



Internet programiranje

Bootstrap

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Uvod

- X Front-end framework za brži i lakši razvoj veb aplikacija
- X Pruža HTML i CSS šablone za forme, dugmiće, tabele, navigacije, itd.
- X Omogućava lakši razvoj responzivnih stranica (automatsko prilagođavanje veličini uređaja)
- X Najnovija verzija: Bootstrap 5 (2021)
- X Mobile-first approach

- X Izvor: <https://getbootstrap.com/docs/5.3/getting-started/introduction/>

Instalacija

- X Moguće je uključiti ga preko CDN-a (Content Delivery Network) ili uključiti fajl preuzet sa zvaničnog sajta: <https://getbootstrap.com/>
- X `<link href=≡"https://cdn.jsdelivr.net/npm/bootstrap@5.3.2/dist/css/bootstrap.min.css" rel="stylesheet">`
- X `<link href=≡"bootstrap.min.css" rel="stylesheet" type="text/css">`
- X Uključivanje JS-a omogućava korišćenje dinamičkih komponenti

Struktura

- X Sav sadržaj stranice nalazi se u kontejneru:
- X .container pruža responzivnost stranice

	Extra small <576px	Small ≥576px	Medium ≥768px	Large ≥992px	Extra Large ≥1200px	XXL ≥1400px
max-width	100%	540px	720px	960px	1140px	1320px

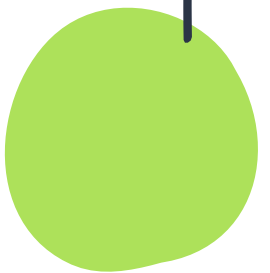
- X .container-fluid se uvek prožima po širini cele stranice

<https://getbootstrap.com/docs/5.3/layout/grid/>

Struktura

- X Bootstrap je izgrađen pomoću Flexbox-a i koristi grid sistem
- X Kolone se automatski prilagođavaju širini ekrana
- X Maksimalno 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											



Struktura

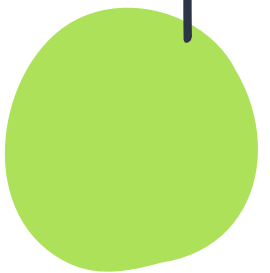
- X Koristi se row-col struktura stranice
- X Redovi horizontalno grupišu kolone
- X Sadržaj stranice se nalazi u kolonama
- X .col- <576px
- X .col-sm- >=576px
- X .col-md- >=768px
- X .col-lg- >=992px
- X .col-xl- >=1200px
- X .col-xxl- >=1400px

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

Struktura

- X Ukupan broj kolona u redu treba da bude 12
- X Broj nakon veličine kolone predstavlja broj kolona koje se grupišu zajedno

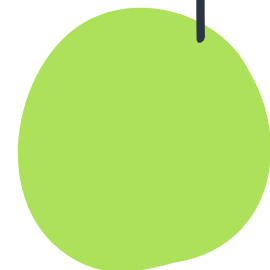
.col-sm-3	.col-sm-3	.col-sm-3	.col-sm-3
.col-sm-4	.col-sm-8		
.col	.col	.col	



Boje

- X Bootstrap pruža klase za rad sa bojama (značenje kroz boju)
- X `.text-muted`, `.text-primary`, `.text-success`, `.text-info`, `.text-warning`, `.text-danger`, `.text-secondary`, `.text-white`, `.text-dark`, `.text-body`, `.text-light`
- X `.bg-primary`, `.bg-success`, `.bg-info`, `.bg-warning`, `.bg-danger`, `.bg-secondary`, `.bg-dark`, `.bg-light`

<https://getbootstrap.com/docs/5.3/customize/color/>



Alerts

- X Predefinisane poruke sa informacijama `.alert`
- X `.alert-success`, `.alert-info`, `.alert-warning`, `.alert-danger`, `.alert-primary`, `.alert-secondary`, `.alert-light`, `.alert-dark`

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

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

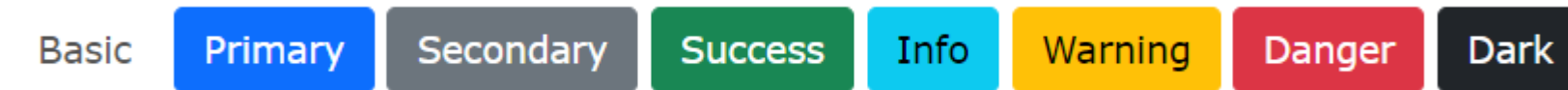
Warning! This alert box could indicate a warning that might need attention.

<https://getbootstrap.com/docs/5.3/components/alerts/>

Dugmad

- X Klase za dugmad mogu da se koriste na `<a>`, `<button>` i `<input>` elementima

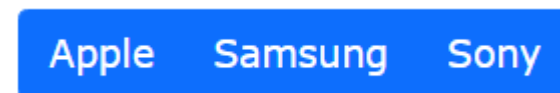
```
<button type="button" class="btn">Basic</button>
```



- X `.btn-outline-*`, `.btn-lg`, `.btn-sm`, `.d-grid`, `.gap-*`



- X `.btn-group`, `.active`, `disabled` (atribut)



<https://getbootstrap.com/docs/5.3/components/buttons/>

Slike

- X `.rounded`, `.rounded-circle`, `.img-thumbnail`
- X `.float-start`, `.float-end`, `.mx-auto`, `.d-block`, `.img-fluid`

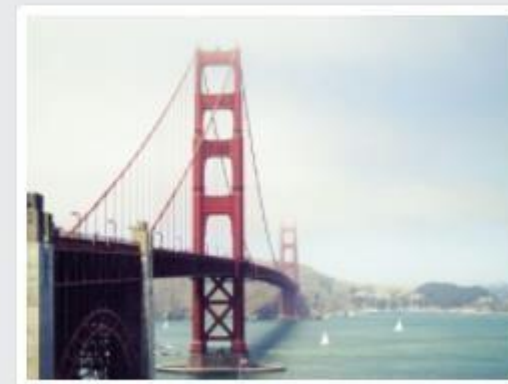
Rounded Corners:



Circle:



Thumbnail:



<https://getbootstrap.com/docs/5.3/content/images/>

Tabele

X Bootstrap tabele imaju horizontalne bordere i mali padding

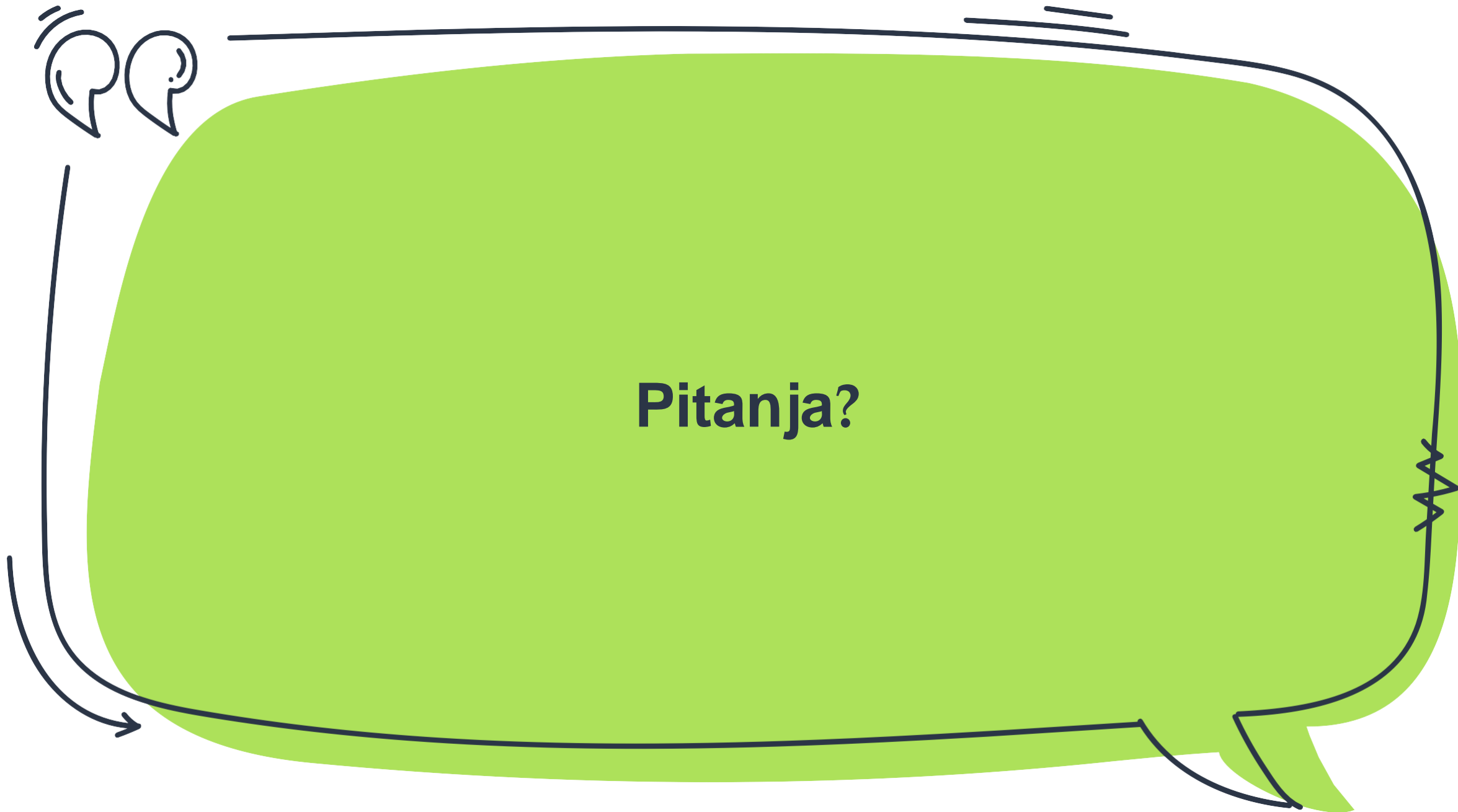
X `.table`

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

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

X `.table-sm`, `.table-responsive-*` (scrollbar), `.table-primary`, itd.

<https://getbootstrap.com/docs/5.3/content/tables/>



Pitanja?