

# Bootstrap



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Jadson Santos  
Computing Engineer

# What is Bootstrap?

- Bootstrap is a free front-end framework (HTML and CSS) for faster and easier web development
- Bootstrap is famous for being developed with components that have the ability to follow the property of responsive designs
  - Responsive Design is about using CSS and HTML to resize, hide, shrink, enlarge, or move the content to make it look good on any screen
  - Responsive Design allow your page works for computer, tablets and mobile phones.

# What is Bootstrap?

- In other words, bootstrap is a collection of CSS classes and JavaScript functions the you get ready to use and will not worry about write code like this:

```
.glyphicon {  
  position: relative;  
  top: 1px;  
  display: inline-block;  
  font-family: 'Glyphicons Halflings';  
  font-style: normal;  
  font-weight: 400;  
  line-height: 1;  
  -webkit-font-smoothing: antialiased;  
  -moz-osx-font-smoothing: grayscale  
}  
  
,,  
(jQuery), +function(a) {  
  "use strict";  
  function b(b) {  
    return this.each(function() {  
      var c = a(this),  
          e = c.data("bs.alert");  
      e || c.data("bs.alert", e = new d(this)), "string" == typeof b && e[b].call(c)  
    })  
  }  
  var c = '[data-dismiss="alert"]',  
      d = function(b) {  
        a(b).on("click", c, this.close)  
      };  
  ;
```

# First Bootstrap Page

- Include the **HTML5 doctype** at the beginning of the page, along with the **lang** attribute and the correct **character set**

```
<!DOCTYPE html>
<html lang="pt">
  <head>
    <meta charset="utf-8">
    <meta name="viewport" content="width=device-width, initial-scale=1">
  </head>
</html>
```

# First Bootstrap Page

- Meta **viewport tag** ensure proper rendering and touch zooming
- Width of the page to follow the screen-width of the device and initial zoom level to default zoom level of device
- User will have a better experience, thus will not need zoom the page to view page information

# First Bootstrap Page

- You will need to include three files:
  - **bootstrap.min.css**
  - **jquery.min.js**
  - **bootstrap.min.js**
- You must download it and include in you page
- For this example, we include from the Internet

```
<link rel="stylesheet" href="https://maxcdn.bootstrapcdn.com/bootstrap/3.3.7/css/bootstrap.min.css">
<script src="https://ajax.googleapis.com/ajax/libs/jquery/3.1.1/jquery.min.js"></script>
<script src="https://maxcdn.bootstrapcdn.com/bootstrap/3.3.7/js/bootstrap.min.js"></script>
```

# First Bootstrap Page

- Bootstrap has a concept of containing element to wrap site contents

```
<div class="container">  
  <h1>My First Bootstrap Page</h1>  
  <p>This is some text.</p>  
</div>
```

```
<div class="container-fluid">  
  <h1>My First Bootstrap Page</h1>  
  <p>This is some text.</p>  
</div>
```

# Bootstrap Grids

- Bootstrap's grid system allows up to 12 columns across the page
- You can divide the container in rows and each row in columns with space multiple of the 12





# Bootstrap Grids

- In the bellow example, we divide the space inside the container in 1 row and this row in 3 columns with the same side.  $4+4+4 = 12$
- You can use any combination that the sum be equal to 12.

```
<div class="container">
  <h1>Bootstrap Grid</h1>
  <div class="row">
    <div class="col-sm-4">.col-sm-4</div>
    <div class="col-sm-4">.col-sm-4</div>
    <div class="col-sm-4">.col-sm-4</div>
  </div>
</div>
```

# Bootstrap Grids

- Responsive Bootstrap's grid system with 3 columns

small screens

**Bootstrap Grid**

**.col-sm-4**

**.col-sm-4**

**.col-sm-4**

big screens

**Bootstrap Grid**

**.col-sm-4**

**.col-sm-4**

**.col-sm-4**

# Bootstrap Table

- 4 main classes:
  - *.table*
  - *.table-striped*
  - *.table-bordered*
  - *.table-hover*
- 5 contextual classes:
  - *.active*
  - *.success*
  - *.info*
  - *.warning*
  - *.danger*

# Bootstrap Tables

```
<div class="container">
  <h1>Bootstrap Table</h1>
  <table class="table table-striped table-bordered table-hover">
    <thead>
      <tr>
        <th>Firstname</th>
        <th>Lastname</th>
        <th>Email</th>
      </tr>
    </thead>
    <tbody>
      <tr>
        <td>John</td>
        <td>Doe</td>
        <td>john@example.com</td>
      </tr>
      <tr>
        <td>Joseph</td>
        <td>Saints</td>
        <td>joseph@example.com</td>
      </tr>
      <tr class="warning">
        <td>Mary Help</td>
        <td>Saints</td>
        <td>mary@example.com</td>
      </tr>
    </tbody>
  </table>
</div>
```

# Bootstrap Tables

## Bootstrap Table

Firstname	Lastname	Email
John	Doe	john@example.com
Joseph	Saints	joseph@example.com
Mary Help	Saints	mary@example.com

# Bootstrap Images

- 3 main classes:
  - *.img-rounded*
  - *.img-circle*
  - *.img-thumbnail*

```
<div class="row">
  <div class="col-md-4">
    
  </div>
  <div class="col-md-4">
    
  </div>
  <div class="col-md-4">
    
  </div>
</div>
```

# Bootstrap Images

## Bootstrap Images



# Bootstrap Alerts

- Bootstrap provides an easy way to create predefined alert messages
- Alerts are created with the `.alert` class, followed by one of the four contextual classes
- `.alert-success`
- `.alert-info`
- `.alert-warning`
- `.alert-danger`



# Bootstrap Alerts

```
<div class="container">
  <h1>Bootstrap Alerts</h1>
  .....

  <div class="alert alert-success">
    <strong>Success!</strong> Indicates a successful or positive action.
  </div>

  <div class="alert alert-info">
    <strong>Info!</strong> Indicates a neutral informative change or action.
  </div>

  <div class="alert alert-warning">
    <strong>Warning!</strong> Indicates a warning that might need attention.
  </div>

  <div class="alert alert-danger">
    <strong>Danger!</strong> Indicates a dangerous or potentially negative action.
  </div>
</div>
```

# Bootstrap Alerts

## Bootstrap Alerts

**Success!** Indicates a successful or positive action.

**Info!** Indicates a neutral informative change or action.

**Warning!** Indicates a warning that might need attention.

**Danger!** Indicates a dangerous or potentially negative action.

# Bootstrap Buttons

- Bootstrap provides seven styles of buttons:
- To achieve the button styles above, Bootstrap has the following contextual classes:
  - `.btn-default`
  - `.btn-primary`
  - `.btn-success`
  - `.btn-info`
  - `.btn-warning`
  - `.btn-danger`
  - `.btn-link`

# Bootstrap Buttons

```
<div class="container">
  <h1>Bootstrap Button</h1>

  <button type="button" class="btn btn-default">Default</button>
  <button type="button" class="btn btn-primary">Primary</button>
  <button type="button" class="btn btn-success">Success</button>
  <button type="button" class="btn btn-info">Info</button>
  <button type="button" class="btn btn-warning">Warning</button>
  <button type="button" class="btn btn-danger">Danger</button>
  <button type="button" class="btn btn-link">Link</button>

</div>
```

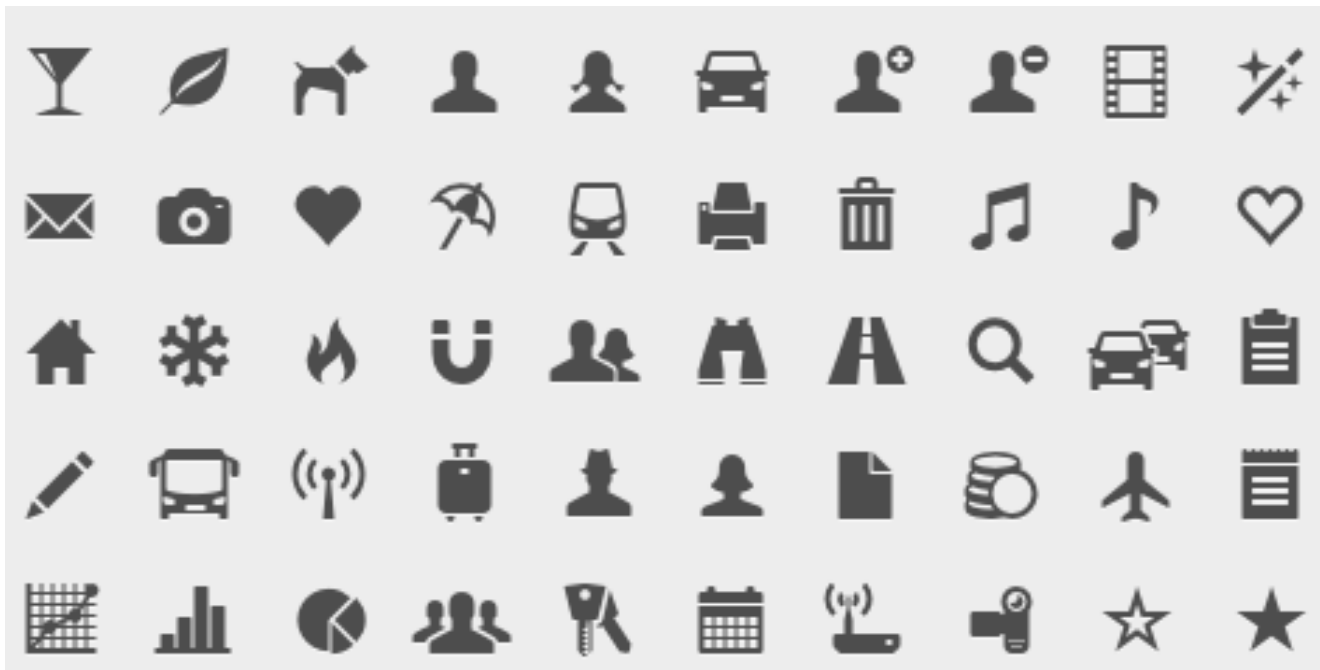
---

## Bootstrap Button



# Bootstrap Glyphicons

- Bootstrap provides 260 glyphs from the Glyphicons Halflings set
- (<http://getbootstrap.com/components/>)



# Bootstrap Glyphicons

```
<div class="container">
  <h1>Bootstrap glyphicon</h1>

  <p> Simple Span:
  |   <span class="glyphicon glyphicon-check"></span>
  |
  </p>

  <p>Default button with icon:
  |   <button type="button" class="btn btn-default"> Play
  |       <span class="glyphicon glyphicon-play"></span>
  |   </button>
  |
  </p>

  <p>Search icon on a styled button:
  |   <button type="button" class="btn btn-info">
  |       <span class="glyphicon glyphicon-search"></span> Search
  |   </button>
  |
  </p>

  <p>Link with icon:
  |   <a href="#" class="btn btn-success btn-lg">
  |       <span class="glyphicon glyphicon-print"></span> Print
  |   </a>
  |
  </p>

</div>
```

# Bootstrap Glyphicons

## Bootstrap glyphicon

Simple Span: 

Default button with icon:

Play 

Search icon on a styled button:

 Search

Link with icon:

 Print

# Bootstrap Labels

- Labels are used to provide information about something
- Bootstrap create labels with colorful backgrounds to highlight the text inside de label
- Use the `.label` class, followed by one of the six contextual classes `.label-default`, `.label-primary`, `.label-success`, `.label-info`, `.label-warning` or `.label-danger`



# Bootstrap Labels

```
<div class="container">  
  <h1>Bootstrap Label</h1>  
  
  <span class="label label-default">Default Label</span>  
  <span class="label label-primary">Primary Label</span>  
  <span class="label label-success">Success Label</span>  
  <span class="label label-info">Info Label</span>  
  <span class="label label-warning">Warning Label</span>  
  <span class="label label-danger">Danger Label</span>  
</div>
```

## Bootstrap Label

Default Label

Primary Label

Success Label

Info Label

Warning Label

Danger Label

# Bootstrap Panels

- A panel in bootstrap is a bordered box with some padding around its content that can be use to highlight or separated some information
- Like other bootstrap elements panel has contextual classes also (`.panel-default`, `.panel-primary`, `.panel-success`, `.panel-info`, `.panel-warning`, or `.panel-danger`)

# Bootstrap Panels

```
<div class="container">  
  <h1>Bootstrap Panel</h1>  
  
  <div class="panel panel-success">  
    <div class="panel-heading">Panel Heading</div>  
    <div class="panel-body">Panel Content</div>  
    <div class="panel-footer">Panel Footer</div>  
  </div>  
</div>
```

## Bootstrap Panel

Panel Heading

Panel Content

Panel Footer

# Bootstrap Themes and Templates

- You can find several templates e themes free to download
  - A **theme** consists of customized CSS
  - A **template** consists of one or more predesigned HTML pages, which often make use of a theme
- Both are collection of bootstrap elements (grids, buttons, panels), put together for someone, until have a fully functional website or web application.
- You can find some free templates here:

<https://startbootstrap.com/template-categories/all/>

# Bootstrap Themes and Templates

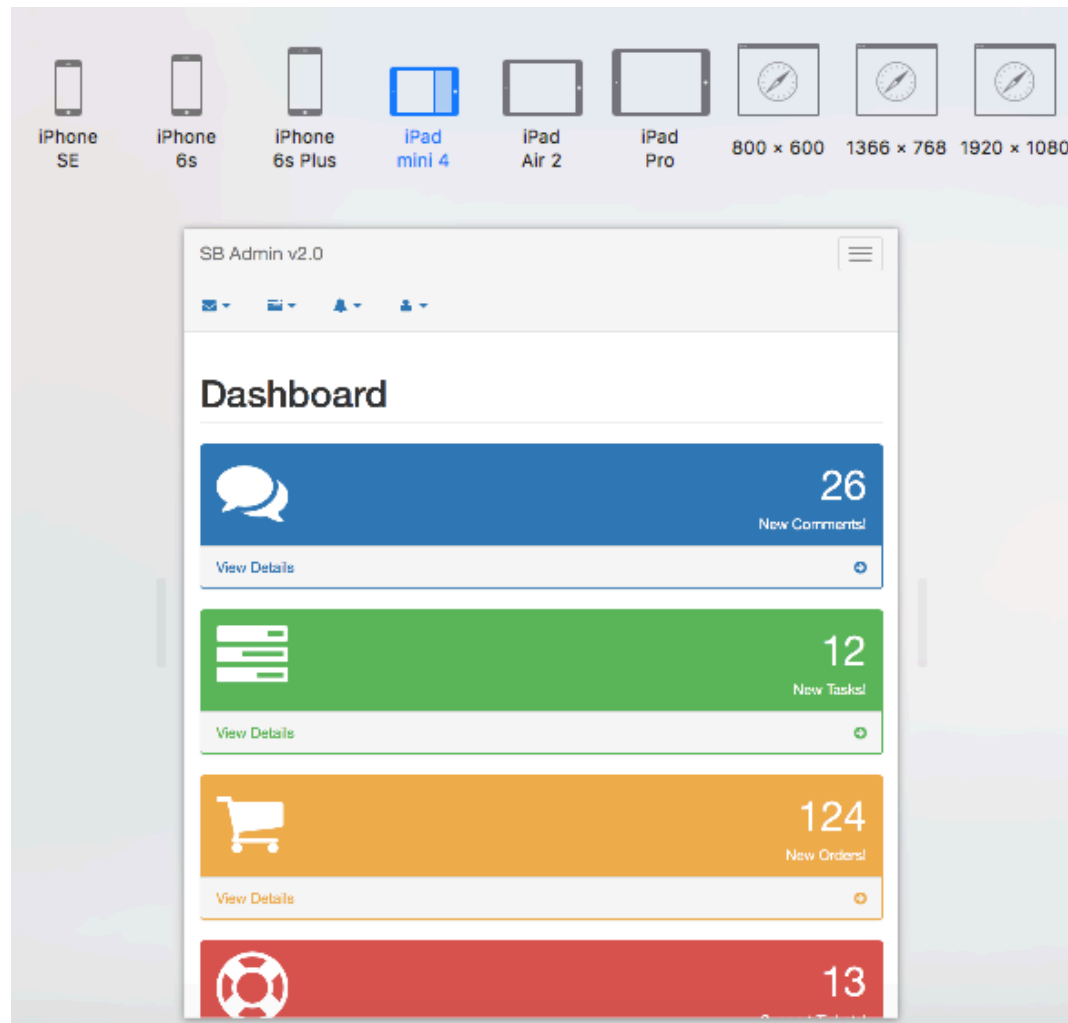
- For web application **SB Admin 2** template is appropriate. It has forms, tables, charts and other useful components



# Bootstrap Themes and Templates

- Download **SB Admin 2** template for your computer and open the `/pages/index.html` in your web browser
- Start to customize it, instead write you application design from scratch

# Bootstrap Themes and Templates



- **References**

- w3schools. Bootstrap 3 Tutorial. <https://www.w3schools.com/bootstrap/>

- **Source Code**

- <https://github.com/jadsonjs/bootstrap>