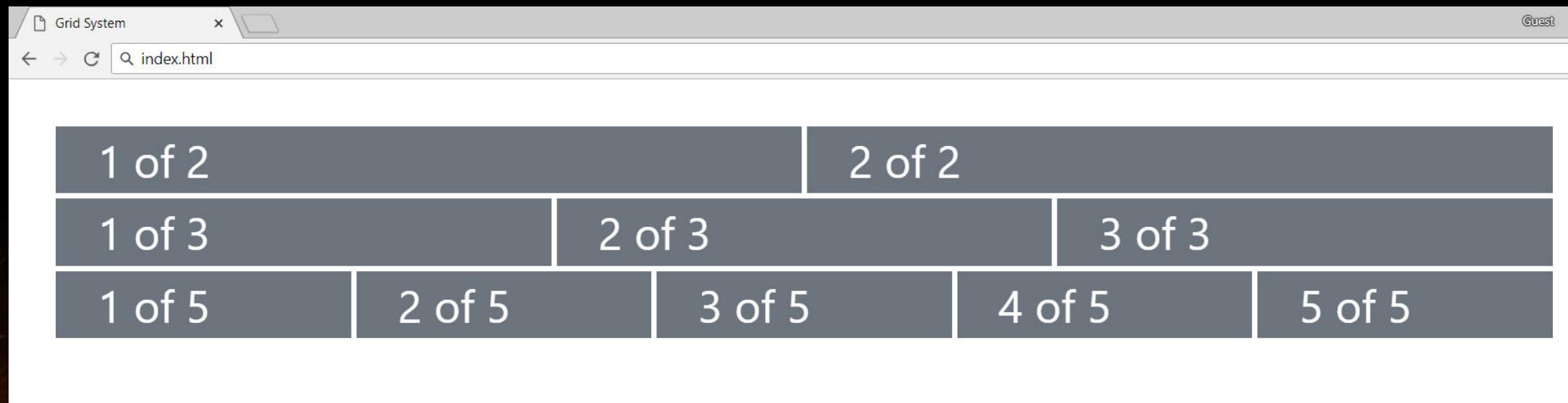
## index.html

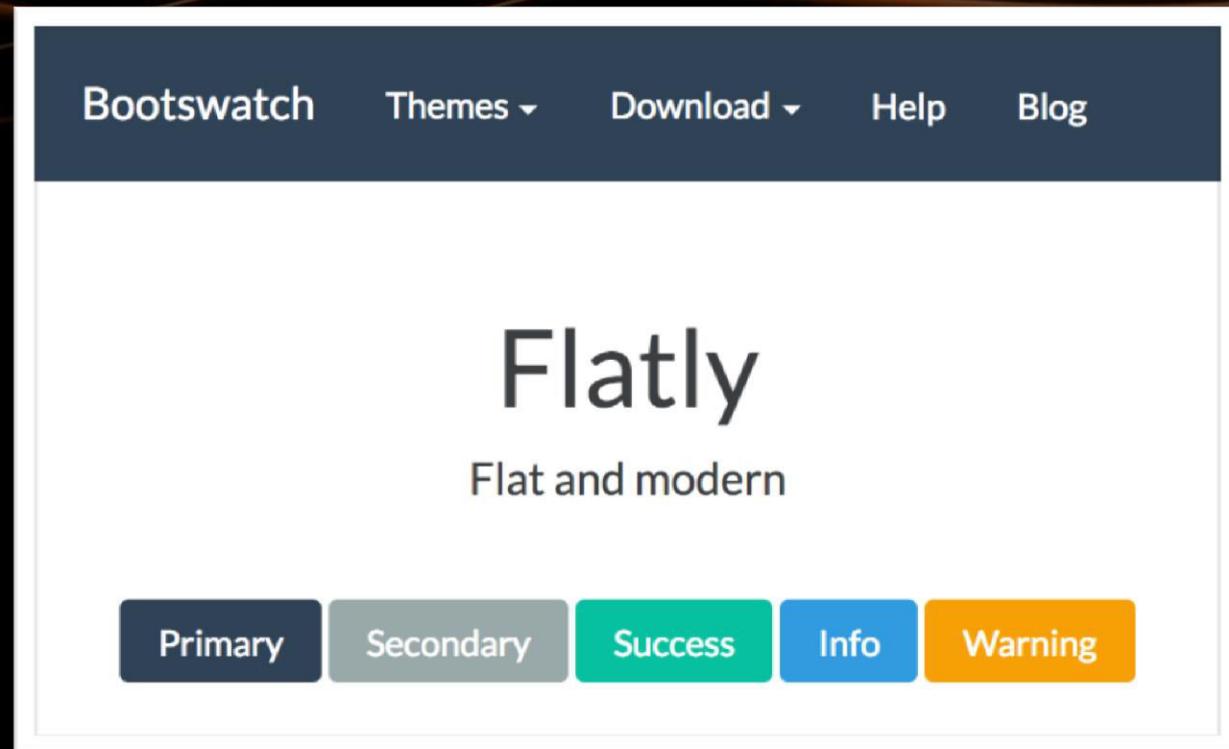
```
<div class="bg-primary text-white">.bg-primary</div>
<div class="bg-secondary text-white">.bg-secondary</div>
<div class="bg-success text-white">.bg-success</div>
<div class="bg-danger text-white">.bg-danger</div>
<div class="bg-warning text-dark">.bg-warning</div>
<div class="bg-info text-white">.bg-info</div>
<div class="bg-light text-dark">.bg-light</div>
<div class="bg-dark text-white">.bg-dark</div>
<div class="bg-white text-dark">.bg-white</div>
```



# Problem: Grid System

- Create a page like the following, using Bootstrap Grid System
  - Use class **row** for every line
  - Define containers with class **col** inside every row



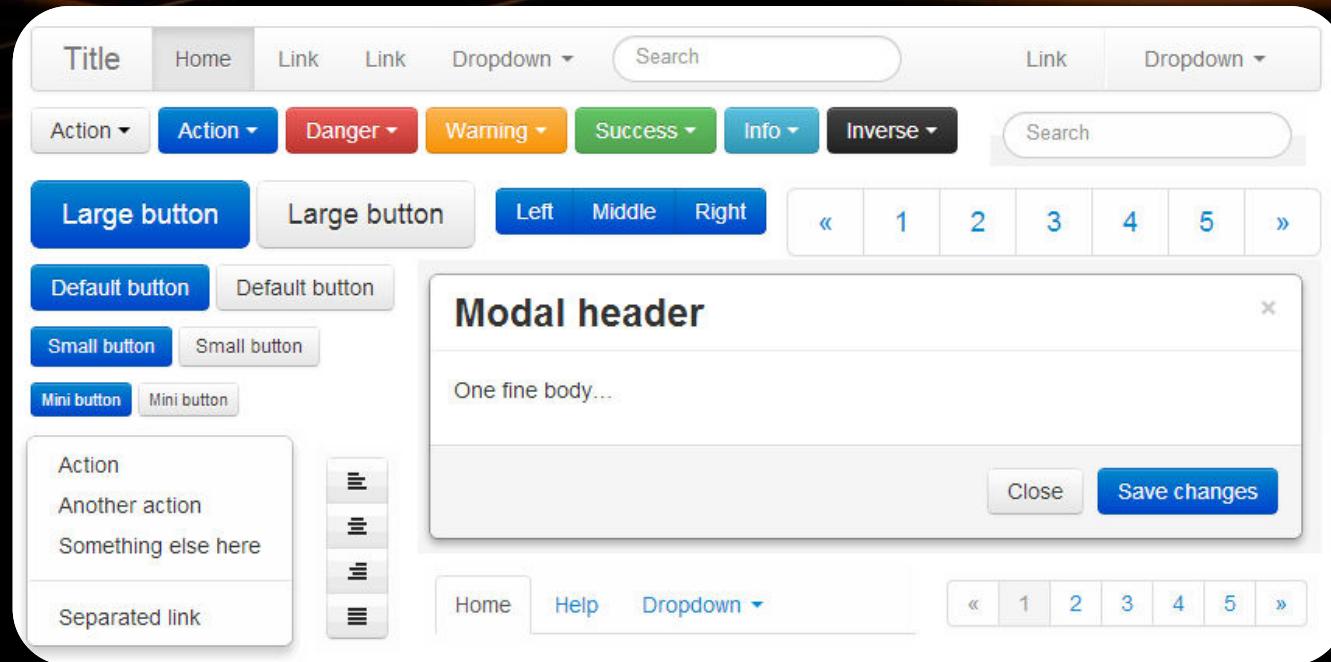


# Theming Bootstrap

Enable the built-in theme to add components

- Bootswatch is a collection of open source themes for Bootstrap
- Usage
  - Download the bootstrap.min.css file
  - Replace Bootstrap's default stylesheet
  - Still include Bootstrap's JavaScript file to have functional dropdowns, modals, etc.





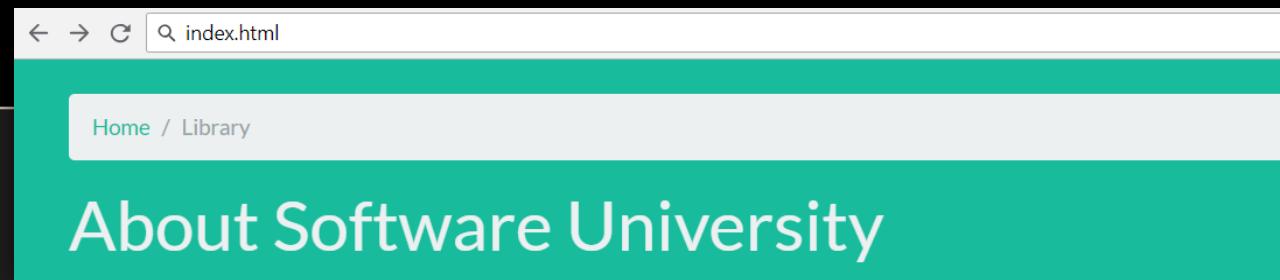
# Bootstrap Components

## Over a dozen reusable components

# Page Header and Breadcrumbs

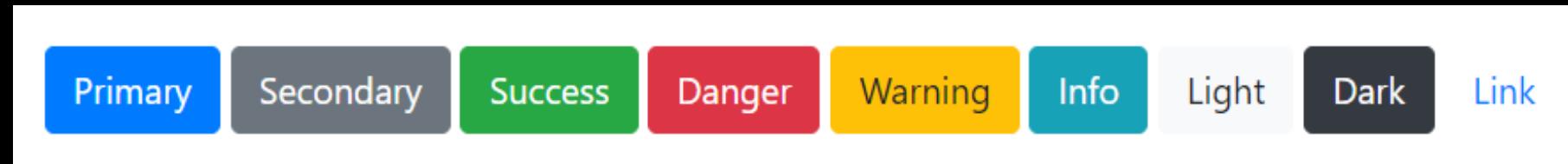
- Indicate the current page's location within a navigational hierarchy

```
<body class="bg-success">
<div class="container m-4">
  <div class="page-header">
    <ol class="breadcrumb">
      <li class="breadcrumb-item"><a href="#">Home</a></li>
      <li class="breadcrumb-item active">Library</li>
    </ol>
    <h1 class="h1 text-light">About Software University</h1>
  </div>
</div>
</body>
```



# Button Groups

- Custom button styles with support for multiple sizes, states, and more



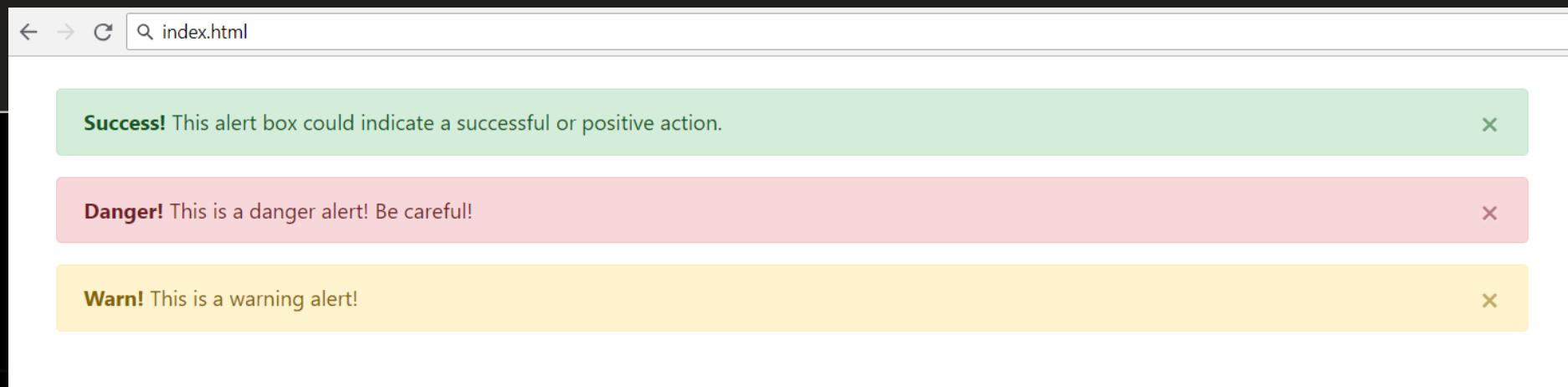
index.html

```
<button type="button" class="btn btn-primary">Primary</button>
<button type="button" class="btn btn-secondary">Secondary</button>
<button type="button" class="btn btn-success">Success</button>
<button type="button" class="btn btn-danger">Danger</button>
. . .
```

Documentation: <https://getbootstrap.com/docs/4.0/components/buttons/>

- Provide contextual feedback messages for typical user actions with the handful of flexible alert messages

```
<div class="alert alert-success alert-dismissible">  
  <a class="close" data-dismiss="alert" aria-label="close">x</a>  
  <strong>Success!</strong>  
  This alert box could indicate a successful or positive action.  
</div>
```



# Nav and Navbar

- Require a wrapping `.navbar`
- Responsive by default
- Come with built-in support for a handful of sub-components
  - `.navbar-brand` for your company, product, or project name
  - `.navbar-nav` for a full-height and lightweight navigation
  - `.nav-item` for every item in navigation



See more at: <https://getbootstrap.com/docs/4.0/components/navbar/>

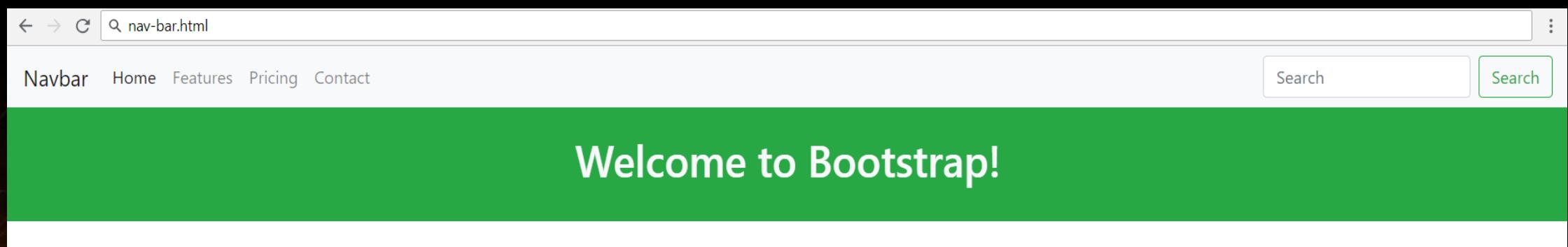
# Nav and Navbar with Bootstrap

```
<nav class="navbar navbar-expand-lg navbar-light bg-light">
  <div class="collapse navbar-collapse">
    <a class="navbar-brand">Logo</a>
    <ul class="navbar-nav mr-auto">
      <li class="nav-item">
        <a class="nav-link" href="#">Home</a>
      </li>
      <li class="nav-item">
        <a class="nav-link" href="#">About</a>
      </li>
      <li class="nav-item">
        <a class="nav-link" href="#">Contact</a>
      </li>
    </ul>
  </div>
</nav>
```

Logo Home About Contact

# Problem: Navigation Bar

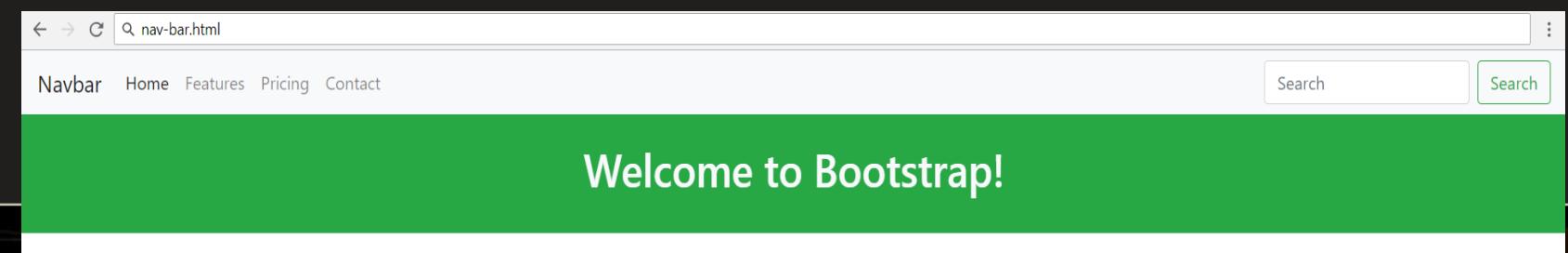
- Create the following navigation bar using Bootstrap
  - Take a look at documentation and examples for Bootstrap's powerful, responsive navbar



The screenshot shows a web browser window with the URL "nav-bar.html" in the address bar. The page features a Bootstrap navigation bar at the top with links for "Navbar", "Home", "Features", "Pricing", and "Contact". To the right of the navigation bar is a search bar with a placeholder "Search" and a green "Search" button. The main content area has a green background and displays the text "Welcome to Bootstrap!" in white.

# Solution: Navigation Bar

```
<div class="container-fluid pl-0 pr-0">
  <nav class="navbar navbar-expand-lg navbar-light bg-light">
    <a class="navbar-brand" href="#">Navbar</a>
    <div class="collapse navbar-collapse">
      <ul class="navbar-nav">
        <li class="nav-item active">
          <a class="nav-link" href="#">Home</a>
        </li>
        <li class="nav-item">
          <a class="nav-link" href="#">Features</a>
        </li>
        . . .
      </ul>
    </div>
  </div>
  . . .
```



# Solution: Navigation Bar (2)

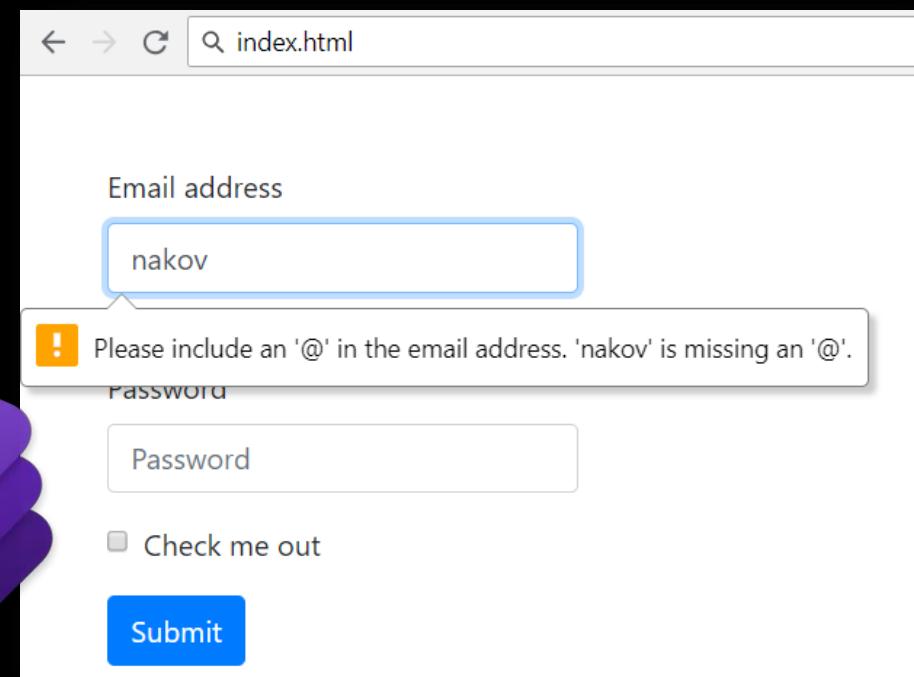
```
...
<form class="form-inline">
    <input class="form-control mr-sm-2" type="search"
        placeholder="Search" aria-label="Search">
    <button class="btn btn-outline-success my-2 my-sm-0"
type="submit">Search</button>
</form>
</nav>
</div>

<div class="container-fluid p-4 bg-success">
    <h1 class="h1 text-center text-light">
        Welcome to Bootstrap!
    </h1>
</div>
```



# Forms

- Form control styles, layout options and custom components for creating a wide variety of forms
- Use **type** attribute on all inputs to take advantage of newer input controls
  - Email verification
  - Number selection

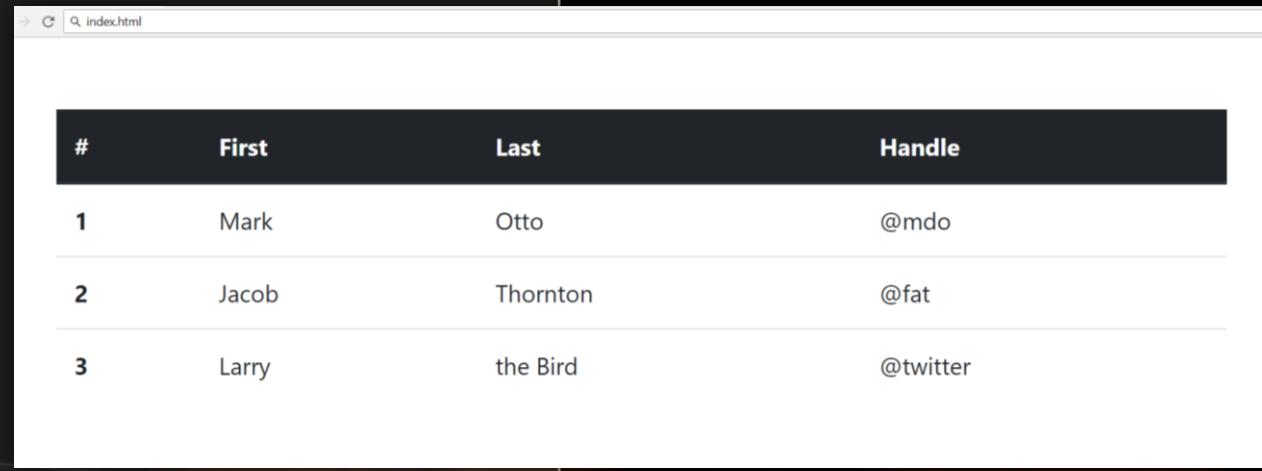


A screenshot of a web browser window titled "index.html". The page contains a form with two fields: "Email address" and "Password". The "Email address" field has the value "nakov" and is highlighted with a blue border. Below it, a red box contains the text "Please include an '@' in the email address. 'nakov' is missing an '@'." The "Password" field is empty and has a light gray border. At the bottom of the form is a "Submit" button.

```
<form>
  <div class="form-group">
    <label for="exampleInputEmail1">Email address</label>
    <input type="email" class="form-control" id="exampleInputEmail1"
aria-describedby="emailHelp" placeholder="Enter email">
    <small id="emailHelp" class="form-text text-muted">We'll never share
your email with anyone else.</small>
  </div>
  <div class="form-group">...</div>
  <div class="form-check mb-3">
    <input type="checkbox" class="form-check-input" id="exampleCheck1">
    <label class="form-check-label" for="exampleCheck1">Check out</label>
  </div>
  <button type="submit" class="btn btn-primary">Submit</button>
</form>
```

# Tables

```
<table class="table">
  <thead class="thead-dark">
    <tr> <th scope="col">#</th>
          <th scope="col">First</th>
          <th scope="col">Last</th>
          <th scope="col">Handle</th> </tr>
  </thead>
  <tbody>
    <tr> <th scope="row">1</th>
          <td>Mark</td>
          <td>Otto</td>
          <td>@mdo</td> </tr>
    <tr> . . . </tr>
    <tr> . . . </tr>
  </tbody>
</table>
```



#	First	Last	Handle
1	Mark	Otto	@mdo
2	Jacob	Thornton	@fat
3	Larry	the Bird	@twitter

# Jumbotron

- Lightweight, flexible component for showcasing hero unit style content

```
<div class="jumbotron">
  <h1 class="display-4">Hello,
  world!</h1>
  <p class="lead">This is a ...</p>
  <hr class="my-4"><p>It uses ...</p>
  <p class="lead">
    <a class="btn btn-primary btn-lg">
      Learn more</a>
  </p>
</div>
```

Hello, world!

This is a simple hero unit, a simple jumbotron-style component for calling extra attention to featured content or information.

It uses utility classes for typography and spacing to space content out within the larger container.

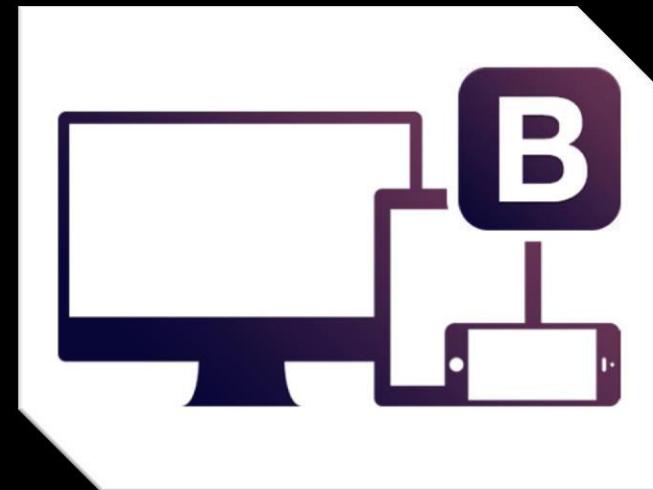
[Learn more](#)

See more at: <https://getbootstrap.com/docs/4.0/components/jumbotron/>

# Summary

- Bootstrap – the most popular HTML, CSS and JS framework
  - Responsive, mobile-first, prevailing
  - Easy to use and to learn it
  - Free and open source
  - Simple Integration
  - 12-column responsive grid
- Cheatsheet to Bootstrap components

Summary





## Questions?



# SoftUni Diamond Partners



**SoftwareGroup**  
*doing it right*



# SoftUni Diamond Partners



LIEBHERR



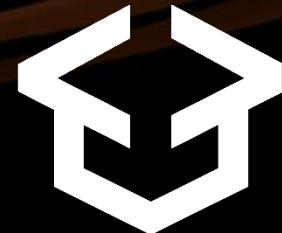
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