

Introdução às tecnologias Web - ITW

Aula 4 – Twitter bootstrap

Sumário

RWD _ Responsive Web Design

Twitter Bootstrap

Grid system

Visual Studio e o Bootstrap



Responsive web design (RWD)

Responsive web design (RWD) é uma abordagem de web design que visa a elaboração de sites que forneçam

- uma experiência de visualização e leitura fácil;
- navegação optimizada com um mínimo de redimensionamento;
- visão panorâmica e rolagem através de uma ampla gama de dispositivos que variam desde os telefones móveis passando pelos tablets e terminando em computador de mesa com monitores de diversas resoluções.

Twitter Bootstrap

Bootstrap é uma coleção de ferramentas para a criação de sites e aplicações web.

- Foi desenvolvido pela Twitter

Contém um conjunto de marcadores HTML e modelos de design baseados em CSS para tipografia, formulários, botões, navegação e outros componentes da interface

Possui ainda um conjunto de extensões JavaScript opcionais.



Bootstrap is the most popular HTML, CSS, and JS framework for developing responsive, mobile first projects on the web.
12/10/2015
©2014-15, JOAQUIM SOUSA PINTO



One framework, every device.

Bootstrap easily and efficiently scales your websites and applications with a single code base, from phones to tablets to desktops with CSS media queries.

O pacote bootstrap

```
bootstrap/
  └── css/
    ├── bootstrap.css
    ├── bootstrap.min.css
    ├── bootstrap-theme.css
    └── bootstrap-theme.min.css
  └── js/
    ├── bootstrap.js
    └── bootstrap.min.js
  └── fonts/
    ├── glyphicons-halflings-regular.eot
    ├── glyphicons-halflings-regular.svg
    ├── glyphicons-halflings-regular.ttf
    └── glyphicons-halflings-regular.woff
```

folhas de estilos

scripts javascript

fonte com ícones

Estrutura básica de um documento

```
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="utf-8">
    <meta http-equiv="X-UA-Compatible" content="IE=edge">
    <meta name="viewport" content="width=device-width, initial-scale=1"> ←-----  

    <title>Bootstrap 101 Template</title>
    <!-- Bootstrap --> ←-----  

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

    <!-- HTML5 shim and Respond.js for IE8 support of HTML5 elements and media queries -->
    <!-- WARNING: Respond.js doesn't work if you view the page via file:// -->
    <!--[if lt IE 9]>
        <script src="https://oss.maxcdn.com/html5shiv/3.7.2/html5shiv.min.js"></script>
        <script src="https://oss.maxcdn.com/respond/1.4.2/respond.min.js"></script>
    <![endif]-->
</head>
<body>
    <h1>Hello, world!</h1>
    <!-- jQuery (necessary for Bootstrap's JavaScript plugins) -->
    <script src="https://ajax.googleapis.com/ajax/libs/jquery/1.11.1/jquery.min.js"></script>
    <!-- Include all compiled plugins (below), or include individual files as needed -->
    <script src="js/bootstrap.min.js"></script> ←-----  

</body>
```

Funcionalidades Bootstrap

Menus – desktop



Bootstrap starter template

Use this document as a way to quickly start any new project.

All you get is this text and a mostly barebones HTML document.



Funcionalidades Bootstrap

Menus – mobile

The diagram illustrates the transition of a mobile menu in Bootstrap. It consists of two screenshots connected by a dotted arrow.

Initial State: On the left, a dark header bar contains the text "Project name" and a three-line hamburger menu icon. A red dashed box highlights the icon.

Final State: On the right, the same header bar now displays a dropdown menu with three items: "Home", "About", and "Contact". A red dashed box highlights the three-line icon, which now features a white mouse cursor icon, indicating it has been clicked.

Text Content: Below the screenshots, the text "All you get is this text and a mostly barebones HTML document." is displayed twice, once under each screenshot.

Cursor: A small cursor icon is positioned near the bottom left of the left screenshot.

Funcionalidades Bootstrap

Menus - código

```
<nav class="navbar navbar-inverse navbar-fixed-top" role="navigation">
  <div class="container">
    <div class="navbar-header">
      <button type="button" class="navbar-toggle collapsed" data-toggle="collapse"
        data-target="#navbar" aria-expanded="false" aria-controls="navbar">
        <span class="sr-only">Toggle navigation</span>
        <span class="icon-bar"></span>
        <span class="icon-bar"></span>
        <span class="icon-bar"></span>
      </button>
      <a class="navbar-brand" href="#">Project name</a>
    </div>
    <div id="navbar" class="collapse navbar-collapse">
      <ul class="nav navbar-nav">
        <li class="active"><a href="#">Home</a></li>
        <li><a href="#about">About</a></li>
        <li><a href="#contact">Contact</a></li>
      </ul>
    </div><!--/.nav-collapse -->
  </div>
</nav>
```

<http://getbootstrap.com/examples/starter-template/#contact>

Funcionalidades Bootstrap

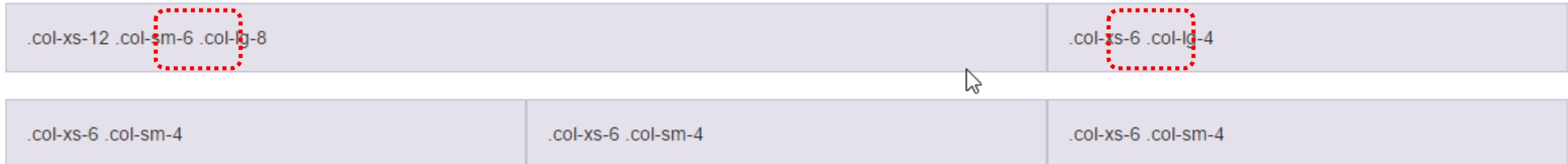
Grelhas para informação - conceitos

	Extra small devices Phones (<768px)	Small devices Tablets ($\geq 768px$)	Medium devices Desktops ($\geq 992px$)	Large devices Desktops ($\geq 1200px$)
Grid behavior	Horizontal at all times	Collapsed to start, horizontal above breakpoints		
Container width	None (auto)	750px	970px	1170px
Class prefix	.col-xs-	.col-sm-	.col-md-	.col-lg-
# of columns	12			
Column width	Auto	~62px	~81px	~97px
Gutter width	30px (15px on each side of a column)			
Nestable	Yes			
Offsets	Yes			
Column ordering	Yes			

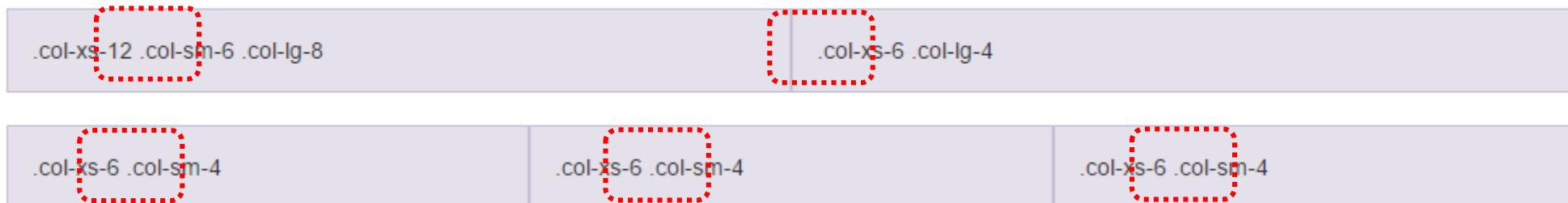
Funcionalidades Bootstrap

Grelhas para informação - exemplos

Mixed: mobile, tablet, and desktop



Mixed: mobile, tablet, and desktop



<http://getbootstrap.com/examples/grid/>

Funcionalidades Bootstrap

Grelhas para informação - exemplos

Mixed: mobile, tablet, and desktop



<http://getbootstrap.com/examples/grid/>

Funcionalidades Bootstrap

Grelhas para informação - exemplos

```
<body>
  <div class="container">
    <h3>Mixed: mobile, tablet, and desktop</h3>
    <p></p>
    <div class="row">
      <div class="col-xs-12 col-sm-6 col-lg-8">.col-xs-12 .col-sm-6 .col-lg-8</div>
      <div class="col-xs-6 col-lg-4">.col-xs-6 .col-lg-4</div>
    </div>
    <div class="row">
      <div class="col-xs-6 col-sm-4">.col-xs-6 .col-sm-4</div>
      <div class="col-xs-6 col-sm-4">.col-xs-6 .col-sm-4</div>
      <div class="col-xs-6 col-sm-4">.col-xs-6 .col-sm-4</div>
    </div>
  </div>

  (...)

</body>
```

<http://getbootstrap.com/examples/grid/>

Funcionalidades Bootstrap

Jumbotron - conceitos

Um elemento jumbotron ocupa toda a largura do browser.

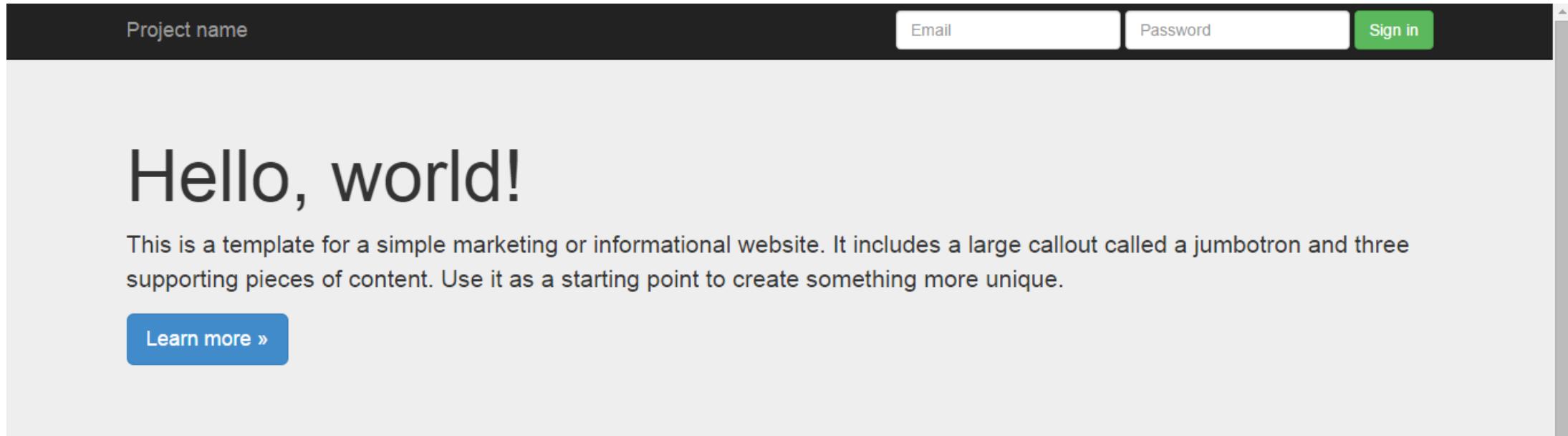
Isso é conseguido através da especificação de um `<div>` com a classe “container-fluid”.

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

Nos elementos anteriores o elemento `<div>` estava sempre dentro de uma classe “container”.

Funcionalidades Bootstrap

Jumbotron – exemplos (desktop)



Heading

Donec id elit non mi porta gravida at eget metus. Fusce dapibus, tellus ac cursus commodo, tortor mauris condimentum nibh, ut fermentum massa justo sit amet risus. Etiam porta sem malesuada magna mollis euismod. Donec sed odio dui.

12/10/2015

[View details »](#)

Heading

Donec id elit non mi porta gravida at eget metus. Fusce dapibus, tellus ac cursus commodo, tortor mauris condimentum nibh, ut fermentum massa justo sit amet risus. Etiam porta sem malesuada magna mollis euismod. Donec sed odio dui.

[View details »](#)

Heading

Donec sed odio dui. Cras justo odio, dapibus ac facilisis in, egestas eget quam. Vestibulum id ligula porta felis euismod semper. Fusce dapibus, tellus ac cursus commodo, tortor mauris condimentum nibh, ut fermentum massa justo sit amet risus.

[View details »](#)

Funcionalidades Bootstrap

Jumbotron – exemplos (tablet | mobile)

The image displays two side-by-side screenshots of a website template using Bootstrap's jumbotron class. Both screenshots show a dark header bar with input fields for 'Project name', 'Email', and 'Password', and a green 'Sign in' button. The main content area features a large callout (jumbotron) with the heading 'Hello, world!' and a descriptive paragraph. Below the jumbotron are three supporting content blocks, each with a heading and a 'View details »' button.

Project name

Email

Password

Sign in

Hello, world!

This is a template for a simple marketing or informational website. It includes a large callout called a jumbotron and three supporting pieces of content. Use it as a starting point to create something more unique.

[Learn more »](#)

Heading

Donec id elit non mi porta gravida at eget metus. Fusce dapibus, tellus ac cursus commodo, tortor mauris condimentum nibh, ut fermentum massa justo sit amet risus. Etiam porta sem malesuada magna mollis euismod. Donec sed odio dui.

[View details »](#)

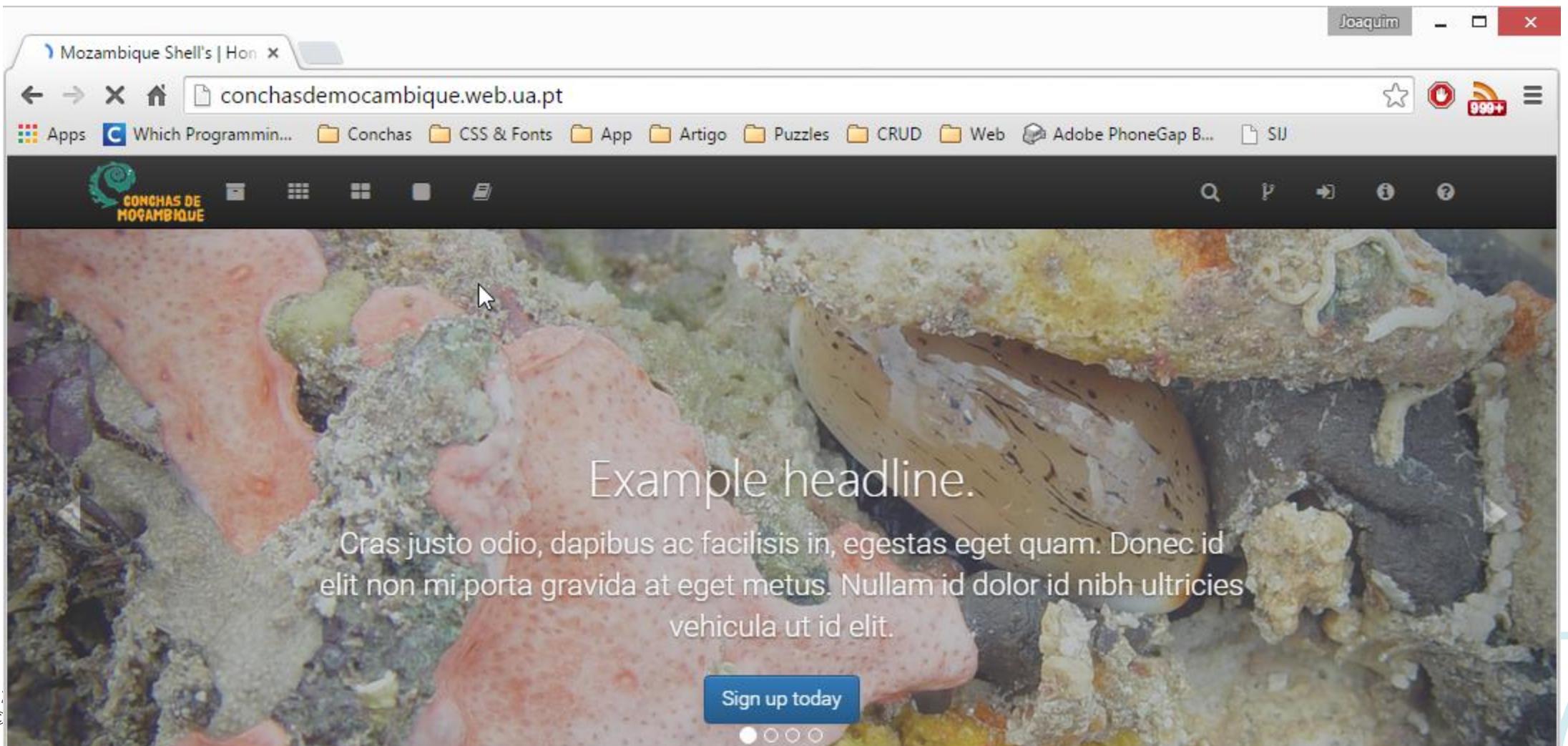
Heading

Donec id elit non mi porta gravida at eget metus. Fusce dapibus, tellus ac cursus commodo, tortor mauris condimentum nibh, ut fermentum massa justo sit amet risus. Etiam porta sem malesuada magna mollis euismod. Donec sed odio dui.

[View details »](#)

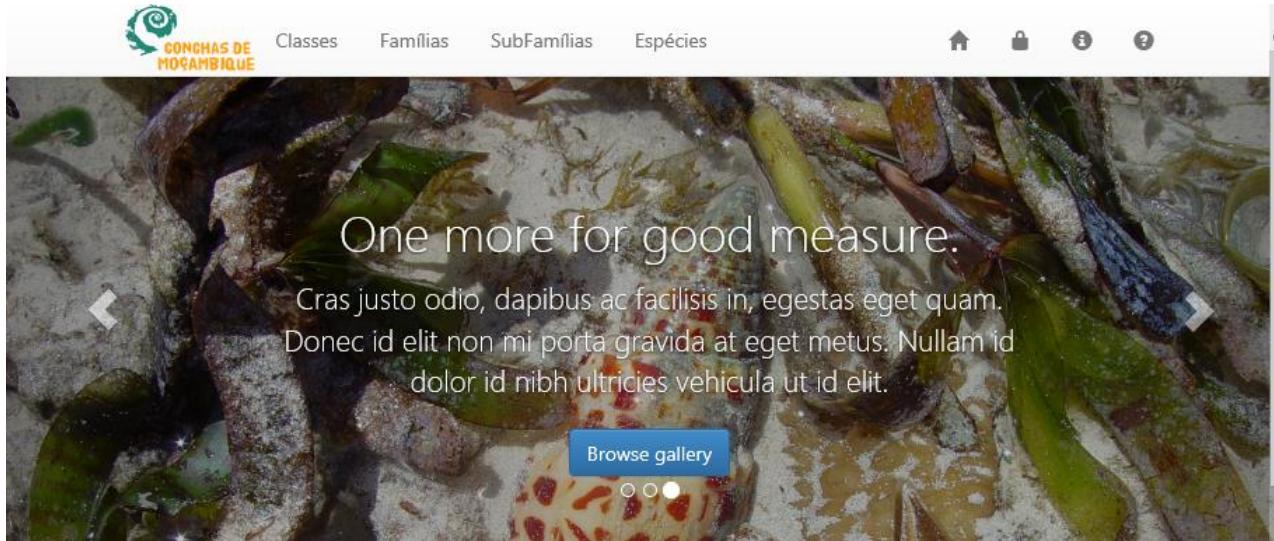
Funcionalidades Bootstrap

Jumbotron – exemplos (imagens)



Funcionalidades Bootstrap

Jumbotron – exemplos (imagens)

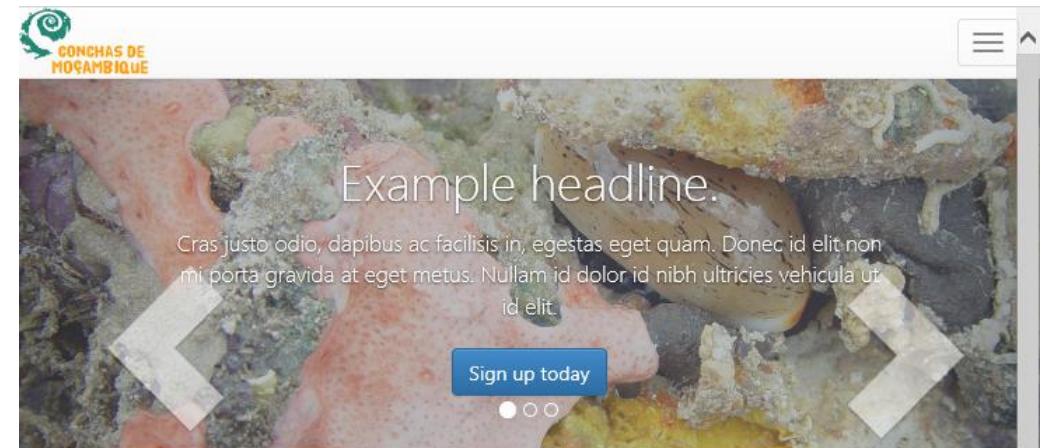


Heading

Donec id elit non mi porta gravida at eget metus. Fusce dapibus, tellus ac cursus commodo, tortor mauris condimentum nibh, ut fermentum massa justo sit amet risus. Etiam porta sem malesuada magna mollis euismod. Donec sed odio dui.

Heading

Donec id elit non mi porta gravida at eget metus. Fusce dapibus, tellus ac cursus commodo, tortor mauris condimentum nibh, ut fermentum massa justo sit amet risus. Etiam porta sem malesuada magna mollis euismod. Donec sed odio dui.



Heading

Donec id elit non mi porta gravida at eget metus. Fusce dapibus, tellus ac cursus commodo, tortor mauris condimentum nibh, ut fermentum massa justo sit amet risus. Etiam porta sem malesuada magna mollis euismod. Donec sed odio dui.

[View details »](#)

Heading

Funcionalidades Bootstrap

Tipos e tamanhos de letra

EXAMPLE

h1. Bootstrap heading Secondary text

h2. Bootstrap heading Secondary text

h3. Bootstrap heading Secondary text

h4. Bootstrap heading Secondary text

h5. Bootstrap heading Secondary text

h6. Bootstrap heading Secondary text

Copy

```
<h1>h1. Bootstrap heading <small>Secondary text</small></h1>
<h2>h2. Bootstrap heading <small>Secondary text</small></h2>
<h3>h3. Bootstrap heading <small>Secondary text</small></h3>
<h4>h4. Bootstrap heading <small>Secondary text</small></h4>
<h5>h5. Bootstrap heading <small>Secondary text</small></h5>
12/10/2015
<h6>h6. Bootstrap heading <small>Secondary text</small></h6>
```

Funcionalidades Bootstrap

Tables

EXAMPLE

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

```
<table class="table table-striped">
...
</table>
```

Copy

<http://getbootstrap.com/css/#tables>

Funcionalidades Bootstrap

Formulários

EXAMPLE

Email address

Enter email

Password

Password

File input

Choose File No file chosen

Example block-level help text here.

Check me out

Submit

```
<form role="form">
  <div class="form-group">
    <label for="exampleInputEmail1">Email address</label>
    <input type="email" class="form-control" id="exampleInputEmail1"
           placeholder="Enter email">
  </div>
  <div class="form-group">
    <label for="exampleInputPassword1">Password</label>
    <input type="password" class="form-control" id="exampleInputPassword1"
           placeholder="Password">
  </div>
  <div class="form-group">
    <label for="exampleInputFile">File input</label>
    <input type="file" id="exampleInputFile">
    <p class="help-block">Example block-level help text here.</p>
  </div>
  <div class="checkbox">
    <label>
      <input type="checkbox"/> Check me out
    </label>
  </div>
  <button type="submit" class="btn btn-default">Submit</button>
</form>
```

<http://getbootstrap.com/css/#forms>

Funcionalidades Bootstrap

Formulários

EXAMPLE

Email

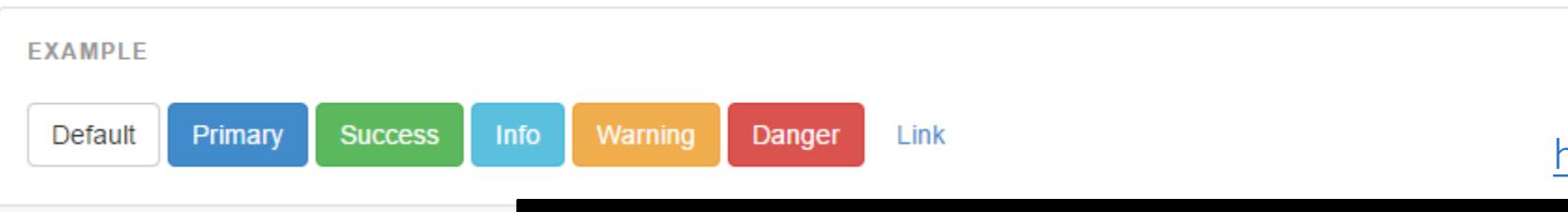
Password

Remember me

```
<form class="form-horizontal" role="form">
  <div class="form-group">
    <label for="inputEmail3" class="col-sm-2 control-label">Email</label>
    <div class="col-sm-10">
      <input type="email" class="form-control" id="inputEmail3"
            placeholder="Email">
    </div>
  </div>
  <div class="form-group">
    <label for="inputPassword3" class="col-sm-2 control-label">Password</label>
    <div class="col-sm-10">
      <input type="password" class="form-control" id="inputPassword3"
            placeholder="Password">
    </div>
  </div>
  <div class="form-group">
    <div class="col-sm-offset-2 col-sm-10">
      <div class="checkbox">
        <label>
          <input type="checkbox" /> Remember me
        </label>
      </div>
    </div>
  </div>
  <div class="form-group">
    <div class="col-sm-offset-2 col-sm-10">
      <button type="submit" class="btn btn-default">Sign in</button>
    </div>
  </div>
</form>
```

Funcionalidades Bootstrap

Botões – códigos de cor



<http://getbootstrap.com/css/#buttons>

```
<!-- Standard button -->
<button type="button" class="btn btn-default">Default</button>

<!-- Provides extra visual weight and identifies the primary action in a set of buttons -->
<button type="button" class="btn btn-primary">Primary</button>

<!-- Indicates a successful or positive action -->
<button type="button" class="btn btn-success">Success</button>

<!-- Contextual button for informational alert messages -->
<button type="button" class="btn btn-info">Info</button>

<!-- Indicates caution should be taken with this action -->
<button type="button" class="btn btn-warning">Warning</button>

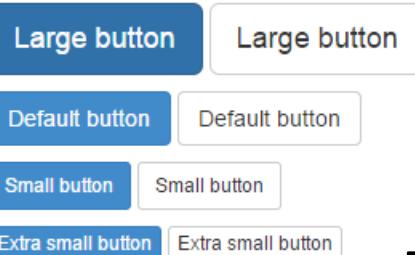
<!-- Indicates a dangerous or potentially negative action -->
<button type="button" class="btn btn-danger">Danger</button>

<!-- Deprecate a button by making it look like a link while maintaining button behavior -->
<button type="button" class="btn btn-link">Link</button>
```

Funcionalidades Bootstrap

Botões - tamanho

EXAMPLE



```
<p>
  <button type="button" class="btn btn-primary btn-lg">Large button</button>
  <button type="button" class="btn btn-default btn-lg">Large button</button>
</p>
<p>
  <button type="button" class="btn btn-primary">Default button</button>
  <button type="button" class="btn btn-default">Default button</button>
</p>
<p>
  <button type="button" class="btn btn-primary btn-sm">Small button</button>
  <button type="button" class="btn btn-default btn-sm">Small button</button>
</p>
<p>
  <button type="button" class="btn btn-primary btn-xs">Extra small button</button>
  <button type="button" class="btn btn-default btn-xs">Extra small button</button>
</p>
```

Funcionalidades Bootstrap

Glyphicon

<http://getbootstrap.com/components/>

							
glyphicon glyphicon-asterisk	glyphicon glyphicon-plus	glyphicon glyphicon-euro	glyphicon glyphicon-minus	glyphicon glyphicon-cloud	glyphicon glyphicon-envelope	glyphicon glyphicon-pencil	glyphicon glyphicon-glass
							
glyphicon glyphicon-music	glyphicon glyphicon-search	glyphicon glyphicon-heart	glyphicon glyphicon-star	glyphicon glyphicon-star-empty	glyphicon glyphicon-user	glyphicon glyphicon-film	glyphicon glyphicon-th-large
							
glyphicon glyphicon-th	glyphicon glyphicon-th-list	glyphicon glyphicon-ok	glyphicon glyphicon-remove	glyphicon glyphicon-zoom-in	glyphicon glyphicon-zoom-out	glyphicon glyphicon-off	glyphicon glyphicon-signal
							
glyphicon glyphicon-settings	glyphicon glyphicon-list	glyphicon glyphicon-up	glyphicon glyphicon-down	glyphicon glyphicon-left	glyphicon glyphicon-right	glyphicon glyphicon-down-left	glyphicon glyphicon-down-right

Funcionalidades Bootstrap

Dropdown lists

EXAMPLE

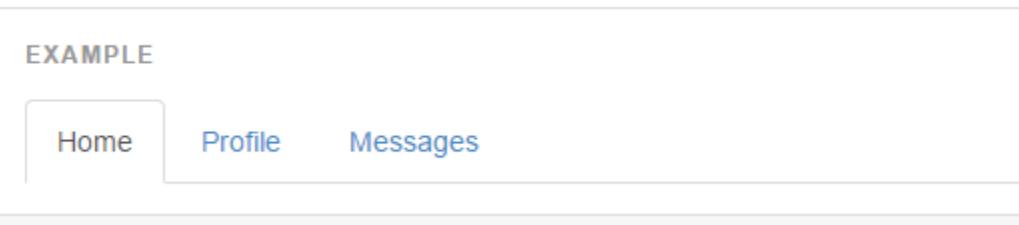
Dropdown ▾

- Action
- Another action
- Something else here
- Separated link

```
<div class="dropdown">
  <button class="btn btn-default dropdown-toggle" type="button" id="dropdownMenu1" data-toggle="dropdown">
    Dropdown
    <span class="caret"></span>
  </button>
  <ul class="dropdown-menu" role="menu" aria-labelledby="dropdownMenu1">
    <li role="presentation"><a role="menuitem" tabindex="-1" href="#">Action</a></li>
    <li role="presentation"><a role="menuitem" tabindex="-1" href="#">Another action</a></li>
    <li role="presentation"><a role="menuitem" tabindex="-1" href="#">Something else here</a></li>
    <li role="presentation"><a role="menuitem" tabindex="-1" href="#">Separated link</a></li>
  </ul>
</div>
```

Funcionalidades Bootstrap

Tabs



<http://getbootstrap.com/components/#nav>

```
<ul class="nav nav-tabs" role="tablist">
  <li role="presentation" class="active">
    <a href="#tab-1" role="tab" data-toggle="tab">Home</a></li>
  <li role="presentation">
    <a href="#tab-2" role="tab" data-toggle="tab">Profile</a></li>
  <li role="presentation">
    <a href="#tab-3" role="tab" data-toggle="tab">Messages</a></li>
</ul>

<div class="tab-content" style="min-height: 400px;">
  <div class="tab-pane fade in active" id="tabs-1">
    ...
  </div>
  <div class="tab-pane fade" id="tabs-2">
    ...
  </div>
  <div class="tab-pane fade" id="tabs-3">
    ...
  </div>
<div>
```

Funcionalidades Bootstrap

Tabs c/ Dropdown lists

EXAMPLE

Home

Help

Dropdown ▾

```
<ul class="nav nav-tabs" role="tablist">  
  <li role="presentation" class="dropdown">  
    <a class="dropdown-toggle" data-toggle="dropdown" href="#">  
      Dropdown <span class="caret"></span>  
    </a>  
    <ul class="dropdown-menu" role="menu">  
      ...  
    </ul>  
  </li>  
...  
</ul>
```

Funcionalidades Bootstrap

Labels

EXAMPLE

Default Primary Success Info Warning Danger

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

Copy

<http://getbootstrap.com/components/#labels>

Funcionalidades Bootstrap

Badges

EXAMPLE

Inbox 42

Messages 4

```
<a href="#">Inbox <span class="badge">42</span></a>

<button class="btn btn-primary" type="button">
  Messages <span class="badge">4</span>
</button>
```

[Copy](#)

<http://getbootstrap.com/components/#badges>

Funcionalidades Bootstrap

Alert boxes

<http://getbootstrap.com/components/#alerts>

EXAMPLE

Well done! You successfully read this important alert message.

Heads up! This alert needs your attention, but it's not super important.

Warning! Better check yourself, you're not looking too good.

Oh snap! Change a few things up and try submitting again.

```
<div class="alert alert-success" role="alert">...</div>
<div class="alert alert-info" role="alert">...</div>
<div class="alert alert-warning" role="alert">...</div>
<div class="alert alert-danger" role="alert">...</div>
```

Copy

Funcionalidades Bootstrap

Panels

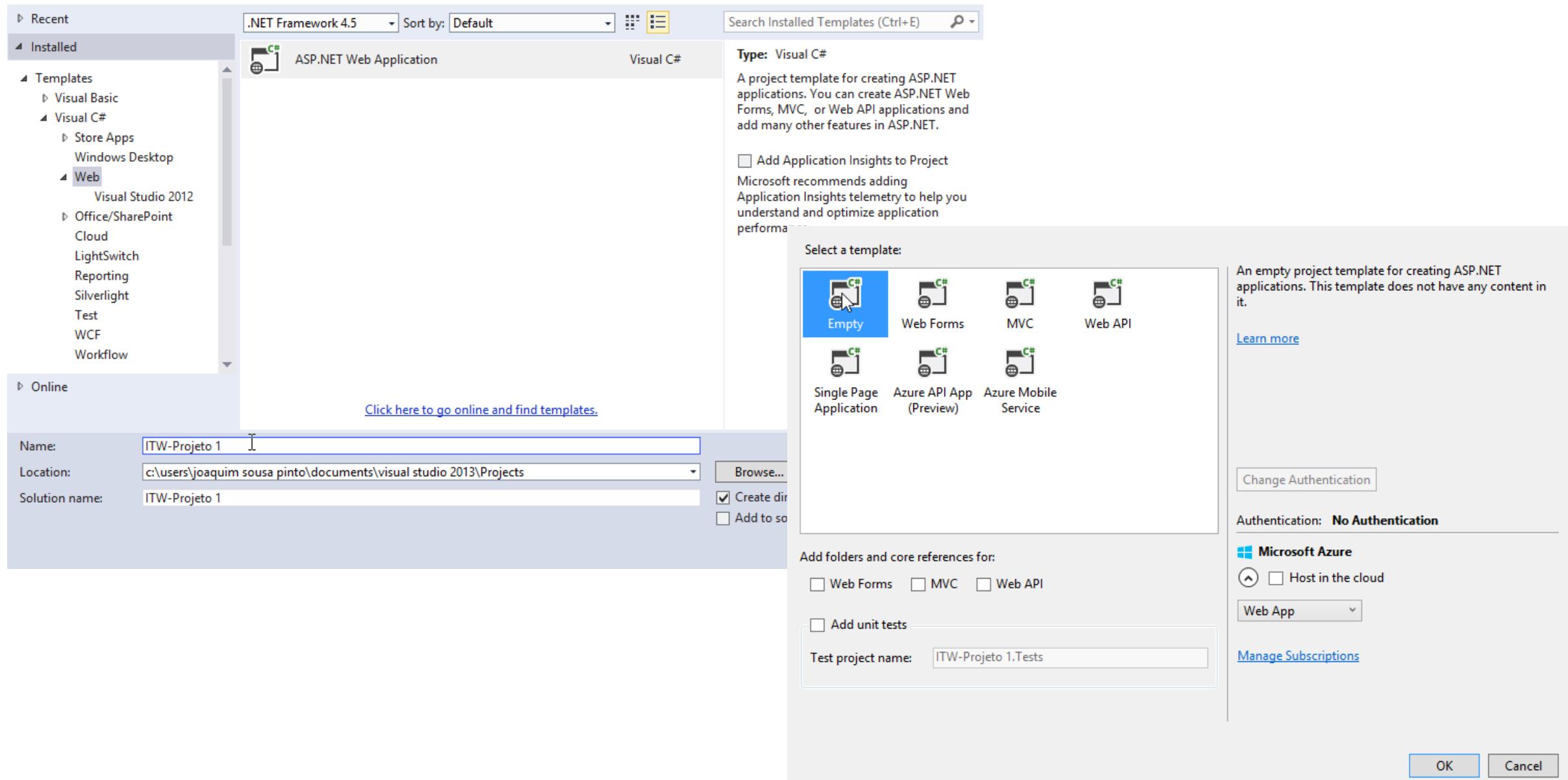
EXAMPLE

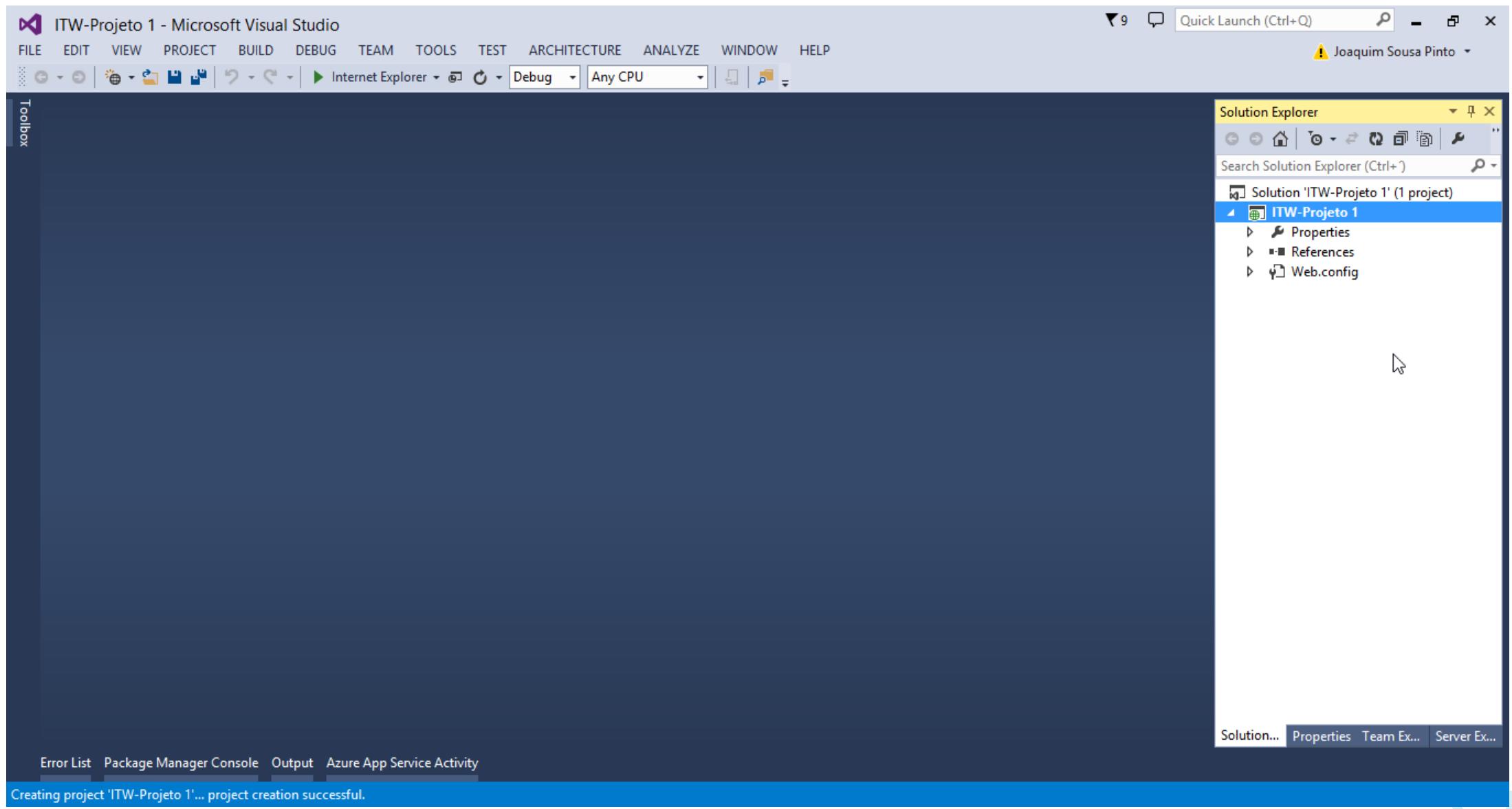
The slide displays five panels, each with a title and content area. The panels are styled with different Bootstrap classes:

- Primary panel (blue): `<div class="panel panel-primary">...</div>`
- Success panel (green): `<div class="panel panel-success">...</div>`
- Info panel (light blue): `<div class="panel panel-info">...</div>`
- Warning panel (yellow): `<div class="panel panel-warning">...</div>`
- Danger panel (pink): `<div class="panel panel-danger">...</div>`

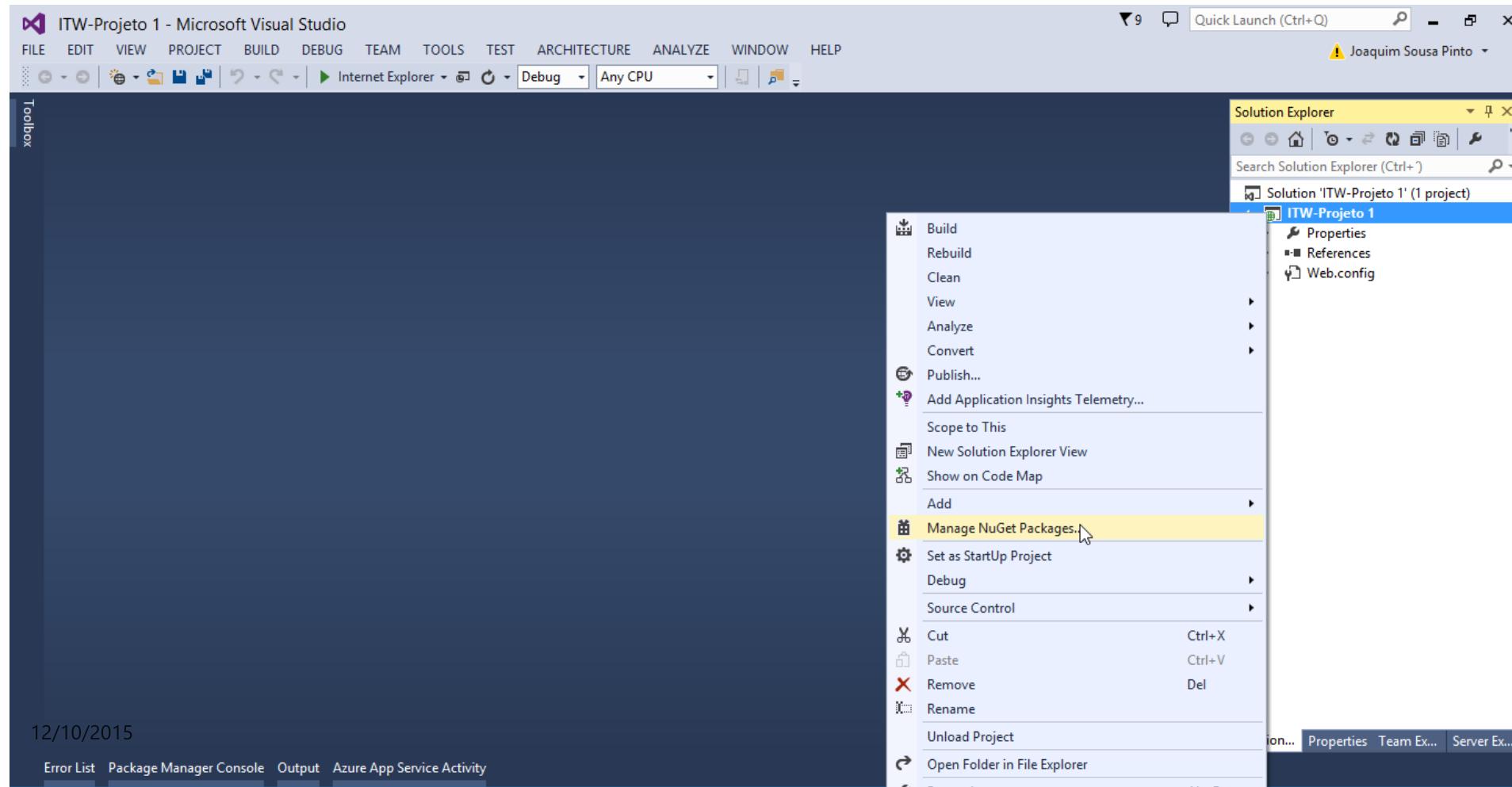
<http://getbootstrap.com/components/#panels>

Usando o bootstrap com o Visual Studio

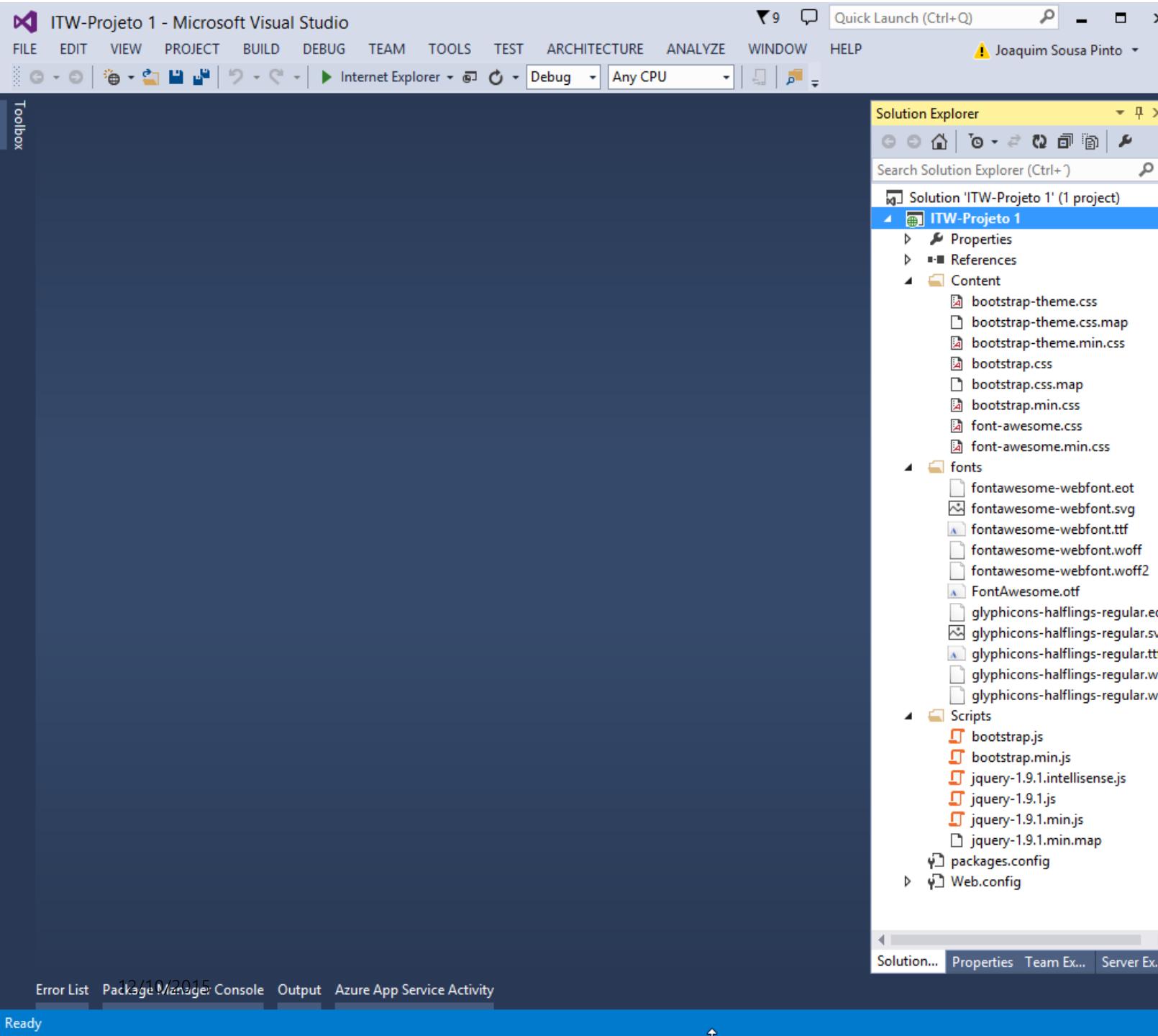




Adicionado packages ao projeto



36



Packages adicionados:

- Bootstrap
 - jQuery
- Font Awesome

Font Awesome, the icons

fortawesome.github.io/Font-Awesome/

Want to add your own icon? Check out [Fonticons](#), from the maker of Font Awesome. [Gimme Some!](#)

Font Awesome Home What's New Get Started Icons Examples Community License Blog

Font Awesome

THE ICONIC FONT AND CSS TOOLKIT

 Download

Version 4.4.0 · GitHub Project · Old 3.2.1 Docs · Created by Dave Gandy

Enter your email address... [Subscribe to Font Awesome Updates](#)

Star 36,600 Fork 6,072 Follow @fontawesome 23K followers Tweet 4,810

Font Awesome gives you scalable vector icons that can instantly be customized — size, color, drop shadow, and anything that can be done with the power of CSS.

One Font, 585 Icons

No JavaScript Required

Infinite Scalability

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Exercício

Crie uma aplicação web destinada à presença institucional de uma empresa constituída por 3 páginas principais:

- * Página de entrada

- Jumbotron com 3 produtos da empresa (em imagem);*

- Três notícias principais*

- * Acerca da empresa

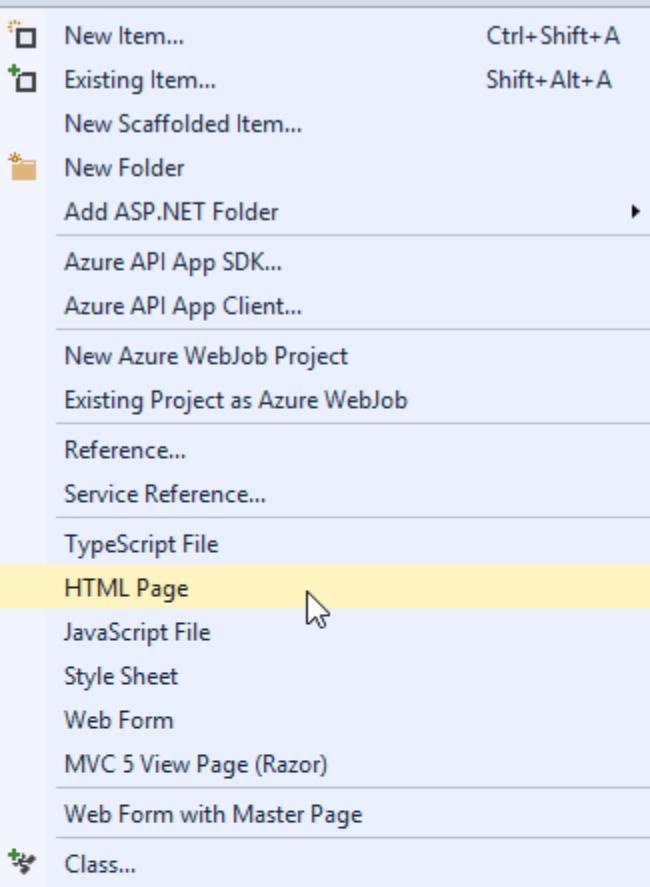
- Página com uma lista de produtos e uma pequena descrição de cada um deles;*

- * Contactos

-oOo-

Pesquise e investigue as facilidades do Bootstrap de modo a melhorar a interface e tirar as potencialidades todas;

Não se esqueça que a interface deve ser moldável aos diversos tipos de dispositivos.



The Solution Explorer window shows the 'ITW-Projeto 1' project structure:

- Build
- Rebuild
- Clean
- View
- Analyze
- Convert
- Publish...
- Add Application Insights Telemetry...
- Scope to This
- New Solution Explorer View
- Show on Code Map
- Add** (highlighted with yellow background)
- Manage NuGet Packages...
- Set as StartUp Project
- Debug
- Source Control
- Cut (Ctrl+X)
- Paste (Ctrl+V)
- Remove (Del)
- Rename
- Unload Project
- Open Folder in File Explorer
- Properties (Alt+Enter)

Properties Team Ex... Serv...

Criando as 4 páginas pedidas

Item name:

Item name:

Item name:

Resultado inicial (esperado!)

