



UD2.2

BOOTSTRAP



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INTRODUCCIÓN

BOOTSTRAP 4

- Un framework de los más populares del mercado
- Desarrollado por el equipo de Twitter.
- Utiliza un grid responsive de 12 columnas
- Integra una gran cantidad de complementos y plugins javascript
- En la actualidad se encuentra en la versión 4

VENTAJAS DE USAR BOOTSTRAP

- Fácil de usar
- Orientado al diseño web responsivo
- Planteamiento Mobile-first
- Compatible con todos los navegadores

OBTENER BOOTSTRAP

- Se trata de una serie de ficheros CSS y JS que contienen clases y funciones predefinidas que enlazadas a un documento HTML permiten usar los componentes del framework.

<https://getbootstrap.com/>

TRABAJANDO CON BOOTSTRAP

PLANTILLA BOOTSTRAP

Copy

```
<!doctype html>
<html lang="en">
  <head>
    <!-- Required meta tags -->
    <meta charset="utf-8">
    <meta name="viewport" content="width=device-width, initial-scale=1, shrink-to-fit=no">

    <!-- Bootstrap CSS -->
    <link rel="stylesheet" href="https://stackpath.bootstrapcdn.com/bootstrap/4.3.1/css/bootstrap.min.css">

    <title>Hello, world!</title>
  </head>
  <body>
    <h1>Hello, world!</h1>

    <!-- Optional JavaScript -->
    <!-- jQuery first, then Popper.js, then Bootstrap JS -->
    <script src="https://code.jquery.com/jquery-3.3.1.slim.min.js" integrity="sha384-q8i/X+965" >
    <script src="https://cdnjs.cloudflare.com/ajax/libs/popper.js/1.14.7/umd/popper.min.js" in
    <script src="https://stackpath.bootstrapcdn.com/bootstrap/4.3.1/js/bootstrap.min.js" integ
  </body>
</html>
```

CONTAINER



```
<div class="container">  
  <!-- Content here -->  
</div>
```

Copy

CONTAINER

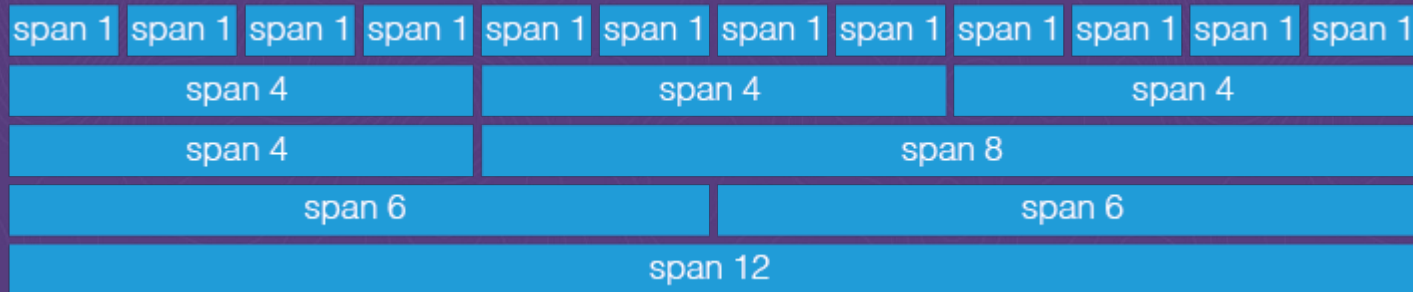


```
<div class="container-fluid">  
  ...  
</div>
```

Copy

GRID

- El grid o rejilla de Bootstrap se divide en 12 columnas, utilizadas para determinar la proporción de los contenidos.



GRID

One of three columns

One of three columns

One of three columns

```
<div class="container">
  <div class="row">
    <div class="col-sm">
      One of three columns
    </div>
    <div class="col-sm">
      One of three columns
    </div>
    <div class="col-sm">
      One of three columns
    </div>
  </div>
</div>
```

Copy

GRID

→ A la hora de posicionar, la clase nos permite discriminar el dispositivo

	Extra small <576px	Small ≥576px	Medium ≥768px	Large ≥992px	Extra large ≥1200px
Max container width	None (auto)	540px	720px	960px	1140px
Class prefix	.col-	.col-sm-	.col-md-	.col-lg-	.col-xl-
# of columns	12				

<https://codepen.io/loc-daw-m09/pen/EKQPdZ>

GRID

→ Ancho de columna variable

```
<div class="container">  
  <div class="row justify-content-md-center">  
    <div class="col col-lg-2">1 of 3</div>  
    <div class="col-md-auto">Variable width content</div>  
    <div class="col col-lg-2">3 of 3</div>  
  </div>  
  <div class="row">  
    <div class="col">1 of 3</div>  
    <div class="col-md-auto">Variable width content</div>  
    <div class="col col-lg-2">3 of 3</div>  
  </div>  
</div>
```

1 of 3	Variable width content	3 of 3
1 of 3	Variable width content	3 of 3

GRID

→ Forzar salto de línea en una fila

Column	Column
Column	Column

```
<div class="container">  
  <div class="row">  
    <div class="col">Column</div>  
    <div class="col">Column</div>  
    <div class="w-100"></div>  
    <div class="col">Column</div>  
    <div class="col">Column</div>  
  </div>  
</div>
```

Copy

GRID

→ Anidamiento de filas

```
<div class="row">  
  <div class="col-sm-9">  
    Level 1: .col-sm-9  
    <div class="row">  
      <div class="col-8 col-sm-6">Level 2: .col-8 .col-sm-6</div>  
      <div class="col-4 col-sm-6">Level 2: .col-4 .col-sm-6</div>  
    </div>  
  </div>  
</div>
```

Level 1: .col-sm-9	
Level 2: .col-8 .col-sm-6	Level 2: .col-4 .col-sm-6

GRID

→ Order

```
<div class="container">  
  <div class="row">  
    <div class="col">First, but unordered</div>  
    <div class="col order-12">Second, but last</div>  
    <div class="col order-1">Third, but first</div>  
  </div>  
</div>
```

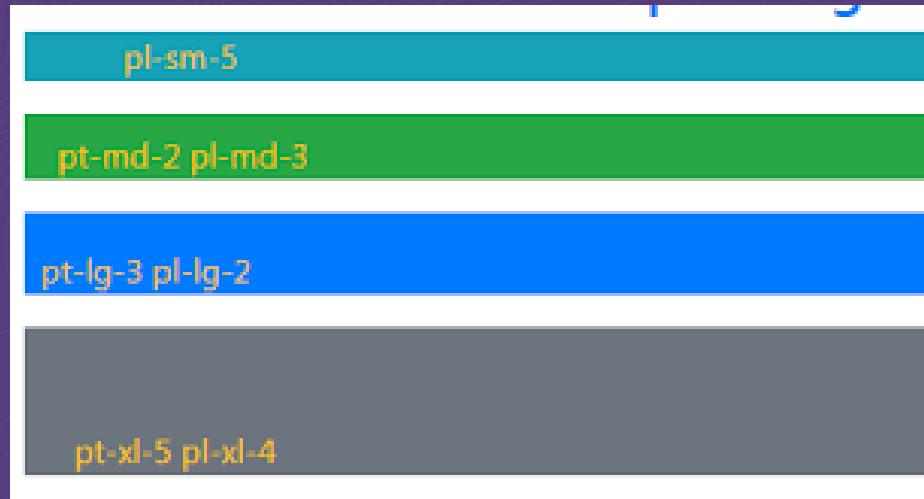
Third, but first	First, but unordered	Second, but last
------------------	----------------------	------------------

GRID

- La alineación de la rejilla está basada en flex
- Alineación vertical con `align-items-*`
- Alineación horizontal con `justify-content-*`
- Podemos hacer alineaciones dependientes de la pantalla: `align-items-md-*`

SPACING

→ Se usa p para el padding y m para el pargin:



<https://getbootstrap.com/docs/4.0/utilities/spacing/>

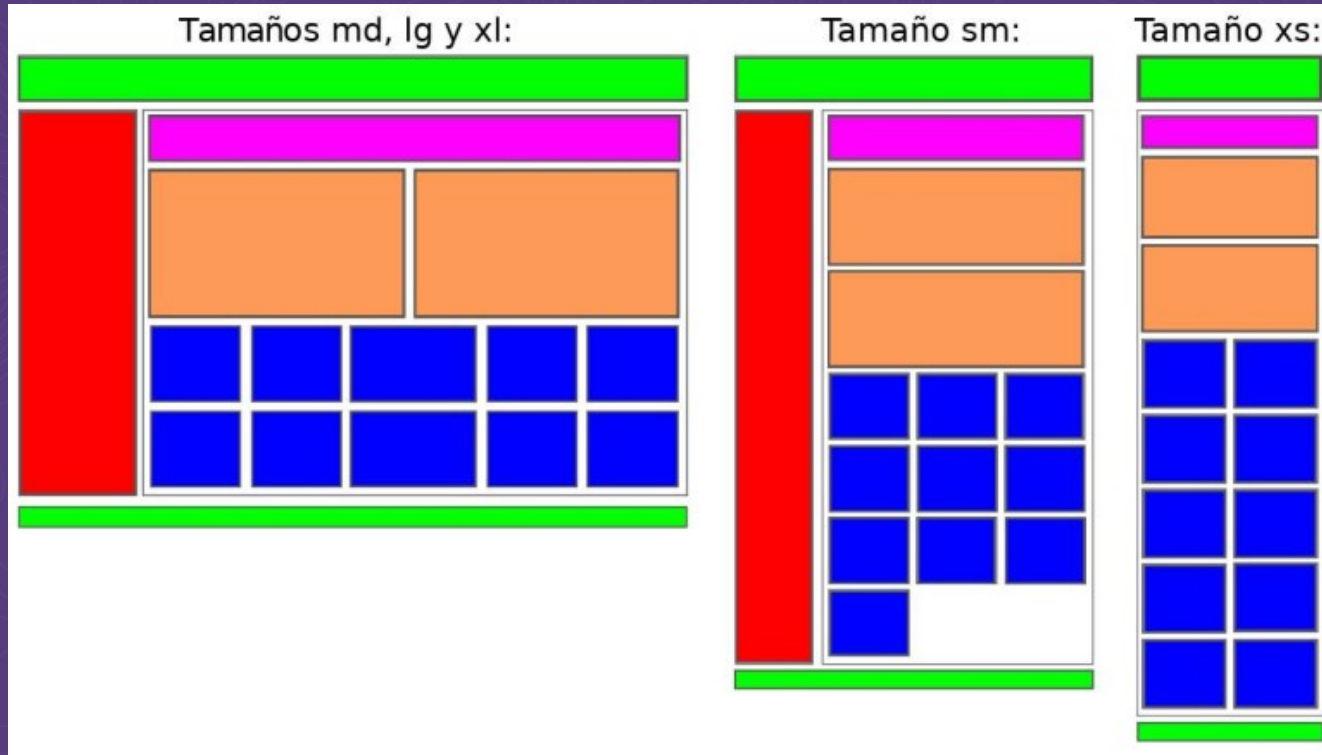
UTILIDADES RESPONSIVE

→ Para ocultar o mostrar elementos dependiendo del tamaño de la pantalla:

Tamaños de pantalla	Mostrar	Ocultar
Solo para tamaños extra pequeños	<code>d-block d-sm-none</code>	<code>d-none d-sm-block</code>
Solo para tamaños pequeños (sm)	<code>d-none d-sm-block d-md-none</code>	<code>d-sm-none d-md-block</code>
Solo para tamaños medianos (md)	<code>d-none d-md-block d-lg-none</code>	<code>d-md-none d-lg-block</code>
Solo para tamaños grandes (lg)	<code>d-none d-lg-block d-xl-none</code>	<code>d-lg-none d-xl-block</code>
Solo para tamaños extra grandes (xl)	<code>d-none d-xl-block</code>	<code>d-xl-none</code>

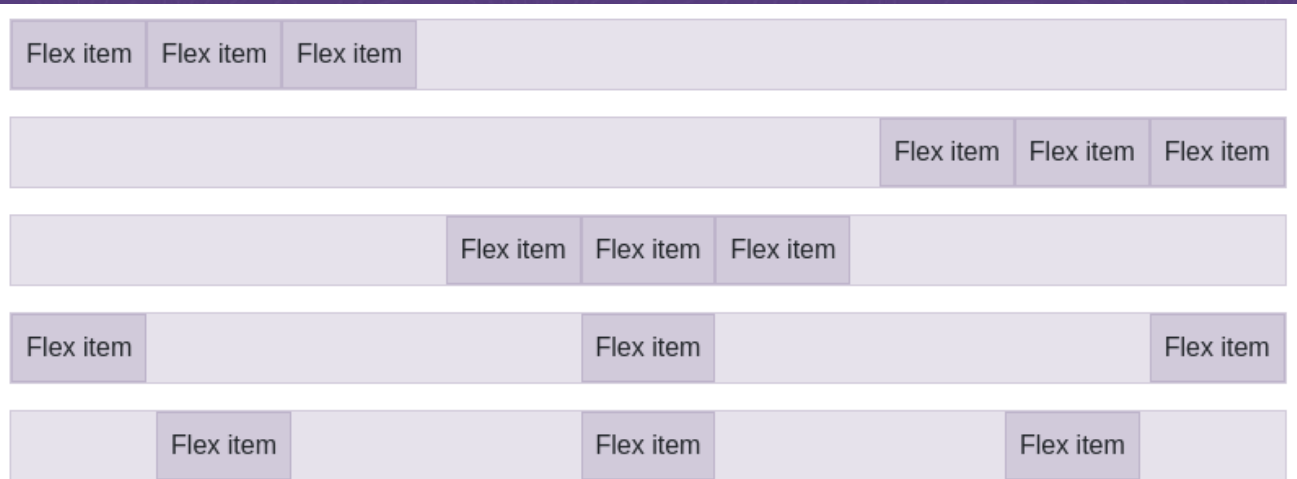
ACTIVIDAD

→ Diseña usando el grid de bootstrap



FLEX

→ Bootstrap también incluye el display flex

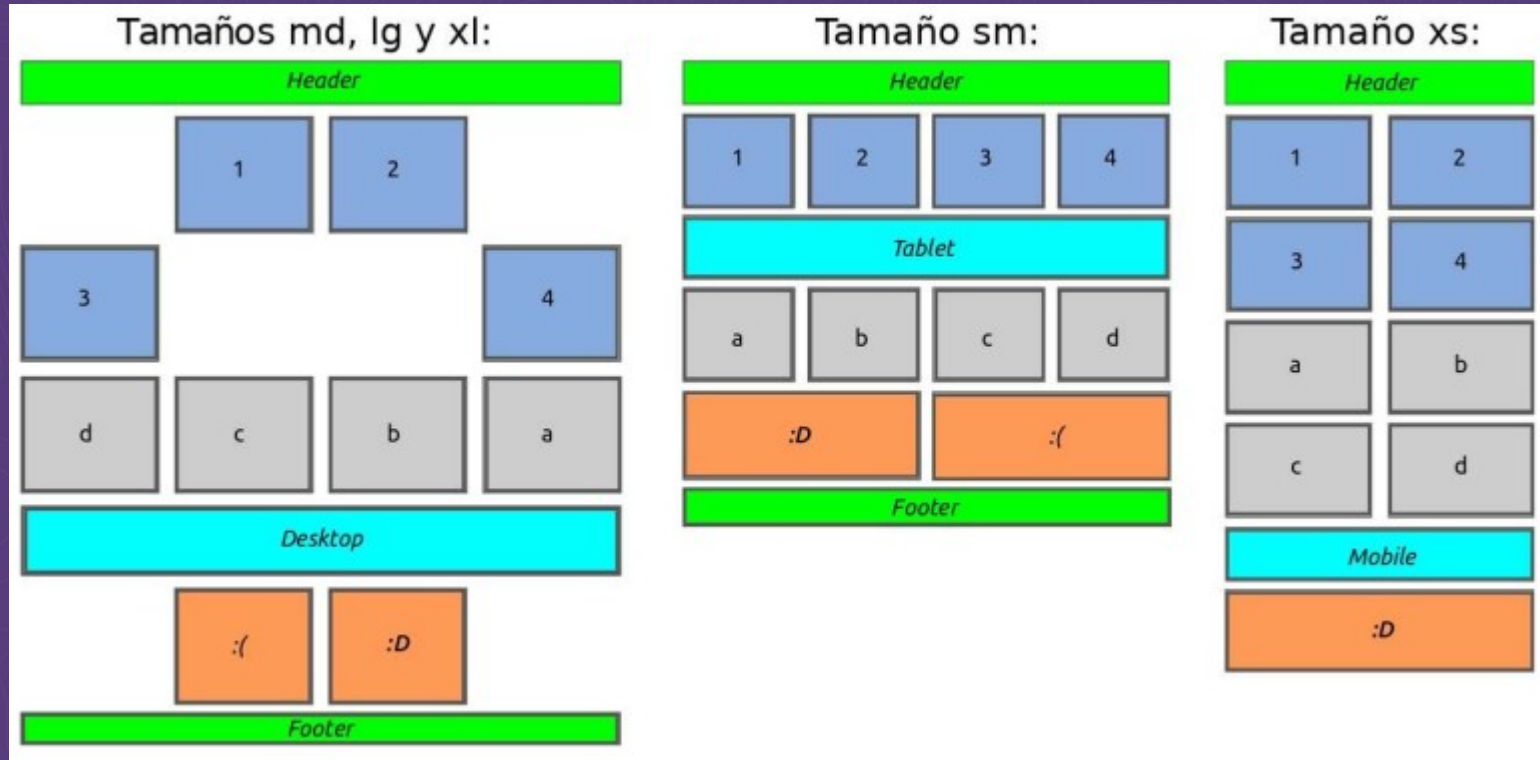


```
<div class="d-flex justify-content-start">...</div>
<div class="d-flex justify-content-end">...</div>
<div class="d-flex justify-content-center">...</div>
<div class="d-flex justify-content-between">...</div>
<div class="d-flex justify-content-around">...</div>
```

Copy

ACTIVIDAD

→ Diseña con flex



COMPONENTES

BOTONES

```
<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>  
<button type="button" class="btn btn-warning">Warning</button>  
<button type="button" class="btn btn-info">Info</button>  
<button type="button" class="btn btn-light">Light</button>  
<button type="button" class="btn btn-dark">Dark</button>  
<button type="button" class="btn btn-link">Link</button>
```

Primary

Secondary

Success

Danger

Warning

Info

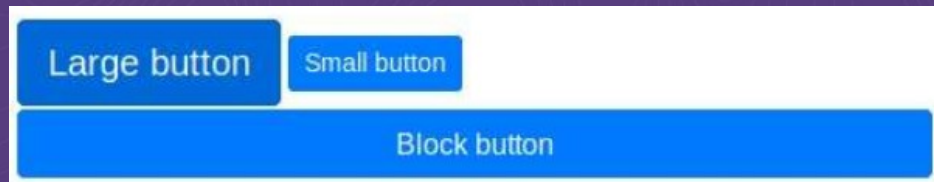
Light

Dark

Link

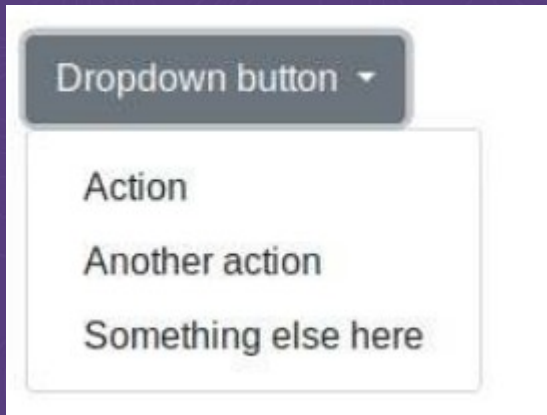
BOTONES

```
<button type="button" class="btn btn-primary btn-lg">Large button</button>  
<button type="button" class="btn btn-primary btn-sm">Small button</button>  
<button type="button" class="btn btn-primary btn-block">Block button</button>
```



DESPLEGABLE

```
<div class="dropdown">
  <button class="btn btn-secondary dropdown-toggle" type="button" id="dropdownMenuButt
on" data-toggle="dropdown" aria-haspopup="true" aria-expanded="false">
    Dropdown button
  </button>
  <div class="dropdown-menu" aria-labelledby="dropdownMenuButton">
    <a class="dropdown-item" href="#">Action</a>
    <a class="dropdown-item" href="#">Another action</a>
    <a class="dropdown-item" href="#">Something else here</a>
  </div>
</div>
```



GRUPO DE BOTONES

```
<div class="btn-group" role="group" aria-label="Basic example">  
  <button type="button" class="btn btn-secondary">Left</button>  
  <button type="button" class="btn btn-secondary">Middle</button>  
  <button type="button" class="btn btn-secondary">Right</button>  
</div>
```



Left Middle Right

BARRA DE BOTONES

```
<div class="btn-toolbar" role="toolbar" aria-label="Toolbar with button groups">
  <div class="btn-group mr-2" role="group" aria-label="First group">
    <button type="button" class="btn btn-secondary">1</button>
    <button type="button" class="btn btn-secondary">2</button>
    <button type="button" class="btn btn-secondary">3</button>
    <button type="button" class="btn btn-secondary">4</button>
  </div>
  <div class="btn-group mr-2" role="group" aria-label="Second group">
    <button type="button" class="btn btn-secondary">5</button>
    <button type="button" class="btn btn-secondary">6</button>
    <button type="button" class="btn btn-secondary">7</button>
  </div>
  <div class="btn-group" role="group" aria-label="Third group">
    <button type="button" class="btn btn-secondary">8</button>
  </div>
</div>
```

1

2

3

4

5

6

7

8

GRUPO DE BOTONES

```
<div class="btn-group btn-group-lg" role="group" aria-label="...">...</div>  
<div class="btn-group" role="group" aria-label="...">...</div>  
<div class="btn-group btn-group-sm" role="group" aria-label="...">...</div>
```



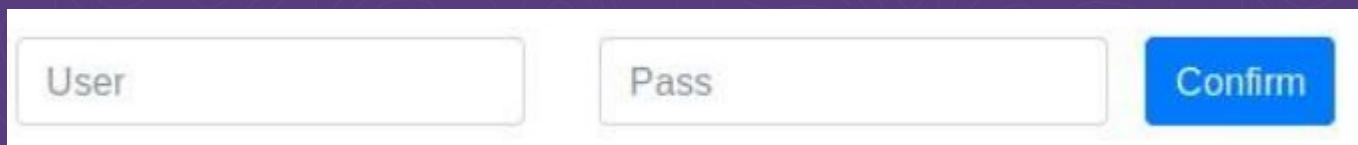
FORMULARIOS

```
<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">
  </div>
</form>
```

Email address

FORMULARIO INLINE

```
<form class="form-inline">
  <div class="form-group mx-sm-3">
    <label for="inputUser" class="sr-only">User</label>
    <input type="password" class="form-control" id="inputUser" placeholder="User">
  </div>
  <div class="form-group mx-sm-3">
    <label for="inputPass" class="sr-only">Password</label>
    <input type="password" class="form-control" id="inputPass" placeholder="Pass">
  </div>
  <button type="submit" class="btn btn-primary">Confirm</button>
</form>
```



FORMULARIO HORIZONTAL

```
<form>
  <div class="form-group row">
    <label for="inputEmail3" class="col-sm-2 col-form-label">Email</label>
    <div class="col-sm-10">
      <input type="email" class="form-control" id="inputEmail3" placeholder="Email">
    </div>
  </div>
  <div class="form-group row">
    <label for="inputPassword3" class="col-sm-2 col-form-label">Password</label>
    <div class="col-sm-10">
      <input type="password" class="form-control" id="inputPassword3" placeholder="Pas
sword">
    </div>
  </div>
</form>
```

Email

Password

Checkbox

☐ Check me out

Sign in

VALIDACIÓN DE FORMULARIO

```
<form>
  <div class="form-group">
    <label for="validation01">First name</label>
    <input type="text" class="form-control is-valid" id="validation01"
      placeholder="First name" value="Mark" required>
  </div>
  <div class="form-group">
    <label for="validation02">City</label>
    <input type="text" class="form-control is-invalid" id="validation02" placeholder=
"City" required>
  </div>
</form>
```

First name

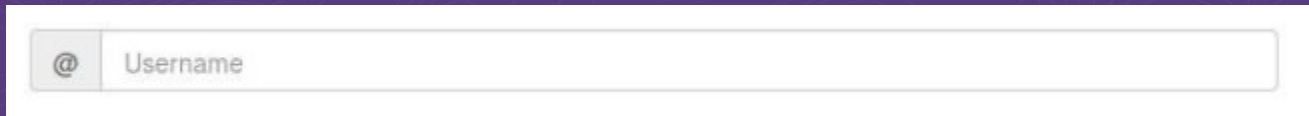
Mark

City

City

INPUT ADDON

```
<div class="input-group">  
  <span class="input-group-addon">@</span>  
  <input type="text" class="form-control" placeholder="Username">  
</div>
```



CARDS

```
<div class="card" style="width: 18rem;">  
    
  <div class="card-body">  
    <h5 class="card-title">Card title</h5>  
    <p class="card-text">Some quick example text to build on the card title and make up the bu  
    <a href="#" class="btn btn-primary">Go somewhere</a>  
  </div>  
</div>
```

Copy

286x180

Card title

Some quick example text to build on the card title and make up the bulk of the card's content.

Go somewhere

PESTAÑAS

```
<ul class="nav nav-tabs">
  <li class="nav-item">
    <a class="nav-link active" href="#">Active</a>
  </li>
  <li class="nav-item">
    <a class="nav-link" href="#">Link</a>
  </li>
  <li class="nav-item">
    <a class="nav-link" href="#">Link</a>
  </li>
  <li class="nav-item">
    <a class="nav-link disabled" href="#">Disabled</a>
  </li>
</ul>
```

Active

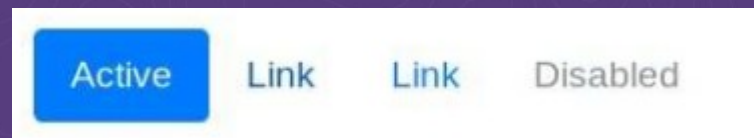
Link

Link

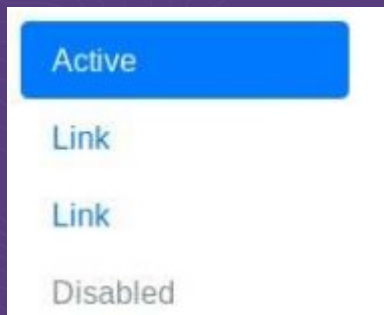
Disabled

PÍLDORAS

```
<ul class="nav nav-pills">
  <li class="nav-item">
    <a class="nav-link active" href="#">Active</a>
  </li>
  <li class="nav-item">
    <a class="nav-link" href="#">Link</a>
  </li>
  <li class="nav-item">
    <a class="nav-link" href="#">Link</a>
  </li>
  <li class="nav-item">
    <a class="nav-link disabled" href="#">Disabled</a>
  </li>
</ul>
```



```
<ul class="nav nav-pills flex-column">
  <li class="nav-item">
    <a class="nav-link active" href="#">Active</a>
  </li>
  <li class="nav-item">
    <a class="nav-link" href="#">Link</a>
  </li>
  <li class="nav-item">
    <a class="nav-link" href="#">Link</a>
  </li>
  <li class="nav-item">
    <a class="nav-link disabled" href="#">Disabled</a>
  </li>
</ul>
```



ANCHO DE PESTAÑAS O PÍLDORAS

```
<ul class="nav nav-pills nav-fill">
  <li class="nav-item">
    <a class="nav-link active" href="#">Active</a>
  </li>
  <li class="nav-item">
    <a class="nav-link" href="#">Longer nav link</a>
  </li>
  <li class="nav-item">
    <a class="nav-link" href="#">Link</a>
  </li>
  <li class="nav-item">
    <a class="nav-link disabled" href="#">Disabled</a>
  </li>
</ul>
```

Active

Longer nav link

Link

Disabled

NAVEGACIÓN CON DESPLEGABLES

```
<li class="nav-item dropdown">
  <a class="nav-link dropdown-toggle" data-toggle="dropdown" href="#" role="button"
    aria-haspopup="true" aria-expanded="false">Dropdown</a>
  <div class="dropdown-menu">
    <a class="dropdown-item" href="#">Action</a>
    <a class="dropdown-item" href="#">Another action</a>
    <a class="dropdown-item" href="#">Something else here</a>
    <div class="dropdown-divider"></div>
    <a class="dropdown-item" href="#">Separated link</a>
  </div>
</li>
```



BARRA DE NAVEGACIÓN

- Bootstrap nos facilita la creación de la barra principal de navegación de nuestra web mediante la clase `.navbar`

Navbar Home Link Dropdown ▾ Disabled

BARRA DE NAVEGACIÓN

- Nombre o logotipo de la web, marcado con la etiqueta `.navbar-brand`
- Botón toggler marcado con `.navbar-toggler`
- El menú, en un `` `.navbar-nav`, dentro de un div con las clases `.collapse` `.navbar-collapse`
- Los elementos del menú, en elementos `` `.navbar-item`

BARRA DE NAVEGACIÓN

```
<nav class="navbar navbar-expand-lg navbar-light bg-light">
  <a class="navbar-brand" href="#">Navbar</a>
  <button class="navbar-toggler" type="button" data-toggle="collapse"
    data-target="#navbarSupportedContent" aria-controls="navbarSupportedContent"

    aria-expanded="false" aria-label="Toggle navigation">
    <span class="navbar-toggler-icon"></span>
  </button>

  <div class="collapse navbar-collapse" id="navbarSupportedContent">
    <ul class="navbar-nav mr-auto">
      <li class="nav-item active">
        <a class="nav-link" href="#">Home <span class="sr-only">(current)</span></a>
      </li>
      <li class="nav-item">
        <a class="nav-link" href="#">Link</a>
      </li>
    </ul>
  </div>
</nav>
```

Navbar Home Link Dropdown ▾ Disabled

Search

Navbar



IMAGEN EN LA BARRA DE NAVEGACIÓN

```
<nav class="navbar navbar-light bg-light">
  <a class="navbar-brand" href="#">
    
  </a>
  ...
</nav>

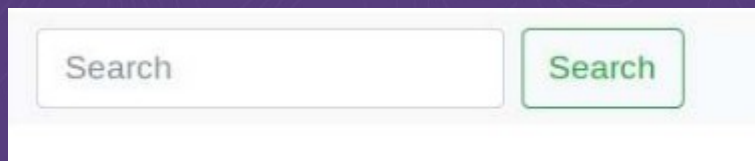
<!-- 0 si queremos incluir un logotipo y texto... -->
<nav class="navbar navbar-light bg-light">
  <a class="navbar-brand" href="#">
    
    Bootstrap
  </a>
</nav>
```



Bootstrap

FORMULARIO EN EL NAVBAR

```
<nav class="navbar navbar-light bg-light">
  <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>
```



Search

ALINEACIÓN DEL NAVBAR

```
<nav class="navbar navbar-light bg-light justify-content-between">
  <a class="navbar-brand">Navbar</a>
  <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>
```

Navbar

Search

ANCLAJE DEL NAVBAR

- Fijado a la parte superior añadiendo la clase con `.fixed-top`
- Fijado a la parte inferior `.fixed-bottom`
- Fijado sticky (o pegajoso) con la etiqueta `.sticky-top`

ANCLAJE DEL NAVBAR

- En los modos `.fixed-top` y `.fixed-bottom`, dado que la barra se colocará de forma "flotante" sobre el contenido, es posible que oculte una parte del mismo.
- Para solucionar esto es necesario añadir un pequeño espaciado superior o inferior a la etiqueta `<body>`

```
body { padding-top: 70px; } /* En el caso de .fixed-top */  
body { padding-bottom: 70px; } /* En el caso de .fixed-bottom */
```

COLORES DEL NAVBAR

```
<nav class="navbar navbar-dark bg-dark">
  <!-- ... -->
</nav>

<nav class="navbar navbar-dark bg-primary">
  <!-- ... -->
</nav>

<nav class="navbar navbar-light" style="background-color: #e3f2fd;">
  <!-- ... -->
</nav>
```

Navbar Home Features Pricing About

Navbar Home Features Pricing About

Navbar Home Features Pricing About

.bg-primary

.bg-danger

.bg-light

.bg-secondary

.bg-warning

.bg-dark

.bg-success

.bg-info

.bg-white

MÁS COMPONENTES

- Alerts
- Tablas
- Jumbotron
- Modal
- Scrollspy
- ...

[GetBootstrap.com](https://getbootstrap.com)



PRÁCTICA 2.4