

BOOTSTRAP 4

RESPONSIVE WEB DIZAJN

- Automatsko prilagođavanje sajtova da izgledaju dobro na svim uređajima
- Bootstrap
 - Font end frejmworck za brži i lakši razvoj veb sajtova
 - Koristi HTML, CSS i JavaScript
 - Mobile first strategy
 - Najnovija verzija: Bootstrap 4

PODEŠAVANJE OKRUŽENJA

■ CDN

- Bez instalacije već preko Content Delivery Network-a (mreže za distribuciju sadržaja)
- `<link rel="stylesheet" href="https://maxcdn.bootstrapcdn.com/bootstrap/4.0.0/css/bootstrap.min.css">`

■ Instaliranje

- <https://getbootstrap.com/>
- Prekompajlirana i minimizovana verzija
- `<link rel = "stylesheet" href = "css/bootstrap.min.css" >`

GRID SISTEM

- Kreiranje stranica pomoću redova i kolona
- Maksimum 12 kolona

span 1	span 1	span 1	span 1	span 1	span 1	span 1	span 1	span 1	span 1	span 1	span 1
span 4				span 4				span 4			
span 4				span 8							
span 6						span 6					
span 12											

- Grid sistem je responsive i kolone se automatski prilagođavaju veličini ekrana

KAKO RADI GRID SISTEM

- Koristiti redove za horizontalno grupisanje kolona
- Redovi moraju biti unutar container klase da bi se postiglo odgovarajuće poravnanje
- Sadržaj treba da bude unutar kolona, a samo kolone smeju biti direktna deca redova
- Kolone se kreiraju navođenjem koliko od 12 mogućih kolona želimo da zauzmemo

GRID KLASE

- Grid sistem ima 5 klasa:
 - .col- (extra small devices – širina ekrana manja od 576px)
 - .col-sm- (small devices – širina ekrana veća ili jednaka od 576px)
 - .col-md- (medium devices - – širina ekrana veća ili jednaka od 768px)
 - .col-lg- (large devices - – širina ekrana veća ili jednaka od 992px)
 - .col-xl- (xlarge devices - – širina ekrana veća ili jednaka od 1200px)
- Ako želimo da specificiramo istu širinu za male i srednje u ređaje dovoljno je da deifinišemo samo sm

OSNOVNA GRID STRUKTURA

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

JEDNAKE KOLONE

```
<div class="row">  
  <div class="col">.col</div>  
  <div class="col">.col</div>  
  <div class="col">.col</div>  
</div>
```


CLEARFIX

■ Problem ako kolone nisu istih visina

```
<div class = "container">
  <div class = "row" >
    <div class = "col-xs-6 col-sm-3" style = "border:1px solid black;">
      <p>Lorem ipsum dolor sit amet, consectetur adipisicing elit, sed do
        eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut
        enim ad minim veniam, quis nostrud exercitation ullamco laboris
        nisi ut aliquip ex ea commodo consequat.</p>
    </div>
    <div class = "col-xs-6 col-sm-3" style = "border:1px solid black;">
      <p>Lorem ipsum dolor sit amet, consectetur adipisicing elit, sed do
        eiusmod tempor incididunt ut.</p>
    </div>
    <div class="clearfix"></div>
    <div class = "col-xs-6 col-sm-3" style = "border:1px solid black;">
      <p>Ut enim ad minim veniam, quis nostrud exercitation ullamco
        laboris nisi ut aliquip ex ea commodo consequat.</p>
    </div>
    <div class = "col-xs-6 col-sm-3" style = "border:1px solid black;">
      <p>Lorem ipsum dolor sit amet, consectetur adipisicing elit, sed do
        eiusmod tempor incididunt ut labore et dolore magna aliqua.</p>
    </div>
  </div>
</div>
```

OFFSET KOLONE

- Za pomeranje kolone

```
<div class = "container">
  <h1>Hello, world!</h1>

  <div class = "row" >
    <div class = "col-md-offset-3 col-xs-6 " style = "border:1px solid black;">
      <p>Lorem ipsum dolor sit amet, consectetur adipisicing elit.</p>
    </div>
  </div>
</div>
```

- offset-md-3 (v4)

UGNJEŽDAVANJE KOLONA

```
<div class = "container">
  <div class = "row">
    <div class = "col-md-3" style = "border:1px solid black; background-color:red;">
      <h4>First Column</h4>
      <p>Lorem ipsum dolor sit amet, consectetur adipisicing elit.</p>
    </div>
    <div class = "col-md-9" style = "border:1px solid black;background-color:yellow;">
      <h4>Second Column- Split into 4 boxes</h4>
      <div class = "row">
        <div class = "col-md-6" style = "border:1px solid black; background-color:blue;">
          <p>Consectetur art party Tonx culpa semiotics. Pinterest assumenda minim organic quis.</p>
        </div>
        <div class = "col-md-6" style = "border:1px solid black;background-color:blue;">
          <p>sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. </p>
        </div>
      </div>
      <div class = "row">
        <div class = "col-md-6" style = "border:1px solid black;background-color:green;">
          <p>quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat.</p>
        </div>
        <div class = "col-md-6" style = "border:1px solid black;background-color:green;">
          <p>Lorem ipsum dolor sit amet, consectetur adipisicing elit, ut enim ad minim.</p>
        </div>
      </div>
    </div>
  </div>
</div>
```

REĐANJE KOLONA

```
<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>
```

TIPOGRAFIJA (1)

- Bootstrap default:
 - font-size: 16px
 - line-height: 1.5
 - font-family: Helvetica Neue, Helvetica, Arial
- Naslovi
 - <h1>-<h6> - veći font i bolder
- Display naslovi
 - .display-1, .display-2, .display-3, .display-4 – veći font i manji bold
- <small> - sekundarni tekst u naslovu
- <mark> - žuta pozadina i padding

TIPOGRAFIJA (2)

- `<abbr>` - akronim
- `<dl>` - deskripciona lista
- `<code>` - prikaz programskog koda
- `<kbd>` - prikaz elemenata sa tastature
- `<pre>` - preformatiran tekst
- Dodatne klase:
 - `.font-italic`
 - `.lead`
 - `.text-justify`
 - `.text-capitalize`
 - `.list-inline`

BOJE

- “meaning through colors”
- `.text-muted`, `.text-primary`, `.text-success`, `.text-info`, `.text-warning`, `.text-danger`, `.text-secondary`, `.text-white`, `.text-dark` and `.text-light`
- Može i nad linkovima -> tamniji hover
- Pozadinske boje:
 - `.bg-primary`, `.bg-success`, `.bg-info`, `.bg-warning`, `.bg-danger`, `.bg-secondary`, `.bg-dark` and `.bg-light`.

TABELE (1)

- `.table`
- `.table-striped`
- `.table-bordered`
- `.table-hover`
- `.table-dark`
- `.table-dark .table-striped`

- `.thead-dark`
- `.thead-light`
- `.table-sm`
- `.table-responsive`

TABELE (2)

■ Kontekstualne klase:

- .table-primary
- .table-success
- .table-danger
- .table-info
- .table-warning
- .table-active
- .table-secondary
- .table-light
- .table-dark

SLIKE

■ Oblici:

- .rounded
- .rounded-circle
- .img-thumbnail

■ Poravnanje

- .float-right
- .float-left

■ Responsive

- .img-fluid

JUMBOTRON

- .jumbotron

Jumbotron :)

- ```
<div class="jumbotron jumbotron-fluid">
 <div class="container">
 <Jumbotron full-width</h1>
 </div>
</div>
```

- .page-header

# DUGMAD (1)

■ btn

Basic

■ btn btn-primary

Primary

■ btn btn-secondary

Secondary

■ btn btn-success

Success

■ btn btn-info

Info

■ btn btn-warning

Warning

■ btn btn-danger

Danger

■ btn btn-dark

Dark

■ btn btn-light

Light

# DUGMAD (2)

- btn btn-outline-primary
- btn btn-outline-secondary
- btn btn-outline-success
- btn btn-outline-info
- btn btn-outline-warning
- btn btn-outline-danger
- btn btn-outline-dark
- btn btn-outline-light

Primary

Secondary

Success

Info

Warning

Danger

Dark

Light

# DUGMAD (3)

- Veličine dugmica
  - btn-lg
  - btn-sm
  - btn-block
- active/disabled
- btn-group
- btn-group-vertical

# ALERTS (1)

## Alerts

Alerts are created with the `.alert` class, followed by a contextual color classes:

**Success!** This alert box could indicate a successful or positive action.

**Info!** This alert box could indicate a neutral informative change or action.

**Warning!** This alert box could indicate a warning that might need attention.

**Danger!** This alert box could indicate a dangerous or potentially negative action.

**Primary!** Indicates an important action.

**Secondary!** Indicates a slightly less important action.

**Dark!** Dark grey alert.

**Light!** Light grey alert.

# ALERTS (2)

- Otvaranje: `$('.alert').alert()`
- Zatvaranje:
  - `$.alert('close')`
  - ```
<div class="alert alert-success alert-dismissible">  
  <button type="button" class="close" data-  
dismiss="alert">&times;</button>  
  <strong>Success!</strong> Indicates a successful or  
positive action.  
</div>
```
- Animacija
 - fade
 - show

GLYPHICONS (V3)

- Sintaksa ``

- Envelope icon:

```
<span class="glyphicon glyphicon-envelope"></span>
```

- Search icon:

```
<span class="glyphicon glyphicon-search"></span>
```

- Print icon:

```
<span class="glyphicon glyphicon-print"></span>
```

BEDŽEVI

- Dodatne informacije bilo kom sadržaju
- Prilagođavaju se veličini roditelja
- `badge badge-primary`
- `badge badge-secondary`
- `badge badge-success`
- `badge badge-danger`
- `badge badge-info`
- `badge badge-light`
- `badge badge-dark`

Primary

Secondary

Success

Danger

Warning

Info

Light

Dark

PROGRESS BAR

- Prikaz koliko je korisnik napredovao u procesu
- ```
<div class="progress">
 <div class="progress-bar" style="width:70%">
 70%
 </div>
</div>
```
- ```
<div class="progress">  
  <div class="progress-bar bg-success progress-bar-striped"  
    style="width:40%;height:20%"></div>  
</div>
```
- ```
<div class="progress-bar progress-bar-striped
 progress-bar-animated" style="width: 40%"></div>
```

# PAGINACIJA

```
<ul class="pagination">
 <li class="page-item"><a class="page-
link" href="#">Previous
 <li class="page-item"><a class="page-
link" href="#">1
 <li class="page-item active"><a class="page-
link" href="#">2
 <li class="page-item"><a class="page-
link" href="#">3
 <li class="page-item"><a class="page-
link" href="#">Next

```

# PAGER (V3)

```
■ <ul class="pager">
 Previous
 Next

```

Previous

Next

# BREADCRUMBS

```
<ul class="breadcrumb">
 <li class="breadcrumb-
item">Photos
 <li class="breadcrumb-item">Summer
2017
 <li class="breadcrumb-
item">Italy
 <li class="breadcrumb-item active">Rome

```

# LINK GRUPE (1)

```
■ <ul class="list-group">
 <li class="list-group-item active">Active
 item
 <li class="list-group-item">Second item
 <li class="list-group-item">Third item

```

## Active Item in a List Group

Active item

Second item

Third item

# LINK GRUPE (2)

```
■ <div class="list-group">
 <a href="#" class="list-group-item list-group-item-
action">Action item
 <a href="#" class="list-group-item list-group-item-
success">Success item
 <a href="#" class="list-group-item list-group-item-
secondary">Secondary item
 <a href="#" class="list-group-item list-group-item-
info">Info item
 <a href="#" class="list-group-item list-group-item-
warning">Warning item
 <a href="#" class="list-group-item list-group-item-
danger">Danger item
 <a href="#" class="list-group-item list-group-item-
primary">Primary item
 <a href="#" class="list-group-item list-group-item-
dark">Dark item
 <a href="#" class="list-group-item list-group-item-
light">Light item
</div>
```



# LINK GRUPE (3)

## Linked Items With Contextual Classes

Move the mouse over the linked items to see the hover effect:

Action item

Success item

Secondary item

Info item

Warning item

Danger item

Primary item

Dark item

Light item

# KARTICE (PANEL V3)

```
■ <div class="card" style="width:400px">

 <div class="card-body">
 <h4 class="card-title">John Doe</h4>
 <p class="card-text">Some example text.</p>
 See Profile
 </div>
</div>
```



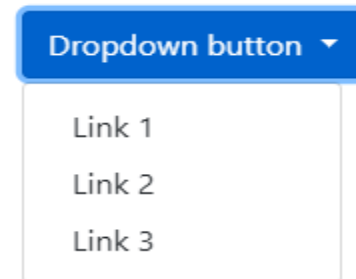
John Doe

Some example text some example text. John Doe is an architect and engineer

See Profile

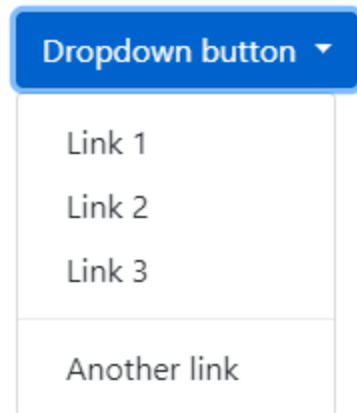
# DROPDOWNS (1)

```
■ <div class="dropdown">
 <button type="button" class="btn btn-primary
dropdown-toggle" data-toggle="dropdown">
 Dropdown button
 </button>
 <div class="dropdown-menu">
 Link 1
 Link 2
 Link 3
 </div>
</div>
```



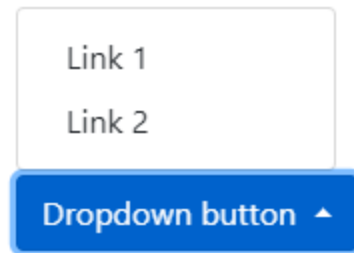
# DROPDOWNS (2)

- dropdown-divider



- dropdown-header

- dropup



# COLLAPSE (1)

- `<button data-toggle="collapse" data-target="#demo">Collapsible</button>`

```
<div id="demo" class="collapse">
 Lorem ipsum dolor text....
</div>
```

- `accordion`

Collapsible Group Item #1

Collapsible Group Item #2

Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat.

Collapsible Group Item #3

# COLLAPSE (2)

```
■ <div id="accordion">

 <div class="card">
 <div class="card-header">
 <a class="card-link" data-
toggle="collapse" data-
parent="#accordion" href="#collapseOne">
 Collapsible Group Item #1

 </div>
 <div id="collapseOne" class="collapse show">
 <div class="card-body">
 Lorem ipsum..
 </div>
 </div>
 </div>
```

## COLLAPSE (3)

```
<div class="card">
 <div class="card-header">
 <a class="collapsed card-link" data-
toggle="collapse" data-
parent="#accordion" href="#collapseTwo">
 Collapsible Group Item #2

 </div>
 <div id="collapseTwo" class="collapse">
 <div class="card-body">
 Lorem ipsum..
 </div>
 </div>
</div>
</div>
```

# NAVS

- Horizontalni meni

- ```
<ul class="nav justify-content-center">  
  <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" href="#">Link</a>  
  </li>  
  <li class="nav-item">  
    <a class="nav-link  
disabled" href="#">Disabled</a>  
  </li>  
</ul>
```


TABOVI (1)

```
■ <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

TABOVI (2)

```
■ <ul class="nav nav-pills">
  <li class="nav-item">
    <a class="nav-link active" data-
toggle="pill" href="#home">Home</a>
  </li>
  <li class="nav-item">
    <a class="nav-link" data-
toggle="pill" href="#menu1">Menu 1</a>
  </li>
  <li class="nav-item">
    <a class="nav-link" data-
toggle="pill" href="#menu2">Menu 2</a>
  </li>
</ul>
```

TABOVI (3)

```
■ <!-- Tab panes -->
  <div class="tab-content">
    <div class="tab-pane active
container" id="home">...</div>
    <div class="tab-pane container" id="menu1">...</div>
    <div class="tab-pane container" id="menu2">...</div>
  </div>
```

Home **Menu 1** Menu 2

Menu 1

Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat.

NAVBAR

```
■ <nav class="navbar navbar-expand-sm bg-dark navbar-dark">  
  <a class="navbar-brand" href="#">  
      
  </a>  
  <ul class="navbar-nav">  
    <li class="nav-item active">  
      <a class="nav-link" 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>  
</nav>
```



Active Link 1 Link 2 Link 3

MEDIA OBJEKTI



John Doe *Posted on February 19, 2016*

Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua.



John Doe *Posted on February 20, 2016*

Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua.



John Doe *Posted on February 21, 2016*

Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua.

- media
- media-left
- media-body
- Media-heading

SLIDESHOW (1)

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

  <!-- Indicators -->
  <ul class="carousel-indicators">
    <li data-target="#demo" data-slide-to="0" class="active"></li>
    <li data-target="#demo" data-slide-to="1"></li>
    <li data-target="#demo" data-slide-to="2"></li>
  </ul>

  <!-- The slideshow -->
  <div class="carousel-inner">
    <div class="carousel-item active">
      
    </div>
    <div class="carousel-item">
      
    </div>
    <div class="carousel-item">
      
    </div>
  </div>
```

SLIDESHOW (2)

```
<!-- Left and right controls -->
<a class="carousel-control-
prev" href="#demo" data-slide="prev">
    <span class="carousel-control-prev-
icon"></span>
</a>
<a class="carousel-control-
next" href="#demo" data-slide="next">
    <span class="carousel-control-next-
icon"></span>
</a>

</div>
```

MODALI

```
<!-- Button to Open the Modal -->
<button type="button" class="btn btn-primary" data-toggle="modal" data-target="#myModal">
  Open modal
</button>

<!-- The Modal -->
<div class="modal fade" id="myModal">
  <div class="modal-dialog">
    <div class="modal-content">

      <!-- Modal Header -->
      <div class="modal-header">
        <h4 class="modal-title">Modal Heading</h4>
        <button type="button" class="close" data-dismiss="modal">&times;</button>
      </div>

      <!-- Modal body -->
      <div class="modal-body">
        Modal body..
      </div>

      <!-- Modal footer -->
      <div class="modal-footer">
        <button type="button" class="btn btn-danger" data-dismiss="modal">Close</button>
      </div>

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


POMOĆNE KLASE (1)

■ Border

Example



Example

```
<span class="border"></span>  
<span class="border border-0"></span>  
<span class="border border-top-0"></span>  
<span class="border border-right-0"></span>  
<span class="border border-bottom-0"></span>  
<span class="border border-left-0"></span>
```

POMOČNE KLASE (2)

■ Border color

Example



Example

```
<span class="border border-primary"></span>  
<span class="border border-secondary"></span>  
<span class="border border-success"></span>  
<span class="border border-danger"></span>  
<span class="border border-warning"></span>  
<span class="border border-info"></span>  
<span class="border border-light"></span>  
<span class="border border-dark"></span>  
<span class="border border-white"></span>
```

POMOĆNE KLASE (3)

■ Border radius

Example



Example

```
<span class="rounded"></span>  
<span class="rounded-top"></span>  
<span class="rounded-right"></span>  
<span class="rounded-bottom"></span>  
<span class="rounded-left"></span>  
<span class="rounded-circle"></span>  
<span class="rounded-0"></span>
```

[Try it Yourself »](#)

POMOĆNE KLASSE (4)

■ Width

Example



Width 25%

Width 50%

Width 75%

Width 100%

Max Width 100%

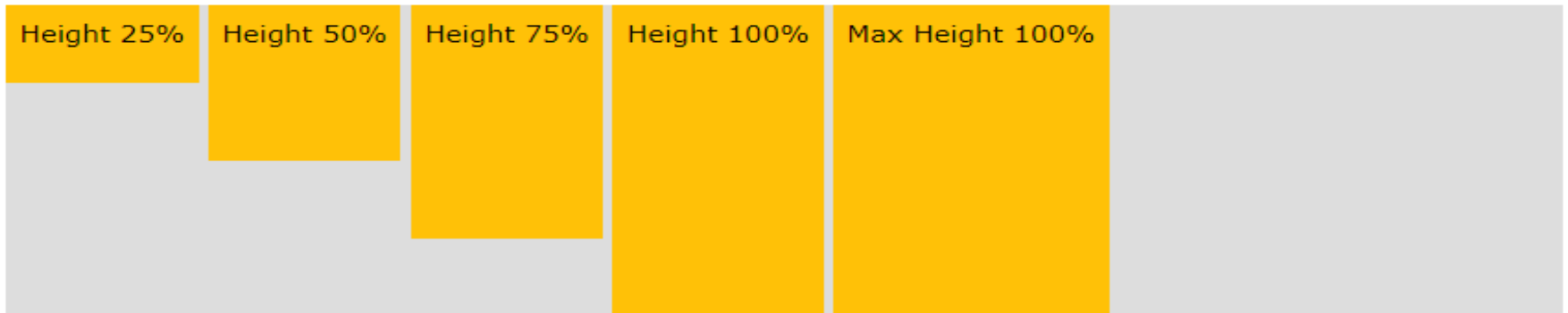
Example

```
<div class="w-25 bg-warning">Width 25%</div>  
<div class="w-50 bg-warning">Width 50%</div>  
<div class="w-75 bg-warning">Width 75%</div>  
<div class="w-100 bg-warning">Width 100%</div>  
<div class="mw-100 bg-warning">Max Width 100%</div>
```

POMOĆNE KLASE (5)

■ Height

Example



Example

```
<div style="height:200px;background-color:#ddd">  
  <div class="h-25 bg-warning">Height 25%</div>  
  <div class="h-50 bg-warning">Height 50%</div>  
  <div class="h-75 bg-warning">Height 75%</div>  
  <div class="h-100 bg-warning">Height 100%</div>  
  <div class="mh-100 bg-warning" style="height:500px">Max Height 100%</div>  
</div>
```

VEŽBANJE (1)



My site

This is my first site and I will use Bootstrap 4!

Firstname Jelica

Lastname Cincovic

Date of birth 04.12.1994.

Mail jelica@etf.rs

Obrazovanje

Cras justo odio

Dapibus ac facilisis in

Vestibulum at eros

Iskustvo

Cras justo odio

Dapibus ac facilisis in

Vestibulum at eros

Vestine

Cras justo odio

Dapibus ac facilisis in

Vestibulum at eros

Osobine

Cras justo odio

Dapibus ac facilisis in

Vestibulum at eros

© Company 2017

VEŽBANJE (2)



News

World

Science

Health



The incident took place yesterday in the evening, near one of the nightclubs in sight of many witnesses. The police spokesperson did not want to give us any information. We got the story was from the participants of a party currently present in front of the club. The man reportedly refused to present his id and then attacked the policeman who grabbed him by the hand. 'A fight ensued after which the policeman dropped to the ground' says a woman, one of the witnesses of the incident. 'His partner tried to help him but she turned out to be helpless too'. The incident took place yesterday in the evening, near one of the nightclubs in sight of many witnesses. The police spokesperson did not want to give us any information. We got the story was from the participants of a party currently present in front of the club. The man reportedly refused to present his id and then attacked the policeman who grabbed him by the hand. 'A fight ensued after which the policeman dropped to the ground' says a woman, one of the witnesses of the incident. 'His partner tried to help him but she turned out to be helpless too'.

VEŽBANJE (2)

My company

The passion for technology appeared before the one for entrepreneurship, because I've always liked to discover what mechanisms hide behind the devices, how systems work and how can they be optimized. I thought about how I can contribute from here, from Brasov, in a world of IT giants, alongside with my team of smart Romanians. And I asked myself at what level can we create and export Romanian technology....

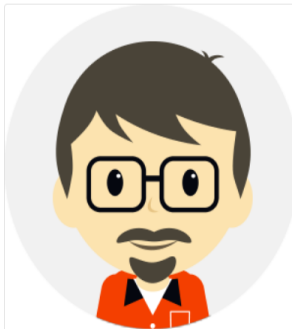
[MySite](#) / [About](#)

70% of full capacity

[Open modal](#)



Staff



John Doe

Some example text some example text.
John Doe is an architect and engineer

[See Profile](#)



John Doe

Some example text some example text.
John Doe is an architect and engineer

[See Profile](#)



John Doe

Some example text some example text.
John Doe is an architect and engineer

[See Profile](#)

VEŽBANJE (2)



Contact information

Unfortunately we do not have phone number yet

Firstname	Lastname	Email
John	Doe	john@example.com
Mary	Moe	mary@example.com
July	Dooley	july@example.com



Map

