

Front-End Development



Bootstrap

Responsive Web Framework



Bootstrap

- Bootstrap is a framework, designed to create responsive feature-rich websites much easier. To take advantage of its features framework, we have to write codes the way Bootstrap wants.
- Bootstrap features: fluid & fixed grid system, carousels, modals, drop-down menu, pop-ups, responsive sites, mobile friendly.
- More informations: <https://getbootstrap.com>



Insert CDN link (*Works Online*)

<http://getbootstrap.com/docs/4.1/getting-started/introduction/>

Setup
#1 Online

CSS

Copy-paste the stylesheet `<link>` into your `<head>` before all other stylesheets to load our CSS.

```
<link rel="stylesheet" href="https://stackpath.bootstrapcdn.com/bootstrap/4.1.3/css/bootstrap.min.css" integrity="sha384-1CnRkOzUE5Ap0trEzerYzL8MQO9/j+ACV1gsY2nDnPRYPH6AWZlveGg+G9+e928">
```

JS

Many of our components require the use of JavaScript to function. Specifically, they require [jQuery](#), [Popper.js](#), and our own JavaScript plugins. Place the following `<script>`s near the end of your pages, right before the closing `</body>` tag, to enable them. jQuery must come first, then Popper.js, and then our JavaScript plugins.

We use [jQuery's slim build](#), but the full version is also supported.

```
<script src="https://code.jquery.com/jquery-3.3.1.slim.min.js" integrity="sha384-q8i/X+965DzO0rT7abK41JStQIAqVgRVzpbz" ></script>
<script src="https://cdnjs.cloudflare.com/ajax/libs/popper.js/1.14.3/umd/popper.min.js" integrity="sha384-ZMP7rVo3mIy" ></script>
<script src="https://stackpath.bootstrapcdn.com/bootstrap/4.1.3/js/bootstrap.min.js" integrity="sha384-ChfqqxuZUCnJSK" ></script>
```

■ *jQuery & Popper.js are included!*



Insert CDN link (*Works Online*)

<http://getbootstrap.com/docs/4.1/getting-started/introduction/>

Setup #1 Online

```
<!DOCTYPE html>
<html>
<head>
```

```
<link rel="stylesheet"
href="https://stackpath.bootstrapcdn.com/bootstrap/4.1.3/css/bootstrap.min.css"
integrity="sha384-MCw98/SFnGE8fJT3GXwEOngsV7Zt27NXFoaoApmYm81iuXoPkFOJwJ8ERdknLPMO"
crossorigin="anonymous">
```

```
<title>Document</title>
</head>
<body>
  <h1>Halo Dunia!</h1>
```

```
<script src="https://code.jquery.com/jquery-3.3.1.slim.min.js" integrity="sha384-q8i/X+965Dz00rT7abK41JStQIAqVgRVzpbzo5smXKp4YfRvH+8abtTE1Pi6jizo"
crossorigin="anonymous"></script>

<script src="https://cdnjs.cloudflare.com/ajax/libs/popper.js/1.14.3/umd/popper.min.js"
integrity="sha384-ZMP7rVo3mIyKv+2+9J3UJ46jBk0WLaUAdn689aCwoqbBJiSnjAK/l8WvCWPIpM49"
crossorigin="anonymous"></script>

<script src="https://stackpath.bootstrapcdn.com/bootstrap/4.1.3/js/bootstrap.min.js"
integrity="sha384-ChfqqxuZUCnJSK3+MXmPNIyE6ZbWh2IMqE241rYiqJxyMiZ6OW/JmZQ5stwEULTy"
crossorigin="anonymous"></script>
```

```
</body>
</html>
```

B

Download locally (*Works Offline*).

*First, download Bootstrap then extract it. Insert its folders (**css** & **js**) to your project dir & link it to your HTML file.*

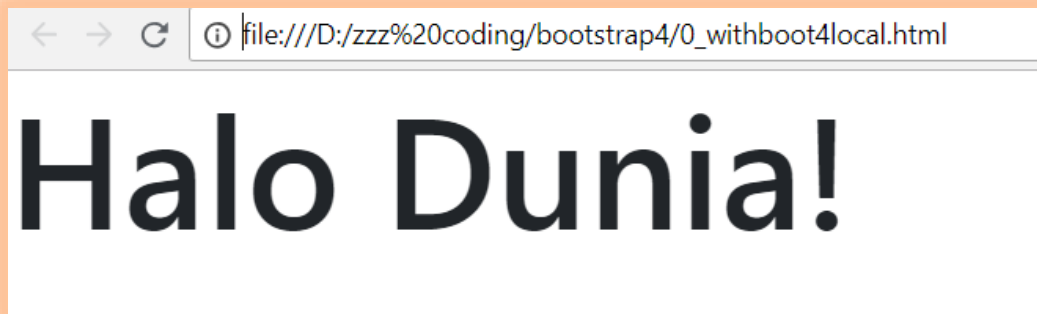
Setup #2 Offline

■ *jQuery & Popper.js are not included yet!*

```
<html>
<head>
  <link rel="stylesheet" type="text/css"
    href="css/bootstrap.min.css">
  <title>Tes Bootstrap 4</title>
</head>
<body>
  <h1>Halo Dunia!</h1>
  <script type="text/javascript"
    src="js/bootstrap.min.js"></script>
</body>
</html>
```

Your 1st Bootstrap Code

```
<html>
<head>
  <link rel="stylesheet" type="text/css"
  href="css/bootstrap.min.css">
  <title>Tes Bootstrap 4</title>
</head>
<body>
  <h1>Halo Dunia!</h1>
  <script type="text/javascript"
  src="js/bootstrap.min.js"></script>
</body>
</html>
```



Containers

- **Containers** surround the whole section of rows & columns. Rows represent a horizontal line of elements, and columns represent the horizontal space that element take up in a row.
- **Fixed Container:** has a fixed width, which changes at certain breakpoints & has built-in padding of 15px all the way around.
- **Fluid Container:** has a fluid width, which stretches to 100% of it's parent element & has built-in padding of 15px all the way around.

Container

*It's a better way to
insert your elements
to a container.*

```
<head>
  <style>
    .container{
      background: yellow;
      height: 100px;
    }
    .container-fluid{
      background: red;
      height: 100px;
    }
  </style>
</head>
<body>
  <div class="container">Ini Fixed</div>
  <div class="container-fluid">Ini Fluid</div>
</body>
```

Ini Fixed

Ini Fluid

Spacing Notation

m - set margin
p - set padding

t - set margin-top or padding-top

b - set margin-bottom or padding-bottom

l - set margin-left or padding-left

r - set margin-right or padding-right

x - set both *-left and *-right

y - set both *-top and *-bottom

blank - set a margin/padding on all 4 sides of the element

0 - eliminate the margin or padding by setting it to 0

1 - set the margin or padding to \$spacer * .25

2 - set the margin or padding to \$spacer * .5

3 - set the margin or padding to \$spacer

4 - set the margin or padding to \$spacer * 1.5

5 - set the margin or padding to \$spacer * 3

auto - for classes that set the margin to auto

```
<div class="pt-5 mb-5">Halo</div>
```

Grid System

- Bootstrap comes with a 12 columns grid system. We can add our content into its 'rows' & 'columns' using Bootstrap's CSS classes.



xs < 768px

Andi
Budi
Caca
Deni
Euis
Fafa

Rows & Columns

sm < 992px

Andi	Budi
Caca	Deni
Euis	Fafa

md < 1200px

Andi	Budi	Caca
Deni	Euis	Fafa

lg >= 1200px

Andi	Budi	Caca	Deni	Euis	Fafa
------	------	------	------	------	------

```

<head>
<style>
    .gaya{text-align:center; background:lightblue; padding:20px}
    .gaya:nth-last-child(odd){background: grey}
    .container-fluid{height: 200px}
</style>
</head>
<body>
<div class="container-fluid">
<div class="row">
<div class="col-xs-12 col-sm-6 col-md-4 col-lg-2 gaya">
Andi</div>
<div class="col-xs-12 col-sm-6 col-md-4 col-lg-2 gaya">
Budi</div>
<div class="col-xs-12 col-sm-6 col-md-4 col-lg-2 gaya">
Caca</div>
<div class="col-xs-12 col-sm-6 col-md-4 col-lg-2 gaya">
Deni</div>
<div class="col-xs-12 col-sm-6 col-md-4 col-lg-2 gaya">
Euis</div>
<div class="col-xs-12 col-sm-6 col-md-4 col-lg-2 gaya">
Fafa</div>
</div>
</div>
</body>

```

Rows & Columns

Heading

```
<div class="container">  
  <h1>Heading 1</h1>  
  <h2>Heading 2</h2>  
  <h3>Heading 3</h3>  
  
  <p class="h4">  
    Heading 4</p>  
  <p class="h5">  
    Heading 5</p>  
  <p class="h6">  
    Heading 6</p>  
</div>
```

Heading 1

Heading 2

Heading 3

Heading 4

Heading 5

Heading 6

Secondary Heading

```
<h3>  
  Purwadhika  
  <small class="text-muted">  
    Startup & Coding School  
  </small>  
</h3>
```

Purwadhika Startup & Coding School

Display Heading

```
<h1>Heading 1</h1>
```

```
<h1 class="display-1">  
  Display 1</h1>
```

```
<h1 class="display-2">  
  Display 2</h1>
```

```
<h1 class="display-3">  
  Display 3</h1>
```

```
<h1 class="display-4">  
  Display 4</h1>
```

Heading 1

Display 1

Display 2

Display 3

Display 4

Lead Paragraph

<p>

Lorem ipsum dolor amet...

</p>

<p class="lead">

Lorem ipsum dolor amet...

</p>

Lorem ipsum, dolor sit amet consectetur adipisicing elit. Ad a, quo magni ipsum accusamus, fugiat amet eius unde laborum recusandae sed omnis quaerat corrupti dolor minima explicabo. Molestiae, accusamus magnam!

Lorem, ipsum dolor sit amet consectetur adipisicing elit. Reprehenderit nihil odit doloribus earum inventore deserunt reiciendis vitae repudiandae nisi? Tempora ducimus hic, pariatur ex expedita saepe eos nam sint impedit.

Text Align

```
<p class="text-left">Teks di kiri</p>  
<p class="text-center">Teks di tengah</p>  
<p class="text-right">Teks di kanan</p>  
<p class="text-justify">Lorem ipsum...</p>
```

Teks di kiri

Teks di tengah

Teks di kanan

Lorem, ipsum dolor sit amet consectetur adipisicing elit. Repellat saepe blanditiis amet magni eos ipsa, dolorum accusamus sit fugit modi, dicta accusantium doloremque, odit assumenda? Vitae porro recusandae ratione? Cupiditate.

Text Transform

ini lowercase

INI UPPERCASE

Ini Capitalize

ini primary

ini secondary

ini success

ini danger

ini warning

ini info

```
<p class="text-lowercase">INI LOWERCASE</p>
```

```
<p class="text-uppercase">ini uppercase</p>
```

```
<p class="text-capitalize">ini capitalize</p>
```

```
<p class="text-primary">ini primary</p>
```

```
<p class="text-secondary">ini secondary</p>
```

```
<p class="text-success">ini success</p>
```

```
<p class="text-danger">ini danger</p>
```

```
<p class="text-warning">ini warning</p>
```

```
<p class="text-info">ini info</p>
```

Table

```
<table class="table">
```

```
<thead>
```

```
<tr>
```

```
<th>No.</th>
```

```
<th>Nama</th>
```

```
<th>Usia</th>
```

```
<th>Kota</th>
```

```
</tr>
```

```
</thead>
```

```
<tbody>
```

```
<tr>
```

```
<td>1.</td>
```

```
<td>Andi</td>
```

```
<td>20 th</td>
```

```
<td>Jakarta</td>
```

```
</tr>
```

```
</tbody>
```

```
</table>
```

No.	Nama	Usia	Kota
1.	Andi	20 th	Jakarta
2.	Budi	21 th	Bandung

```
<table class="table table-dark">
```

No.	Nama	Usia	Kota
1.	Andi	20 th	Jakarta
2.	Budi	21 th	Bandung

Table Head

```
<thead class="thead-light">
```

```
<tr>
```

```
<th>No.</th>
```

```
<th>Nama</th>
```

```
<th>Usia</th>
```

```
<th>Kota</th>
```

```
</tr>
```

```
</thead>
```

No.	Nama	Usia	Kota
1.	Andi	20 th	Jakarta
2.	Budi	21 th	Bandung

```
<thead class="thead-dark">
```

```
<tr>
```

```
<th>No.</th>
```

```
<th>Nama</th>
```

```
<th>Usia</th>
```

```
<th>Kota</th>
```

```
</tr>
```

```
</thead>
```

No.	Nama	Usia	Kota
1.	Andi	20 th	Jakarta
2.	Budi	21 th	Bandung

Image

```
<div class="container-fluid">  
<div class="row">
```

```
<div class="gaya col-xs-4 col-md-4 col-xl-4 col-sm-4">  
  
</div>
```

```
<div class="gaya col-xs-4 col-md-4 col-xl-4 col-sm-4">  
  
</div>
```

```
<div class="gaya col-xs-4 col-md-4 col-xl-4 col-sm-4">  
  
</div>
```

```
</div>  
</div>
```



Alert

```
<div class="alert alert-primary"  
role="alert">  
  Ini alert primary!  
</div>
```

```
<div class="alert alert-info"  
role="alert">  
  Ini alert secondary!  
</div>
```

```
<div class="alert alert-success"  
role="alert">  
  Ini alert success!  
</div>
```

Ini alert primary!

Ini alert secondary!

Ini alert success!

Ini alert danger!

Ini alert warning!

Ini alert info!

Ini alert light!

Button

Primary

Secondary

Success

Danger

Warning

Info

Light

Dark

```
<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 Outline

Primary

Secondary

Success

Danger

Warning

Info

Light

Dark

```
<button type="button"  
class="btn btn-outline-primary">  
    Primary  
</button>
```

```
<button type="button"  
class="btn btn-outline-secondary">  
    Secondary  
</button>
```

```
<button type="button"  
class="btn btn-outline-dark">  
    Dark  
</button>
```


Button Size

Large button

Large button

Small button

Small button

```
<button type="button"  
class="btn btn-primary btn-lg">  
    Large button  
</button>
```

```
<button type="button"  
class="btn btn-secondary btn-lg">  
    Large button  
</button>
```

```
<button type="button"  
class="btn btn-primary btn-sm">  
    Small button  
</button>
```

Group Button



```
<div class="btn-group">
```

```
  <button type="button" class="btn btn-info">  
  << </button>
```

```
  <button type="button" class="btn btn-info">  
  1 </button>
```

```
  <button type="button" class="btn btn-info">  
  2 </button>
```

```
  <button type="button" class="btn btn-info">  
  3 </button>
```

```
  <button type="button" class="btn btn-info">  
  >> </button>
```

```
</div>
```

Badge

Primary

Secondary

Success

Danger

Warning

Info

Light

Dark

```
<span class="badge badge-primary">  
    Primary  
</span>
```

```
<span class="badge badge-secondary">  
    Secondary  
</span>
```

```
<span class="badge badge-success">  
    Success  
</span>
```

Notification Badge



```
<button type="button"  
class="btn btn-info">
```

Kotak Masuk

```
<span class="badge badge-light">
```

4

```
</span>
```

```
</button>
```

Dropdown

```
<button type="button"
class="dropdown-toggle"
data-toggle="dropdown">
  Kategori
</button>
```

```
<div class="dropdown-menu">
  <a class="dropdown-item">Makanan</a>
  <a class="dropdown-item">Minuman</a>
  <a class="dropdown-item">Cemilan</a>
</div>
```



Split Dropdown

Katalog

Outfit Pria

Outfit Wanita

Outfit Anak

Selengkapnya...

```
<div class="btn-group">
  <button type="button"
    class="btn btn-primary"> Katalog
  </button>

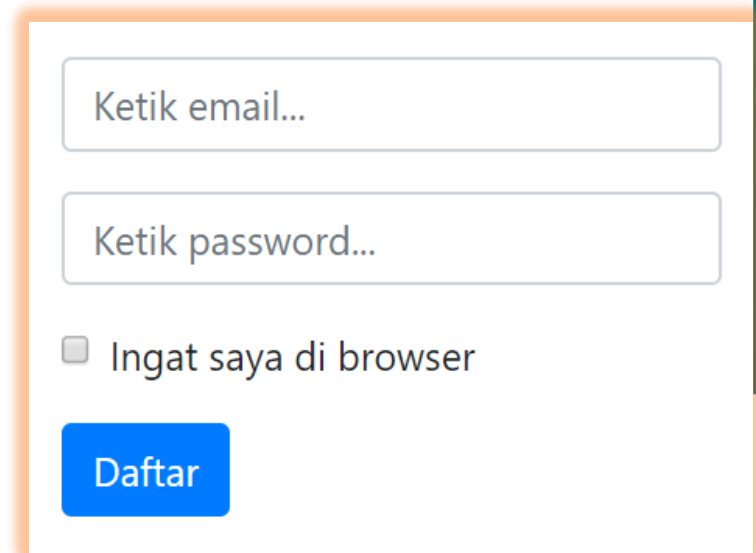
  <button type="button"
    class="btn btn-primary
    dropdown-toggle dropdown-toggle-split"
    data-toggle="dropdown">
  </button>

  <div class="dropdown-menu">
    <a class="dropdown-item"> Outfit Pria </a>
    <a class="dropdown-item"> Outfit Wanita </a>
    <a class="dropdown-item"> Outfit Anak </a>
    <div class="dropdown-divider"></div>
    <a class="dropdown-item"> Selengkapnya... </a>
  </div>
</div>
```

Forms

```
<form>
  <div class="form-group">
    <input type="email"
      class="form-control"
      placeholder="Ketik email...">

    <input type="password"
      class="form-control"
      placeholder="Ketik sandi...">
  </div>
```



Ketik email...

Ketik password...

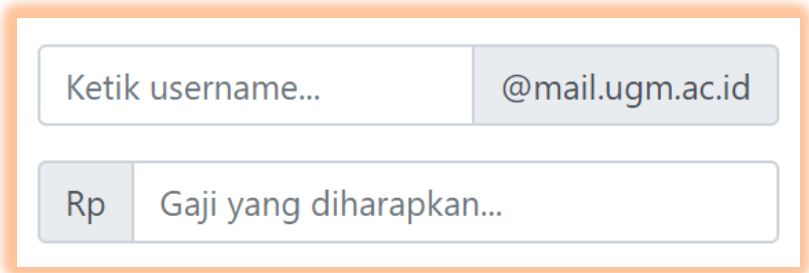
☐ Ingat saya di browser

Daftar

```
<div class="form-group form-check">
  <input type="checkbox" class="form-check-input">
  <label class="form-check-label">
    Ingat saya di browser</label>
</div>

<button type="submit" class="btn btn-primary">
  Daftar</button>
</form>
```

Input Group



Ketik username... @mail.ugm.ac.id

Rp Gaji yang diharapkan...

```
<div class="input-group mb-3">
  <input type="text" class="form-control"
    placeholder="Ketik username...">
  <div class="input-group-append">
    <span class="input-group-text">
      @mail.ugm.ac.id</span>
    </div>
  </div>
```

```
<div class="input-group mb-3">
  <div class="input-group-prepend">
    <span class="input-group-text">Rp</span>
  </div>
  <input type="text" class="form-control"
    placeholder="Gaji yang diharapkan...">
</div>
```


Tooltip

```
<button  
type="button"  
class="btn btn-primary"  
data-toggle="tooltip"  
data-placement="bottom"  
title="ini tooltip!">
```



Hover Sini!

```
</button>
```

Hover sini!

ini tooltip, kak!

Tooltip

Insert a jQuery function:

```
• • • • •  
<script>  
  $(function() {  
    $(' [data-toggle="tooltip"]').tooltip()  
  })  
</script>  
<body>
```

Jumbotron

Hello Netizens!

Welcome to the internet world! Feel the awesomeness!

```
<div class="jumbotron">
  <div class="container">
    <h1 class="display-4">
      Hello Netizens!</h1>
    <p class="lead">
      Welcome to the internet world!
    </p>
  </div>
</div>
```

Modal

Buka modal

Ini judul modal

X

Ini modal body

Tutup

Modal

```
<button type="button" class="btn btn-primary"
data-toggle="modal" data-target="#lin">
  Buka modal
</button>
<div class="modal fade" id="lin" tabindex="-1" role="dialog">
  <div class="modal-dialog" role="document">
    <div class="modal-content">
      <div class="modal-header">
        <h5 class="modal-title">Ini judul modal</h5>
        <button type="button" class="close" data-dismiss="modal">
          <span>x</span>
        </button>
      </div>
      <div class="modal-body">
        <p>Ini modal body</p>
      </div>
      <div class="modal-footer">
        <button type="button" class="btn btn-danger"
          data-dismiss="modal">
          Tutup</button>
      </div>
    </div>
  </div>
</div>
</div>
```

Insert a jQuery function:

```
<script>
$( '#myModal' ).on( 'shown.bs.modal', function(){
    $( '#myInput' ).trigger( 'focus' )
})
</script>
```

Buka modal

Ini judul modal

X

Ini modal body

Tutup

Basic Card

```
<div class="card" style="max-width: 300px;">
```

```
<div class="card-header text-white bg-primary">  
  Sekilas Info</div>
```

```
<div class="card-body">
```

```
<h5 class="card-title">  
  Hari Ini Rupiah Menguat</h5>
```

```
<p class="card-text">  
  Lorem ipsum</p>
```

```
</div>
```

```
</div>
```

Sekilas Info

Hari Ini Rupiah Menguat

Lorem ipsum dolor sit amet
consectetur adipisicing elit. Debitis,
tenetur recusandae ipsum
consequatur ullam quo iusto.

Panel Card

```
<div class="card"
  style="width: 300px;">

  <div class="card-body">

    <h5 class="card-title">
      Capt. Indonesia</h5>

    <p class="card-text">
      Lorem ipsum</p>

    <a class="btn btn-info">
      Klik sini!</a>

  </div>
</div>
```



Captain Indonesia

Lorem, ipsum dolor sit amet
consectetur adipisicing elit.
Voluptatem iusto molestiae maxime
earum nemo et, aliquid, neque optio
velit ipsum.

Klik sini!

[Beranda](#)[Blog](#)[Galeri](#)[Tentang](#)

Navigation

```
<ul class="nav">
  <li class="nav-item">
    <a class="nav-link active" href="#">
      Beranda
    </a>
  </li>
  <li class="nav-item">
    <a class="nav-link" href="#">
      Galeri
    </a>
  </li>
  <li class="nav-item">
    <a class="nav-link" href="#">
      Tentang
    </a>
  </li>
</ul>
```

Nav-Tabs

```
<ul class="nav nav-tabs">
  <li class="nav-item">
    <a class="nav-link active" href="#">
      Beranda
    </a>
  </li>
  <li class="nav-item">
    <a class="nav-link" href="#">
      Galeri
    </a>
  </li>
  <li class="nav-item">
    <a class="nav-link" href="#">
      Tentang
    </a>
  </li>
</ul>
```

Beranda

Blog

Galeri

Tentang

Nav-Pills

```
<ul class="nav nav-pills">
  <li class="nav-item">
    <a class="nav-link active" href="#">
      Beranda
    </a>
  </li>
  <li class="nav-item">
    <a class="nav-link" href="#">
      Galeri
    </a>
  </li>
  <li class="nav-item">
    <a class="nav-link" href="#">
      Tentang
    </a>
  </li>
</ul>
```

Beranda

Blog

Galeri

Tentang

Nav-Tabs & Nav-Pills

Insert a jQuery function:

```
<script>

$(".nav-link").click(function(){
    $(".nav-link").removeClass("active");
    $(this).addClass("active");
});

</script>
```

Carousel

```
<div class="carousel" data-ride="carousel">
  <div class="carousel-inner">
    <div class="carousel-item active">
      
    </div>
    <div class="carousel-item">
      
    </div>
    <div class="carousel-item">
      
    </div>
  </div>
</div>
```



Carousel Slide

```
<div class="carousel slide" data-ride="carousel">
  <div class="carousel-inner">
    <div class="carousel-item active">
      
    </div>
    <div class="carousel-item">
      
    </div>
    <div class="carousel-item">
      
    </div>
  </div>
</div>
```



← slide

Carousel Fade

```
<div class="carousel slide carousel-fade" data-ride="carousel">
  <div class="carousel-inner">
    <div class="carousel-item active">
      
    </div>
    <div class="carousel-item">
      
    </div>
    <div class="carousel-item">
      
    </div>
  </div>
</div>
```

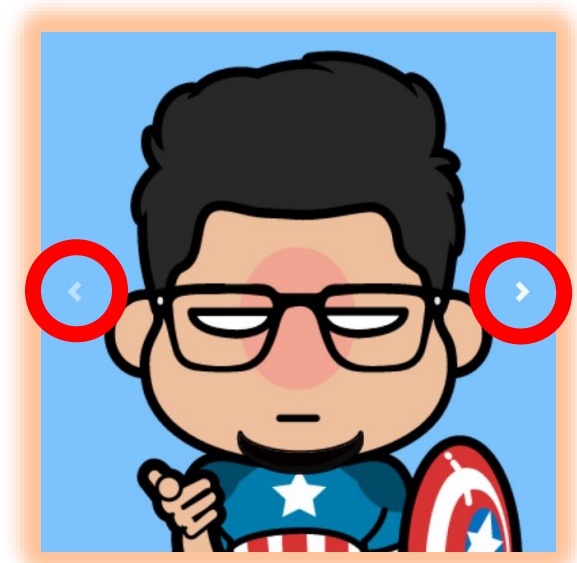


fade transition

Carousel Control #1

```
<div id="lintang" class="carousel slide"
data-ride="carousel">
  <div class="carousel-inner">
    <div class="carousel-item active">
      
    </div>
    <div class="carousel-item">
      
    </div>
    <div class="carousel-item">
      
    </div>
  </div>
</div>
```

.



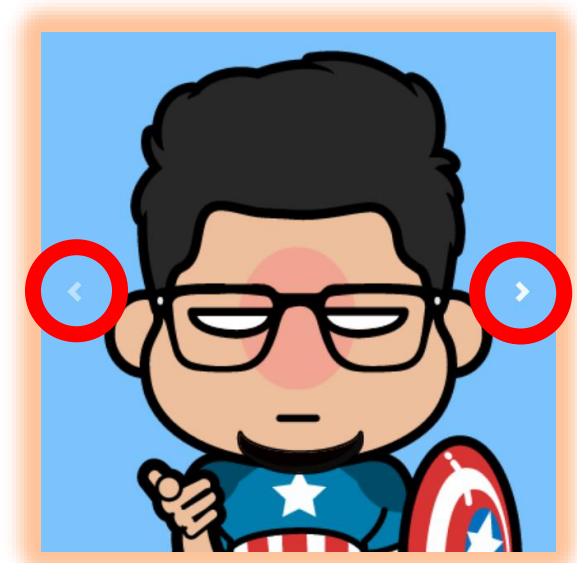
Carousel Control #2

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```
<a class="carousel-control-prev"
href="#lintang" role="button"
data-slide="prev">
  <span
    class="carousel-control-prev-icon">
  </span>
</a>
```

```
<a class="carousel-control-next"
href="#lintang" role="button"
data-slide="next">
  <span
    class="carousel-control-next-icon">
  </span>
</a>
```

```
</div>
```



Carousel Indicator

```
<div id="lintang" class="carousel slide" data-ride="carousel">
```

```
<ol class="carousel-indicators">  
  <li data-target="#lintang" data-slide-to="0" class="active"></li>
```

```
  <li data-target="#lintang" data-slide-to="1"></li>
```

```
  <li data-target="#lintang" data-slide-to="2"></li>  
</ol>
```

```
<div class="carousel-inner">
```

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Front-End Development



Bootstrap

Responsive Web Framework