

STANDARDNI KORISNIČKI INTERFEJSI

Predavanje broj: 06

Nastavna jedinica: CSS

Nastavne teme:

Svojstva: boja, pozadine, margina, granica, unutrašnjih margina, outline-a, liste pozicioniranja, odsecanja, kursor, prekoračenja, vidljivosti. CSS i tabelle. Kombinatori. Horizontalan navigacija. Galerija slika. Providnost. Sprajtovi. Mediji. CSS[atribut]. CSS3, border-radius, border-image (slice, width, outset). Pozadinska slika (size, contain, cover, repeat, pozicija, origin (border-box, content-box), clip (padding-box, content-box)).

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Literatura:

J. D. Gauchat, "Integrisane tehnologije za izradu WEB strana", Mikroknjiga, Beograd, 2014.

W3C Tutorials, Internet, 2014.

Svojstva boja i pozadina

- Vrednost boje se može predstaviti: heksadecimalno "#ff0000", kao RGB vrednost "rgb(255,0,0)" ili nazivom boje "red".

color

- Postavlja boju teksta u datom elementu. Može označavati i boju elementa - npr. kod oznake <hr>. Vrednost *initial* znači podrazumevanu (default) vrednost, a *inherit* da će svojstvo naslediti od roditeljskog elementa.

```
p { color:green; }  
<p>Lorem ipsum dolor sit amet</p>
```

Lorem ipsum dolor sit amet

background-color

- Definiše boju pozadine za dati element.

```
div.primer {  
  background-color:#3C6;  
  color:#000;  
  padding:3px;  
  border:1px solid #000;  
}
```

```
<div class="primer">Lorem ipsum dolor sit amet</div>
```

Lorem ipsum dolor sit amet

Svojstva boja i pozadina

background-image

- Postavlja pozadinsku sliku u element. Ukoliko se primenjuje s niže navedenim svojstvima, može se definisati fiksni položaj pozadinske slike ili ponavljanje po jednom od pravila.

background-repeat

- Ponavljjanje pozadinske slike. Može poprimiti sledeće vrednosti: *repeat* - ponavlja sliku; *no-repeat* - ne ponavlja sliku; *repeat-x* - ponavlja sliku po x osi; *repeat-y* - ponavlja sliku po y osi.

```
div.pozadina {  
    background-image:url("tekstura.gif");  
    background-repeat:repeat-x;  
    border:1px solid #000;  
    height:150px;  
    color:#c00;  
}  
<div class="pozadina">Lorem ipsum dolor sit amet</div>
```

Svojstva boja i pozadina

```
<!DOCTYPE html>
<html>
<head>
<style>
body {
    background-image: url("desert.jpg");
}
</style>
</head>
<body>

<h1>Hello World!</h1>
<p>This text is not easy to
    read on this background image.</p>

</body>
</html>
```



Svojstva boja i pozadina

```
<!DOCTYPE html>
```

```
<html>
```

```
<head>
```

```
<style>
```

```
body {
```

```
    background-image: url("gradient_bg.png");
```

```
    background-repeat: repeat-x;
```

```
}
```

```
</style>
```

```
</head>
```

```
<body>
```

```
<h1>Hello World!</h1>
```

```
</body></html>
```

- Za stil gde se slika ponavlja u smeru obe ose:

```
<style>
```

```
body {
```

```
    background-image: url("img_tree.png");
```

```
    background-repeat: repeat-x repeat-y;
```

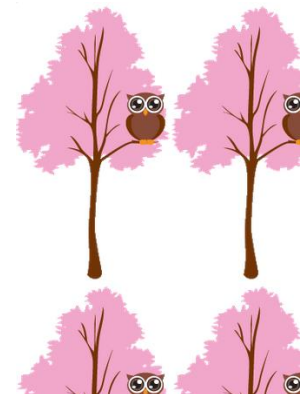
```
}
```

```
</style>
```

Hello World!



img_tree.png

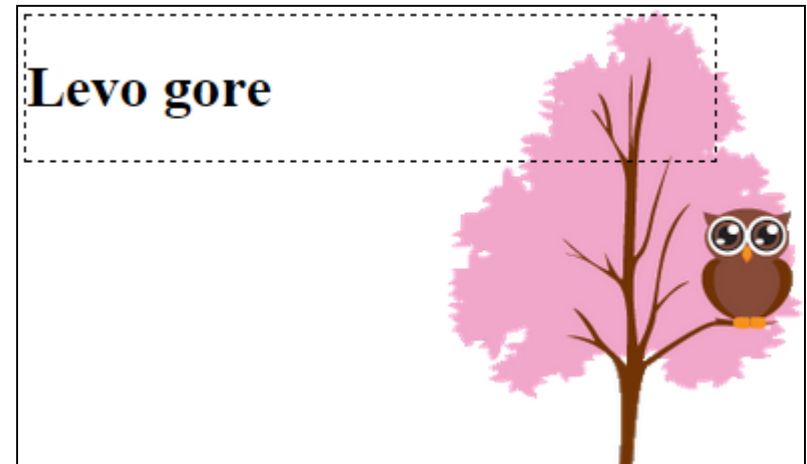


Svojstva boja i pozadina

```
<!DOCTYPE html>
<html>
<head>
<style>
body {
    background-image: url("img_tree.png");
    background-repeat: no-repeat;
    background-position: right top;
    border: 1px dashed black;
    margin-right: 50px;
}
</style>
</head>
<body>

<h1>Levo gore</h1>

</body>
</html>
```



Svojstva boja i pozadina

background-attachment

- Ovo svojstvo definiše pomiče li se pozadinska slika s elementom ili ne. Može poprimiti vrednost *scroll* - pomiče se, ili *fixed* - ne pomiče se.

Fiksna pozadina :

```
body {  
    background-image:url("css.gif");  
    background-repeat:no-repeat;  
    background-attachment:fixed;  
}
```

background-position

- Pozadinska slika predefinisano se postavlja u gornji levi ugao dokumenta. Za definisanje ove početne tačke koristi se svojstvo background-position. Može poprimiti vrednosti: *top*, *center*, *bottom*, *right*, *left* ili procenat, odnosno udaljenost od gornjeg levog ugla.

background

- Skraćeno svojstvo gde se navode sva navedena svojstva (redosled je nebitan):

```
body { background:url("css.gif") no-repeat fixed; }
```


Svojstva SCC kutije

- Auto vrednost za levu i desnu marginu će učiniti da se tekst centrira (15-70-15).

```
<!DOCTYPE html>
<html><head>
<style>
.center {
    margin-left: auto;
    margin-right: auto;
    width: 70%;
    background-color: #b0e0e6;
}
</style>
</head><body>
<div class="center">
    <p>In my younger and more vulnerable years my father gave me
some advice that I've been turning over in my mind ever since.</p>
    <p>'Whenever you feel like criticizing anyone,' he told me,
'just remember that all the people in this world haven't had the
advantages that you've had.'
```

In my younger and more vulnerable years my father gave me some advice that I've been turning over in my mind ever since.

'Whenever you feel like criticizing anyone,' he told me, 'just remember that all the people in this world haven't had the advantages that you've had.'

Svojstva CSS kutije, margine, unutrašnje margine

margin

- Četiri pojedinačne margine mogu se zameniti skraćenim svojstvom, koje bi se tada, za prethodni slučaj, definisalo na sledeći način. Ide se od vrha u smeru kretanja kazaljke na satu.

```
div { margin:15px 70px 5px 40px; }
```

- Ukoliko želimo jednaku marginu za sve strane elementa, možemo pisati:

```
div { margin:5px; }
```

- Ukoliko pišemo manje podataka onda je redosled:

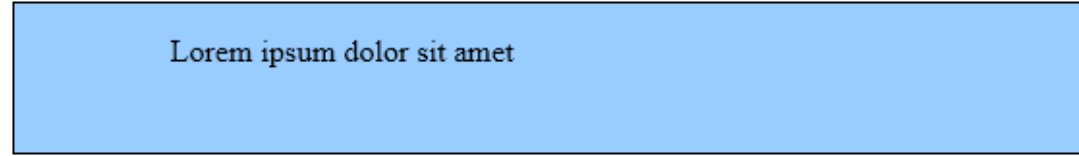
gornja-donja, leva-desna ili gornja, leva-desna, donja.

- **Unutrašnje margine** predstavljaju udaljenost sadržaja do granice CSS kutije.
- Slično kao i kod margina, postoje četiri unutrašnje margine i skraćeno svojstvo.
- Ukoliko nije eksplicitno definisana, predefinisana vrednost unutrašnjih margina je 0.
 - **padding-top** udaljenost od gornje granice.
 - **padding-right** udaljenost od desne granice.
 - **padding-bottom** udaljenost od donje granice.
 - **padding-left** udaljenost od leve granice.

Svojstva CSS kutije, unutrašnje margine

- Razmotrimo opet element div tako da mu uz margine dodajemo i unutrašnje margine:

```
div {  
  padding-top:15px;  
  padding-right:65px;  
  padding-bottom:35px;  
  padding-left:65px;  
  margin:15px,70px,5px,40px;  
  border:1px solid #000;  
  background-color:#99CCFF;  
}  
<div>Lorem ipsum dolor sit amet</div>
```



padding

- Kao i kod margina, i ovdje je moguće definisati unutrašnje margine na drugi način:

```
div { padding:5px 10px 15px 20px; }
```

- Odnosno, ukoliko su unutrašnje margine jednake:

```
div { padding:5px; }
```

Svojstva CSS kutije, granice

- CSS standard definiše niz svojstava kojima je moguće opisati granicu elementa. Moguće ih je podeliti u četiri grupe: širina granice, boja granice, izgled granice i skraćena svojstva.

Svojstva širine granice

- Slično kao i kod prethodnih svojstava, i ovo se svojstvo deli na četiri položaja - gore, desno, dole i levo. Ne može biti samo svojstvo.

```
div {  
  border-top-width:2px;  
  border-right-width:4px;  
  border-bottom-width:6px;  
  border-left-width:8px;  
  border-style:solid;  
  border-color:#000;  
  background-color:#99CCFF;  
}
```

```
<div>Lorem ipsum dolor sit amet</div>
```

- Ili za jednaku širinu svih granica:

```
div { border-width:2px; }
```



Lorem ipsum dolor sit amet

Svojstva CSS kutije, granice

Svojstva izgleda granice

- Svojstvo izgleda granice može poprimiti sledeće vrednosti: *none*, *hidden*, *dotted*, *dashed*, *solid*, *double*, *groove*, *ridge*, *inset*, *outset*.

```
div {  
  border-top-style:hidden;  
  border-right-style:dotted;  
  border-bottom-style:dashed;  
  border-left-style:solid;  
  
  border-width:6px;  
  border-color:#000;  
  background-color:#99CCFF;  
}  
<div>Lorem ipsum dolor sit amet</div>
```



- Ili zajedničko svojstvo za sve četiri granice:

```
div { border-style:dotted; }
```

Svojstva CSS kutije, granice

border-style

none: Defines no border

dotted: Defines a dotted border

dashed: Defines a dashed border

solid: Defines a solid border

double: Defines two borders. The width of the two borders are the same as the border-width value

groove: Defines a 3D grooved border. The effect depends on the border-color value

ridge: Defines a 3D ridged border. The effect depends on the border-color value

inset: Defines a 3D inset border. The effect depends on the border-color value

outset: Defines a 3D outset border. The effect depends on the border-color value

- Ako se navedu dve vrednosti svojstva border-style one se odnose na: **gornju i donju** te **levu i desnu** granicu, respektivno. Za tri vrednosti odnos je **gornja** te **leva i desna** i na kraju **donja** granica, respektivno (kao i kod ranijih slučajevea).

Svojstva CSS kutije, granice

Skraćena svojstva granice

- Sva navedena svojstva možemo postaviti skraćeno za pojedinačnu granicu:

```
div {  
  border-top: 2px solid #000;  
  border-right: 4px dotted red;  
  border-bottom: 6px dashed #fc0;  
  border-left: 6px groove #0c0;  
}  
<div>Lorem ipsum dolor sit amet</div>
```



- Ili za sve četiri granice u jednoj definiciji:

```
div { border: 2px dotted #000; }
```

Svojstva CSS kutije, outline

```
<!DOCTYPE html>
<html>
<head>
<style>
p.one {
    border: 1px solid red;
    outline-style: solid;
    outline-width: thin; outline-color: yellow;
}
p.two {
    border: 1px solid red;
    outline-style: dotted;
    outline-width: 6px;
    outline-color: green;
}
</style>
</head>
<body>
<p class="one">This is some text in a paragraph.</p>
<p class="two">This is some text in a paragraph.</p>
</body></html>
```

This is some text in a paragraph.

This is some text in a paragraph.

Svojstva CSS kutije, dimenzije

- **Dimenzije** CSS kutije definisane su širinom i visinom sadržaja:
 - **width** definiše širinu sadržaja.
 - **height** definiše visinu sadržaja.
- Širina i visina sadržaja može biti postavljena na bilo koji blok element, bez obzira na dimenzije koje bi taj element inače zauzeo.
- Npr. u slučaju CSS ikone:

```
img.ikona {  
    height:165px;  
    width:120px;  
}
```

```

```

```

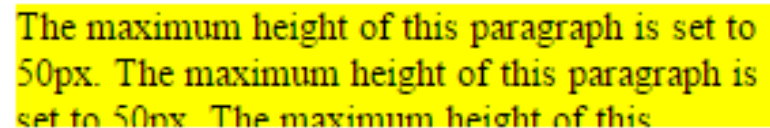
```



Svojstva CSS kutije, dimenzije

- Osim svojstava height i width postoje i :
 - max-width
 - max-height
 - min-width
 - min-height
- Vrednosti mogu biti:
 - none podrazumevano
 - length data u px, cm, etc.
 - % definiše maksimalnu visinu datu u % sadržavajućeg bloka
 - initial podrazumevano u browser-u
 - inherit kao i vrednost roditeljskog svojstva

```
<style>
p {
  max-height: 50px;
  background-color: yellow;
  overflow: auto;
}
</style>
```



The maximum height of this paragraph is set to 50px. The maximum height of this paragraph is set to 50px. The maximum height of this

Svojstva CSS kutije, liste

Svojstva lista

- Liste se sastoje od oznake tipa liste, te od jedne ili više oznaka koje označavaju elemente liste.
 - Svaka od ovih oznaka može se zasebno formatirati.

list-style-type

- Definiše tip grafičkih oznaka koji će biti prikazan ispred pojedinog elementa liste. Može poprimiti sledeće vrednosti: *disc*, *circle*, *square*, *decimal*, *lower-roman*, *upper-roman*, *lower-alpha*, *upper-alpha*, *none*.

```
ul {  
  list-style-type: square;  
}
```

```
<ul>  
  <li>Lorem ipsum dolor sit amet</li>  
  <li>consectetur adipisicing elit</li>  
  <li>sed do eiusmod tempor incididunt</li>  
  <li>ut labore et dolore magna aliqua.</li>  
</ul>
```

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

Svojstva CSS kutije, liste

list-style-image

- Ovo svojstvo nam omogućuje da listi uobičajene grafičke oznake dodamo sliku.
Primer:

```
ul { list-style-image:url(purple.gif);}
li { padding:4px;}
<ul>
  <li>Lorem ipsum dolor sit amet</li>
  <li>consectetur adipisicing elit</li>
  <li>sed do eiusmod tempor incididunt</li>
  <li>ut labore et dolore magna aliqua.</li>
</ul>
```

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

list-style-position

- Definiše uvlačenje elemenata liste. Može poprimiti vrednosti *inside* ili *outside*. Podrazumevana vrednost je *outside*.

list-style

- Skraćeno svojstvo za istovremeni prikaz svih svojstava liste. U ovom primeru, ukoliko je slika nedostupna, prikazuje se *circle*:

```
ul { list-style:circle url(arrows.gif) outside; }
```

Svojstva CSS kutije, liste

```
<!DOCTYPE html>
<html><head>
<style>
ul {
  list-style-type: none;
  padding: 0px;
  margin: 0px;
}
ul li {
  background-image: url(sqpurple.gif);
  background-repeat: no-repeat;
  background-position: 0px center;
  padding-left: 15px;
}
</style>
</head><body>
<ul>
  <li>Coffee</li>
  <li>Tea</li>
  <li>Coca Cola</li>
</ul>
</body></html>
```

■ Coffee
■ Tea
■ Coca Cola



opište ovu sliku

Svojstva CSS kutije, liste

```
<!DOCTYPE html>
<html><head>
<style>
ul.in { list-style: square inside url("sqpurple.gif"); }
ul.ou { list-style: square outside url("sqpurple.gif");}
</style>
</head><body>
Liste
<ul>Normal
  <li>Coffee</li>
  <li>Tea</li>
</ul>
<ul class="in">Inside
  <li>Coffee</li>
  <li>Tea</li>
</ul>
<ul class="ou">Outside
  <li>Coffee</li>
  <li>Tea</li>
</ul>
</body></html>
```

Liste

Normal

- Coffee
- Tea

Inside

- Coffee
- Tea

Outside

- Coffee
- Tea

Svojstva CSS kutije, pozicioniranja

z-index

- Ukoliko se dva elementa prekrivaju, vrednost z-index svojstva definiše koji će element biti iznad, a koji ispod u prikazu. Element s većom vrednošću z-index-a uvek se nalazi iznad.

```
<!DOCTYPE html>
```

```
<html><head>
```

```
<style>
```

```
img {
```

```
    position: absolute;
```

```
    left: 0px;
```

```
    top: 0px;
```

```
    z-index: -1;
```

```
}
```

```
</style>
```

```
</head><body>
```

```
<h1>This is a heading</h1>
```

```

```

```
<p>Because the image has a z-index of -1, it will be placed behind  
the text.</p>
```

```
</body></html>
```



This is a heading

Because the image has a z-index of -1, it will be placed behind the text.

Clip

- Odsecanje oblasti moguće je svojstvom clip (oblast odsecanja je tipa rectangle) u odnosu na top-left (kao da su tačke pravougaonika vidljive oblasti ygd,xgd i ydl,xdl).

```
<!DOCTYPE html>
<html>
<head>
<style>
img {
    position: absolute;
    clip: rect(0px,60px,200px,0px);
}
</style>
</head>
<body>

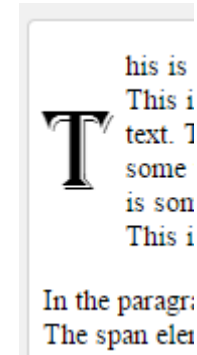

</body>
</html>
```



float

- Svojstvo float omogućuje pozicioniranje guranjem elementa levo ili desno pri čemu se dozvoljava ostalim elementima da budu (wrap) namotani oko elementa.

```
<style>
span {
  float: left;
  width: 0.7em;
  font-size: 400%;
  font-family: algerian, courier;
  line-height: 180%;
}
</style>
<span>T</span>his is some text ...
```



Kreiranje galerije slika pomoću float

```
<!DOCTYPE html>
<html><head>
<style>
.tn {
  float: left;
  width: 110px;
  height: 90px;
  margin: 5px;
}
</style>
</head>
<body>
<h3>Image Gallery</h3>




</body>
</html>
```

Image Gallery



Image Gallery



clear

- Svojstvo clear određuje da li element sa date strane dozvoljava float svojstvo drugih elemenata.

```
<!DOCTYPE html>
```

```
<html>
```

```
<head>
```

```
<style>
```

```
img { float: left;}
```

```
p.clear {  
    clear: both;  
}
```

```
</style>
```

```
</head>
```

```
<body>
```

```

```

```
<p>This is some text. This is some text. This is some text. This  
is some text. This is some text. This is some text.</p>
```

```
<p class="clear">This is also some text. This is also some text.  
This is also some text. This is also some text. This is also some  
text. This is also some text.</p>
```

```
</body>
```

```
</html>
```



This is some text. This is some text. This is some text. This
is some text. This is some text. This is some text.

This is also some text. This is also some text. This is also some text. This is
also some text. This is also some text. This is also some text.

Pozicioniranja

- Fiksno pozicioniranje gde je element invarijantan prema skrolovanju.

```
<style>
```

```
p.pos_fixed {  
    position: fixed;  
    top: 30px;  
    right: 5px;  
    color: red;  
}
```

```
</style>
```

```
<p class="pos_fixed">Some positioned text.</p>
```

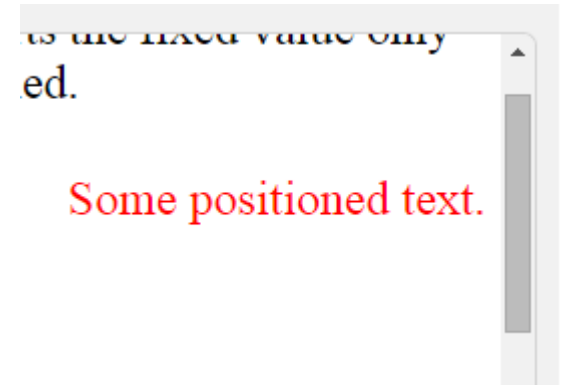
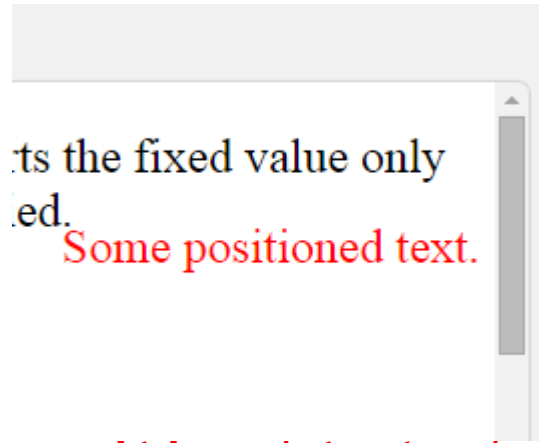
- Relativno pozicioniranje u odnosu na **originalni** položaj (npr. -20px ili 20px)

```
<style>
```

```
h2.pos_left {  
    position: relative;  
    left: -20px;  
}
```

```
h2.pos_right {  
    position: relative;  
    left: 20px;  
}
```

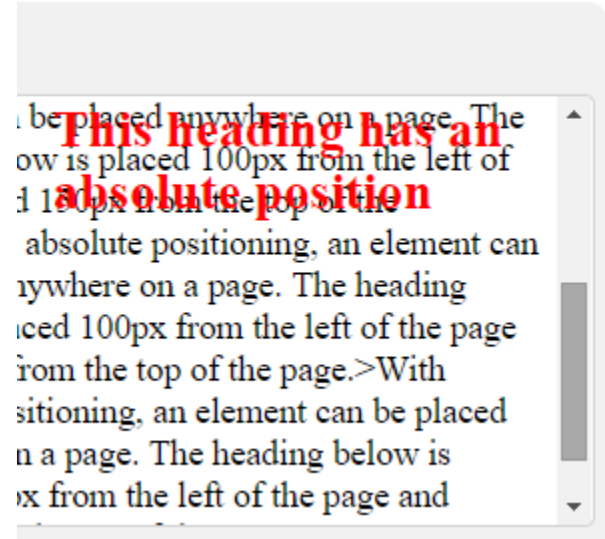
```
</style>
```



Pozicioniranje

- Apsolutno pozicioniranje postavlja element na datu poziciju. Ovakav element se može skrolovati.
 - Ostali elementi mogu biti i ispod apsolutno pozicioniranog elementa.

```
<style>
h2 {
  position: absolute;
  left: 100px;
  top: 150px;
  color:red;
}
</style>
```



Cursor, overflow

cursor

- Definiše vrstu pokazivača kada se on nađe iznad elementa. Može poprimiti vrednosti: *auto*, *crosshair*, *default*, *help*, *move*, *pointer*, *text*, *wait*

```
div { cursor:crosshair; }
```

overflow

- Definiše kako će se prikazati sadržaj koji je veći od CSS kutije. Može poprimiti vrijednosti: *visible*, *hidden*, *scroll* i *auto*.

```
div {  
  width:180px;  
  height:50px;  
  overflow:auto;  
  border:1px solid #000;  
}
```



```
<div>  
Lorem ipsum dolor sit amet  
consectetur adipisicing elit  
sed do eiusmod tempor incididunt  
ut labore et dolore magna aliqua.  
</div>
```

Visibility, display

visibility

- Definiše vidljivost elementa. Može poprimiti vrednosti *visible* - vidljiv, ili *hidden* - skriven (ali i dalje zauzima prostor).

display

- Svojstvo koje omogućuje promenu predefinisanog načina prikaza različitih tipova elemenata. Može poprimiti vrednosti *block*, *inline*, *list-item* i *none*.

Primer kako elemente liste prikazati u liniji:

```
li {  
  display:inline;  
}  
<ul>  
  <li>Lorem</li>  
  <li>ipsum</li>  
  <li>dolor</li>  
  <li>sit</li>  
  <li>amet</li>  
</ul>
```

>Lorem ipsum dolor sit amet

- Probajte da uradite primer sa `<style>span {display: block;}</style>`

Display

```
<!DOCTYPE html>
```

```
<html>
```

```
<head>
```

```
<style>
```

```
li {  
    display: inline;  
}
```

```
</style>
```

```
</head>
```

```
<body>
```

```
<p>Display a list of links as a horizontal menu:</p>
```

```
<ul>  
<li><a href="/html/default.asp" target="_blank">HTML</a></li>  
<li><a href="/css/default.asp" target="_blank">CSS</a></li>  
<li><a href="/js/default.asp" target="_blank">JavaScript</a></li>  
</ul>
```

```
</body>
```

```
</html>
```

Display a list of links as a horizontal menu:

[HTML](#) [CSS](#) [JavaScript](#)

Kombinacija

```
<!DOCTYPE html>
<html><head><style>
ul {
  float: left;
  width: 100%;
  padding: 0;
  margin: 0;
  list-style-type: none;
}
a {
  float: left;
  width: 6em;
  text-decoration: none;
  color: white;
  background-color: purple;
  padding: 0.2em 0.6em;
  border-right: 1px solid white;
}
a:hover {
  background-color: fuchsia;
}
li {
  display: inline; }
</style>
</head><body>
<ul>
  <li><a href="#">Link one</a>
</li>
  <li><a href="#">Link two</a>
</li>
  <li><a href="#">Link three</a>
</li>
  <li><a href="#">Link four</a>
</li>
</ul>
</body></html>
```

Link one

Link two

Link three

Link four

Tabele i CSS

```
<!DOCTYPE html>
<html><head>
<style>
table, th, td {    border: 1px solid black;}
</style>
</head>
<body>
<table>
  <tr>
    <th>Firstname</th>
    <th>Lastname</th>
  </tr>
  <tr>
    <td>Peter</td>
    <td>Griffin</td>
  </tr>
  <tr>
    <td>Lois</td>
    <td>Griffin</td>
  </tr>
</table></body></html>
```

Firstname	Lastname
Peter	Griffin
Lois	Griffin

Tabele i CSS

```
<!DOCTYPE html>
<html><head>
<style>
table {      border-collapse: collapse; }
table, td, th {
    border: 1px solid black;
}
</style>
</head><body>
<table>
  <tr>
    <th>Firstname</th>    <th>Lastname</th>
  </tr>
  <tr>
    <td>Peter</td>        <td>Griffin</td>
  </tr>
  <tr>
    <td>Lois</td>         <td>Griffin</td>
  </tr>
</table>
</body></html>
```

Firstname	Lastname
Peter	Griffin
Lois	Griffin

Tabele i CSS

```
<!DOCTYPE html>
<html>
<head>
<style>
table, td, th { border: 1px solid black;}
table { width: 100%; }
th { height: 50px;}
</style>
</head>
<body>
<table>
  <tr> <th>Firstname</th> <th>Lastname</th> <th>Savings</th> </tr>
  <tr> <td>Peter</td> <td>Griffin</td> <td>$100</td> </tr>
  <tr> <td>Lois</td> <td>Griffin</td> <td>$150</td> </tr>
</table>
</body>
</html>
```

Firstname	Lastname	Savings
Peter	Griffin	\$100
Lois	Griffin	\$150

Tabele i CSS

```
<!DOCTYPE html>
<html>
<head>
<style>
table, td, th { border: 1px solid black;}
table          { width: 100%;}
th             { text-align: left;}
</style>
</head>
<body>
<table>
  <tr> <th>Firstname</th> <th>Lastname</th> <th>Savings</th> </tr>
  <tr> <td>Peter</td>      <td>Griffin</td>  <td>$100</td>      </tr>
  <tr> <td>Lois</td>       <td>Griffin</td>  <td>$150</td>      </tr>
</table>
</body>
</html>
```

Firstname	Lastname	Savings
Peter	Griffin	\$100
Lois	Griffin	\$150

Tabele i CSS

```
<!DOCTYPE html>
<html>
<head>
<style>
table, td, th { border: 1px solid black;}
td {
    height: 50px;
    vertical-align: bottom;
}
</style>
</head>
<body>
<table>
    <tr> <th>Firstname</th> <th>Lastname</th> <th>Savings</th> </tr>
    <tr> <td>Peter</td>      <td>Griffin</td>    <td>$100</td>      </tr>
    <tr> <td>Lois</td>        <td>Griffin</td>    <td>$150</td>      </tr>
</table>
</body>
</html>
```

Firstname	Lastname	Savings
Peter	Griffin	\$100
Lois	Griffin	\$150

Tabele i CSS

```
<!DOCTYPE html>
<html>
<head>
<style>
table, td, th {
    border: 1px solid black;
}
td {
    padding: 15px;
}
</style>
</head>
<body>
<table>
    <tr> <th>Firstname</th> <th>Lastname</th> <th>Savings</th> </tr>
    <tr> <td>Peter</td> <td>Griffin</td> <td>$100</td> </tr>
    <tr> <td>Lois</td> <td>Griffin</td> <td>$150</td> </tr>
</table>
</body>
</html>
```

Firstname	Lastname	Savings
Peter	Griffin	\$100
Lois	Griffin	\$150

Tabele i CSS

```
<!DOCTYPE html>
<html>
<head>
<style>
table, td, th {
    border: 1px solid green;
}
th {
    background-color: green;
    color: white;
}
</style>
</head>
<body>
<table>
    <tr> <th>Firstname</th> <th>Lastname</th> <th>Savings</th> </tr>
    <tr> <td>Peter</td> <td>Griffin</td> <td>$100</td> </tr>
    <tr> <td>Lois</td> <td>Griffin</td> <td>$150</td> </tr>
</table>
</body>
</html>
```

Firstname	Lastname	Savings
Peter	Griffin	\$100
Lois	Griffin	\$150

Tabele i CSS

```
<!DOCTYPE html>
<html><head>
<style>
#customers {
    font-family: "Trebuchet MS", Arial, Helvetica, sans-serif;
    width: 100%;
    border-collapse: collapse;
}
#customers td, #customers th {
    font-size: 1em;
    border: 1px solid #98bf21;
    padding: 3px 7px 2px 7px;
}
#customers th {
    font-size: 1.1em;
    text-align: left;
    padding-top: 5px;
    padding-bottom: 4px;
    background-color: #A7C942;
    color: #ffffff;
}
```

Tabele i CSS

```
#customers tr.alt td { color: #000000; background-color: #EAF2D3;}
caption { caption-side: bottom; }
<!--setiti se pseudo-->
</style>
</head>
<body>
<table id="customers">
<caption>Table 1.1 Customers</caption>
<tr> <th>Company</th> <th>Contact</th> <th>Country</th> </tr>
  <tr> <td>Alfreds Futterkiste</td><td>Maria Anders</td>
    <td>Germany</td> </tr>
  <tr class="alt">
    <td>Berglunds snabbköp</td> <td>Christina Berglund</td>
    <td>Sweden</td> </tr>
  <tr>
    <td>Centro comercial Moctezuma</td> <td>Francisco Chang</td>
    <td>Mexico</td> </tr>
  <tr class="alt">
    <td>Ernst Handel</td> <td>Roland Mendel</td> <td>Austria</td>
  </tr>
</table></body></html>
```

Company	Contact	Country
Alfreds Futterkiste	Maria Anders	Germany
Berglunds snabbköp	Christina Berglund	Sweden
Centro comercial Moctezuma	Francisco Chang	Mexico
Ernst Handel	Roland Mendel	Austria

Table 1.1 Customers

Kombinatori

- Između dva jednostavna selektora (element1, element2) moguće je ubacivanje kombinatora kao što sledi:

- element1 je predak elementa2, (*Descendant Selector*)

```
div p {  
    background-color: yellow;  
}
```

- element1 je otac elementa2 (*Child Selector*)

```
div > p {  
    background-color: yellow;  
}
```

- iza elementa1 je njegov brat element2 (*Adjacent Sibling Selector*)

```
div + p {  
    background-color: yellow;  
}
```

- iza elementa1 su braća tipa element2 (*General Sibling Selector*)

```
div ~ p {  
    background-color: yellow;  
}
```

Kombinatori

```
<!DOCTYPE html>
<html>
<head>
<style>
div p {
    background-color: yellow;
}
</style>
</head>
<body>
```

Paragraph 1 in the div.

Paragraph 2 in the div.

Paragraph 3 in the div.

Paragraph 4. Not in a div.

Paragraph 5. Not in a div.

```
<div>
    <p>Paragraph 1 in the div.</p>
    <p>Paragraph 2 in the div.</p>
    <span><p>Paragraph 3 in the div.</p></span>
</div>
```

```
<p>Paragraph 4. Not in a div.</p>
```

```
<p>Paragraph 5. Not in a div.</p>
```

```
</body></html>
```

Kombinatori

```
<!DOCTYPE html>
<html>
<head>
<style>
div > p {
    background-color: yellow;
}
</style>
</head>
<body>
```

Paragraph 1 in the div.

Paragraph 2 in the div.

Paragraph 3 in the div and in the span.

Paragraph 4 in the div.

Paragraph 5. Not in a div.

Paragraph 6. Not in a div.

```
<div>
    <p>Paragraph 1 in the div.</p>
    <p>Paragraph 2 in the div.</p>
    <span><p>Paragraph 3 in the div and in the span.</p></span> <!--
not Child but Descendant -->
    <p>Paragraph 4 in the div.</p>
</div>

<p>Paragraph 5. Not in a div.</p><p>Paragraph 6. Not in a div.</p>
</body></html>
```

Kombinatori

```
<!DOCTYPE html>
<html><head>
<style>
div + p {
    background-color: yellow;
}
</style>
</head><body>

<div>
<p>Paragraph 1 in the div.</p>
<p>Paragraph 2 in the div.</p>
</div>

<p>Paragraph 3. is after a div.</p>
<p>Paragraph 4. is after a div.</p>
<div></div>
<p>Paragraph 5. is after a div.</p>
<p>Paragraph 6. is after a div.</p>

</body></html>
```

Paragraph 1 in the div.

Paragraph 2 in the div.

Paragraph 3. is after a div.

Paragraph 4. is after a div.

Paragraph 5. is after a div.

Paragraph 6. is after a div.

Kombinatori

```
<!DOCTYPE html>
<html>
<head>
<style>
div ~ p {
    background-color: yellow;
}
</style>
</head>
<body>
<div>
    <p>Paragraph 1 in the div.</p>
    <span><p>Paragraph 2 in the div.</p></span>
</div>
<p>Paragraph 3. Not in a div.</p>
<p>Paragraph 4. Not in a div.</p>
<p>Paragraph 5. Not in a div.</p>
<span><p>Paragraph 6 Not in a div, but it is in a span.</p></span>
<p>Paragraph 7. Not in a div.</p>
</body></html>
```

Paragraph 1 in the div.

Paragraph 2 in the div.

Paragraph 3. Not in a div.

Paragraph 4. Not in a div.

Paragraph 5. Not in a div.

Paragraph 6 Not in a div, but it is in a span.

Paragraph 7. Not in a div.

Horizontalna navigacija

```
<!DOCTYPE html>
<html><head>
<style>
ul {
    list-style-type: none;
    margin: 0;
    padding: 0;
    overflow: hidden;
}
li { float: left;}
a { display: block;    width: 60px;    background-color: #dddddd; }
</style>
</head><body>
<ul>
    <li><a href="#home">Home</a></li>
    <li><a href="#news">News</a></li>
    <li><a href="#contact">Contact</a></li>
    <li><a href="#about">About</a></li>
</ul>
</body>
</html>
```

[Home](#) [News](#) [Contact](#) [About](#)

Galerija slika kao navigacija

```
<!DOCTYPE html>
<html><head><style>
div.img { margin: 5px; padding: 5px; border:
  1px solid #0000ff; height:auto; width:auto;
  float:left; text-align:center;}
div.img img {display:inline; margin:5px;border:1px solid #ffffff;}
div.img a:hover img { border: 5px solid #0000ff; }
div.desc { text-align: center;
           font-weight: normal;
           width: 120px; margin: 5px;}
</style></head><body>
<div class="img">
  <a target="_blank" href="k1_big.html"></a>
  <div class="desc">Add a description of the image here</div>
</div>
<div class="img">
  <a target="_blank" href="k2_big.html"></a>
  <div class="desc">Add a description of the image here</div>
</div></body></html>
```



```
<!DOCTYPE html>
<html>
<head>
<style>
img {
    opacity: 0.4;
}
img:hover {
    opacity: 1.0;
}
</style>
</head>
<body>
```



```
<h1>Image Transparency</h1>



</body>
</html>
```

Ne/providnost

```
<!DOCTYPE html>
<html><head><style>
div.background{
    background: url(klematis.jpg) repeat;
    border: 2px solid black;}
div.transbox{
    margin: 30px;
    background-color: #ffffff;
    border: 1px solid black;
    opacity:0.6;}
div.transbox p{ margin: 5%; font-weight: bold; color: #000000;}
</style>
</head>
<body>
<div class="background">
    <div class="transbox">
        <p>This is some text that is placed in the transparent box.</p>
    </div>
</div>
</body></html>
```



Sprajtovi

- Slika koja ima tri sprajta (više sličica stavljene u jednu sliku) :



- Može se uzeti deo slike i prikazati:

```
<!DOCTYPE html>
<html><head><style>
#home {      width: 46px;      height: 44px;
            background: url(img_navsprites.gif) 0 0;
}
#prev {      width: 43px;      height: 44px;
            background: url(img_navsprites.gif) -47px 0;
}
#next {      width: 43px;      height: 44px;
            background: url(img_navsprites.gif) -91px 0;
}
</style></head><body>
<br><br>

<hr>

</body></html>
```



Sprajtovi

- Ako su sprajtovi dati kao:



- Onda se može izvesti da se pri postavljanju miša iznad npr. linka postavi tamnija slika:

```
#home a:hover {  
    background: url('img_navsprites_hover.gif')    0    -45px;  
}
```

```
#prev a:hover {  
    background: url('img_navsprites_hover.gif') -47px -45px;  
}
```

```
#next a:hover {  
    background: url('img_navsprites_hover.gif') -91px -45px;  
}
```

U selektoru roditelja #home, #prev i #next-a bi se postavila visina i širina elementa.

Sprajtovi

```
<!DOCTYPE html>
<html><head><style>
#navlist    { position: relative; }
#navlist li { margin: 0; padding: 0; list-style: none;
               position: absolute; top: 0; }
#navlist a {   height: 44px;    display: block; }
#home{left:  0px; width:46px; background:url('sprites.gif') 0 0; }
#prev{left: 70px; width:43px; background:url('sprites.gif')-47px 0;}
#next{left:140px; width:43px; background:url('sprites.gif')-91px 0;}
#home a:hover{background: url('sprites.gif')  0    -45px; }
#prev a:hover{background: url('sprites.gif') -47px -45px;}
#next a:hover{background: url('sprites.gif') -91px -45px;}
</style>
</head><body>
<ul id="navlist">
  <li id="home"><a href="default.asp"></a></li>
  <li id="prev"><a href="css_intro.asp"></a></li>
  <li id="next"><a href="css_syntax.asp"></a></li>
</ul>
</body></html>
```



Mediji

```
<!DOCTYPE html>
<html><head><style>
@media screen {
    p {
        font-family: verdana, sans-serif;
        font-size: 17px;
    }
}
@media print {
    p {
        font-family: georgia, serif;
        font-size: 14px;
        color: blue;
    }
}
</style></head><body>
<p>Pravilo @media omogućuje pravljenje stilova posebno za npr
stampanje a posebno za prikaz na ekranu.</p>
<p>U ovom primeru ce se prikazati tekst na ekranu stilom: verdana,
17 piksela, dok ce isti paragraf biti odstampan stilom georgia, 14
piksela u plavoj boji</p></body></html>
```

Pravilo @media omogućuje pravljenje stilova posebno za npr stampanje a posebno za prikaz na ekranu.

U ovom primeru ce se prikazati tekst na ekranu stilom: verdana, 17 piksela, dok ce isti paragraf biti odstampan stilom georgia, 14 piksela u plavoj boji

CSS [atribut] selektor

- Ako želimo da datom tagu koji ima **naveden dati atribut** dodelimo dati stil koristimo sintaksu kao što sledi (CSS [attribute] Selector):

```
a[target] { background-color: yellow; }
```

- Ako želimo da datom tagu, koji ima **naveden dati atribut jednak datoj vrednosti**, dodelimo dati stil koristimo sintaksu kao što sledi (CSS [attribute=value] Selector):

```
a[target="_blank"] {  
    background-color: yellow;  
}
```

- Ako želimo da svim tagovima koji imaju **dati atribut koji sadrži datu reč** dodelimo dati stil koristimo sintaksu kao što sledi ([attribute~=value]):

```
[title~="imarec"] {  
    border: 5px solid yellow;  
}
```

- Ako želimo da svim tagovima, koji imaju **dati atribut čija vrednost počinje datom rečju**, dodelimo dati stil koristimo sintaksu kao što sledi ([attribute|=value]):

```
[class|="prvarec"] { background: yellow; }
```

CSS [atribut] selektor

- Ako želimo da svim tagovima, koji imaju dati atribut čija vrednost počinje **podstringom**, dodelimo dati stil koristimo sintaksu kao što sledi (CSS [attribute^=value] Selector):

```
[class^="pocinjepodstringom"] {  
    background: yellow;  
}
```
- Ako želimo da svim tagovima, koji imaju dati atribut čija vrednost završava datim **podstringom**, dodelimo dati stil koristimo sintaksu kao što sledi (CSS [attribute\$=value] Selector):

```
[class$="zavrsavapodstringom"] {  
    background: yellow;  
}
```
- Ako želimo da svim tagovima, koji imaju dati atribut čija vrednost ima u sebi dati **podstring**, dodelimo dati stil koristimo sintaksu kao što sledi (CSS [attribute*=value] Selector):

```
[class*="imapodstring"] {  
    background: yellow;  
}
```

Primer

```
<!DOCTYPE html>
<html><head><style> input[size] { background-color: gray;}
a[target="_blank"]    { background-color: magenta;}
img[title~="imarec"] { border: 5px solid yellow;}
[class|=prvarec]      { background: yellow;}
[class^=pocinjepodstringom] { background: yellow;}
[class$=zavrsavapodstringom] { background: red; color:yellow;}
[class*="imapodstring"]      { background: cyan;}
</style></head><body>
Password <input type="password" size=10 ></input>
Username <input type="text" ></input><br>
<a href="http://www.wikipedia.org" target="_top">wikipedia.org</a>
<a href="http://www.disney.com" target="_blank">disney.com</a><br>

<br>
<p class="prvarec-text">prvarec-text</p>
<p class="prvareccontent">prvareccontent</p>
<p class="pocinjepodstringom-text">pocinjepodstringom-text</p>
<p class="pocinjepodstringomtext">pocinjepodstringomtext</p>
<p class="text-zavrsavapodstringom">text-zavrsavapodstringom</p>
<p class="textzavrsavapodstringom">textzavrsavapodstringom</p>
<p class="Zimapodstringtext">textimapodstringtext</p></body></html>
```

Izlaz

Password Username

wikipedia.org disney.com



prvarec-text

prvarecontent

pocinjepodstringom-text

pocinjepodstringomtext

text-zavrsavapodstringom

textzavrsavapodstringom

textimapodstringtext

- Granice se mogu definisati i:

- radijusom zakrivljenosti (border-radius, border-top-left-radius, border-top-right-radius, border-bottom-right-radius, border-bottom-left-radius)

```
<style>
div {
  border: 2px solid #a1a1a1;
  padding: 20px;
  background: #dddddd;
  width: 300px;
  border-radius: 25px;
}
</style>
```

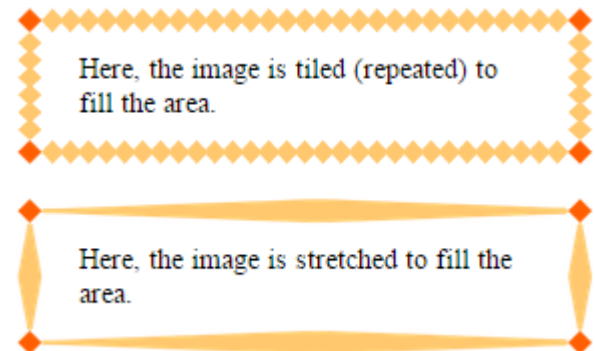
The border-radius property allows you to add rounded corners to elements.

- slikom(border-image)

```
<style>
div { border:15px solid transparent;
      width: 250px; padding: 10px 20px;}
#round  { border-image: url(border.png) 30 30 round; }
#stretch { border-image: url(border.png) 30 30 stretch;}
</style>
```



90x90px



border-image-slice

```
<!DOCTYPE html>
```

```
<html>
```

```
<head>
```

```
<style>
```

```
div {
```

```
  background-color: lightgrey;
```

```
  border: 30px solid transparent;
```

```
  border-image-source: url('border.png');
```

```
  border-image-slice: 30;
```

```
}
```

```
</style>
```

```
</head>
```

```
<body>
```

```
<div>
```

```
This DIV element uses an image as a border.
```

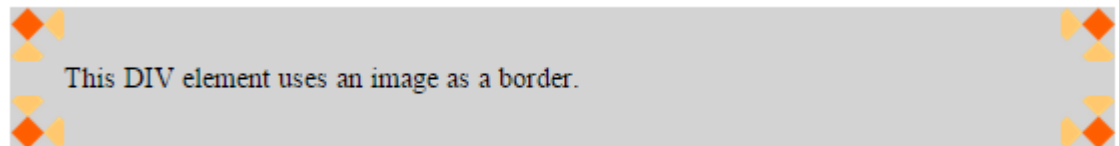
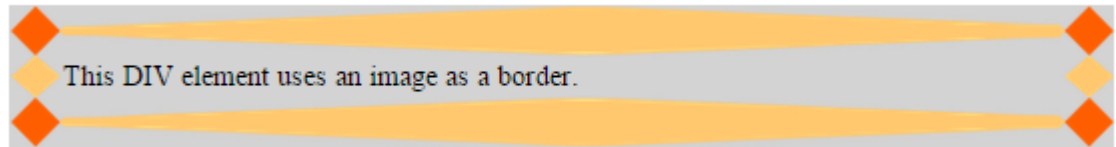
```
</div>
```

```
<p>Here is the image used:</p>
```

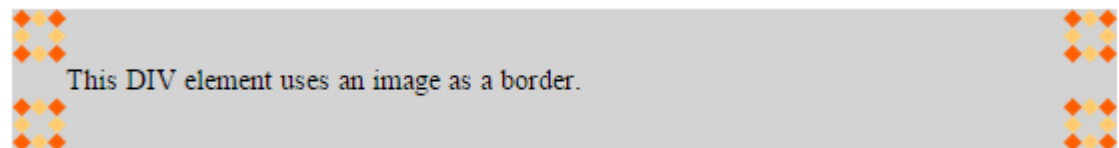
```

```

```
</body></html>
```



border-image-slice:45;

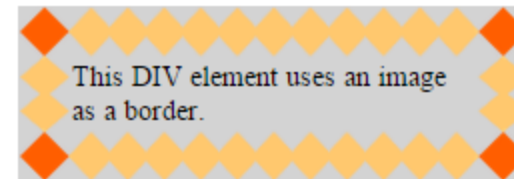
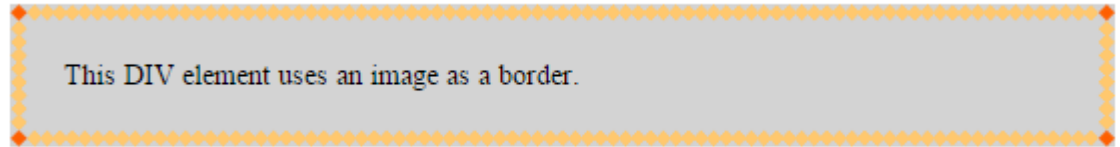


border-image-slice:90;

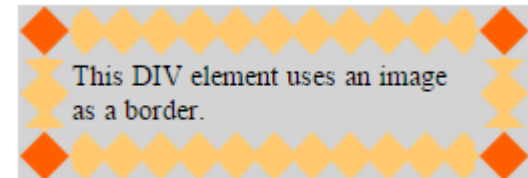
border-image-width

```
<!DOCTYPE html>
<html><head>
<style>
div {
  background-color: lightgrey;
  border: 30px solid transparent;
  border-image: url('border.png');
  border-image-slice: 30;
  border-image-width: 10px;
  border-image-outset: 0;
  border-image-repeat: round;
}
</style>
</head>
<body>
<div>
This DIV element uses an image as a border.
</div>
<p>Here is the image used:</p>

</body></html>
```



border-image-width: 30px;
border-image-repeat: round;

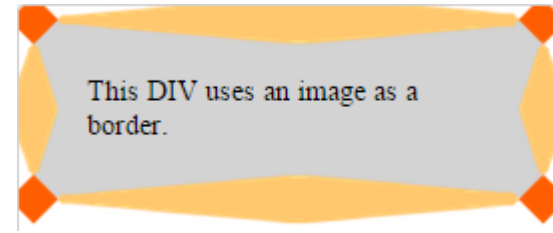


border-image-width: 30px;
border-image-repeat: repeat;

border-image-outset

```
<!DOCTYPE html>
<html>
<head>
<style>
div {
  background-color: lightgrey;
  border: 30px solid transparent;
  border-image: url('border.png');
  border-image-slice: 30;
  border-image-outset: 15px;
}
</style>
</head>
<body>
<div>
This DIV uses an image as a border.
</div>
<p>Here is the image used:</p>

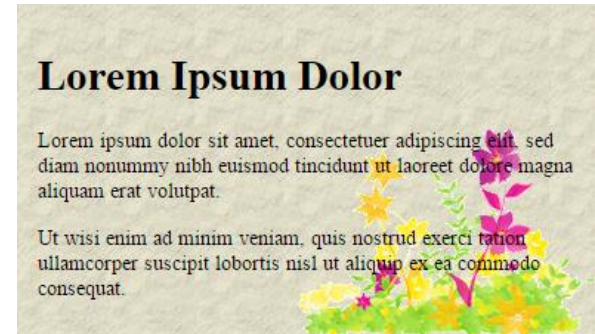
</body>
</html>
```



background-image

- Postavljanje dve pozadine pomoću dve slike

```
<!DOCTYPE html>
<html><head><style>
#example1 {
    background-image: url(img_flwr.gif), url(paper.gif);
    background-position: right bottom, left top;
    background-repeat: no-repeat, repeat;
    padding: 15px;
}
</style></head><body>
<div id="example1">
<h1>Lorem Ipsum Dolor</h1>
<p>Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed
diam nonummy nibh euismod tincidunt ut laoreet dolore magna
aliquam erat volutpat.</p>
<p>Ut wisi enim ad minim veniam, quis nostrud exerci tation
ullamcorper suscipit lobortis nisl ut aliquip ex ea commodo
consequat.</p>
</div></body></html>
```



Skraćeno: **background: url(img_flwr.gif) right bottom no-repeat, url(paper.gif) left top repeat;**

background-size

- Podešavanje veličine pozadine

```
<style>
```

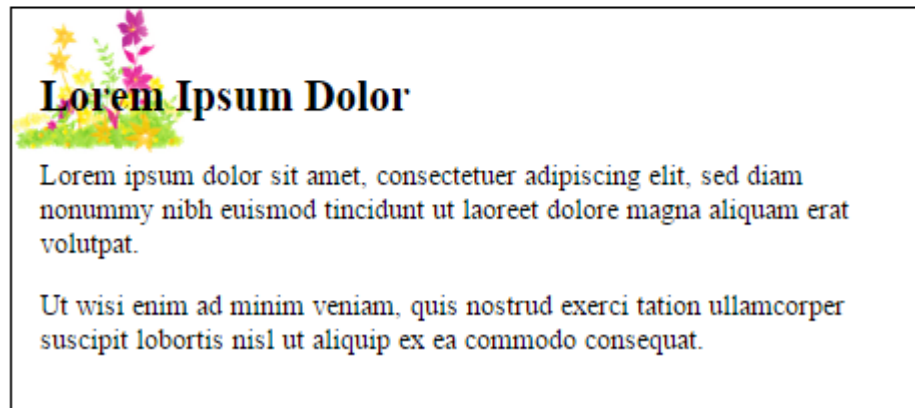
```
#example1 {  
    border: 1px solid black;  
    background:url(img_flwr.gif);  
    background-repeat: no-repeat;  
    padding:15px;  
}
```

```
#example2 {  
    border: 1px solid black;  
    background:url(img_flwr.gif);  
    background-size: 100px 80px;  
    background-repeat: no-repeat;  
    padding:15px;  
}  
</style>
```

Original background-image:



Resized background-image:



background-size: contain, cover

```
<style>
.div1 {
    border: 1px solid black;    height:150px;
    width:180px;
    background:url(img_flwr.gif);
    background-repeat: no-repeat;
}
.div2 {
    border: 1px solid black;    height:150px;
    width:180px;
    background:url(img_flwr.gif);
    background-repeat: no-repeat;
    background-size: contain;
}
.div3 {
    border: 1px solid black;    height:150px;
    width:180px;
    background:url(img_flwr.gif);
    background-repeat: no-repeat;
    background-size: cover;
}</style>
```

Original image:



Using the "contain" keyword:

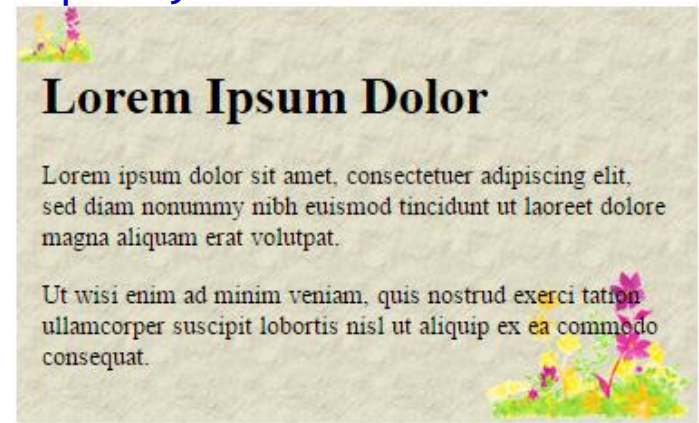


Using the "cover" keyword:



background-size za više slika

```
<!DOCTYPE html>
<html><head><style>
#example1 {
    background: url(img_flwr.gif) left top no-repeat,
                url(img_flwr.gif) right bottom no-repeat,
                url(paper.gif) left top repeat;
    padding: 15px;
    background-size: 50px, 130px, auto;
}
</style>
</head><body>
<div id="example1">
<h1>Lorem Ipsum Dolor</h1>
<p>Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed
diam nonummy nibh euismod tincidunt ut laoreet dolore magna
aliquam erat volutpat.</p>
<p>Ut wisi enim ad minim veniam, quis nostrud exerci tation
ullamcorper suscipit lobortis nisl ut aliquip ex ea commodo
consequat.</p>
</div></body></html>
```



background-origin

```
<style>
#example1 {
  border: 10px solid black;
  padding: 35px;
  background: url(img_flwr.gif);
  background-repeat: no-repeat;
}
#example2 {
  border: 10px solid black;
  padding: 35px;
  background: url(img_flwr.gif);
  background-repeat: no-repeat;
  background-origin: border-box;
}
#example3 {
  border: 10px solid black;
  padding: 35px;
  background: url(img_flwr.gif);
  background-repeat: no-repeat;
  background-origin: content-box;
}</style>
```

No background-origin (padding-box is default):



background-origin: border-box:



background-origin: content-box:

