

CSS In Depth

Values, Style Precedence



SoftUni Team
Technical Trainers
Software University
<http://softuni.bg>



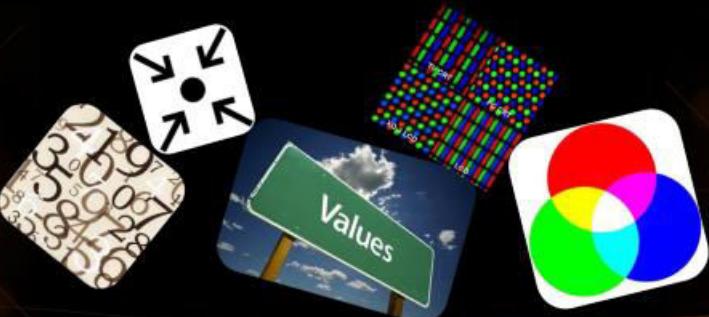
```
color:#696969;
font-weight:500;
margin-top:0;
font-family:Arial; }

h2 {
    color:#696969;
    font-weight:500;
    font-family:Arial; }

h3 {
    color:#4F4F4F;
    font-weight:500;
    font-family:Arial; }
```

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Have a Question?

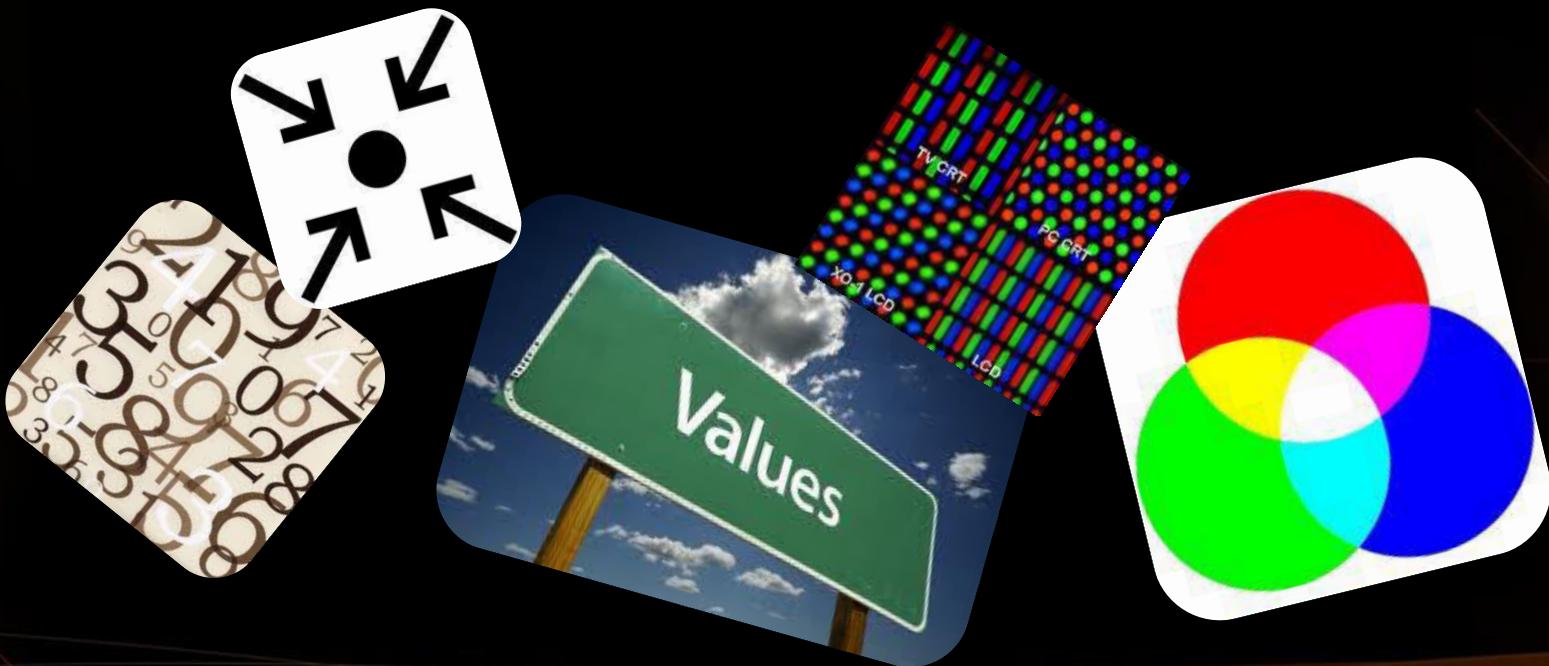


sli.do

#front-end

CSS Values

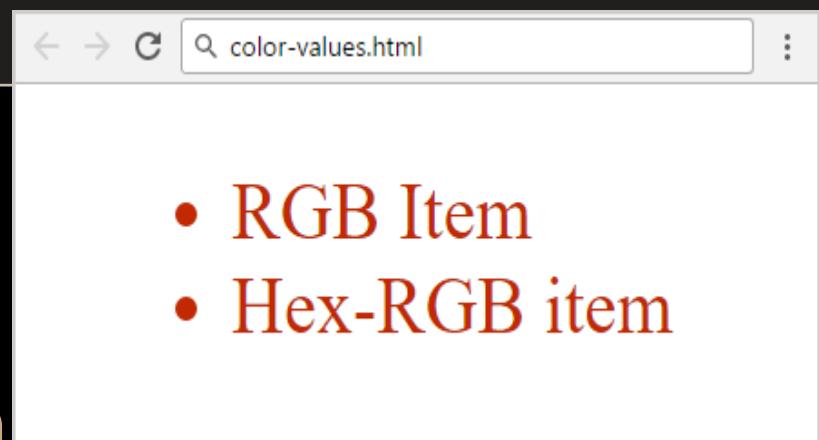
Types, Ranges, Units



CSS Color Values (Hex and RGB)

```
<ul>
  <li id="rgb">RGB Item</li>
  <li id="hex-rgb">Hex-RGB item</li>
</ul>
```

```
#rgb {
  color: rgb(192, 41, 2)
}
#hex-rgb {
  color: #C02902;
```



- RGB Item
- Hex-RGB item

<red>, <green>, <blue>

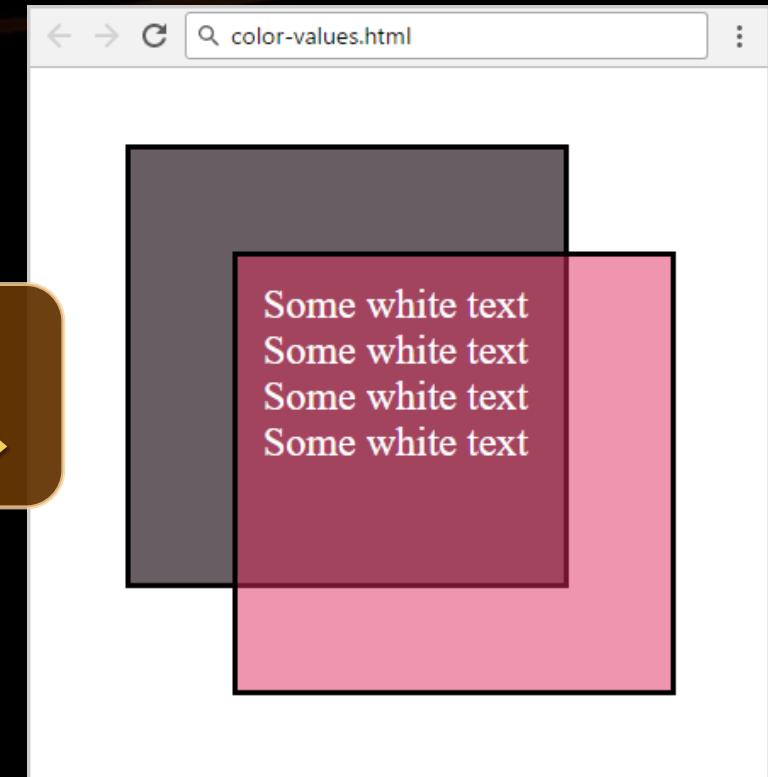
#RRGGBB or #RGB where
R, G, B are hex digits (0...F)

CSS Color Values (RGBA and HSLA)

```
<div id="wrapper">  
  <div class="opacity">Some text</div>  
</div>
```

```
#wrapper, .opacity {  
  background: rgba(87, 76, 83, 0.9)  
}  
.opacity {  
  background: hsla(344, 73%, 52%, 0.5);  
}
```

⟨red⟩, ⟨green⟩,
⟨blue⟩, ⟨alpha⟩



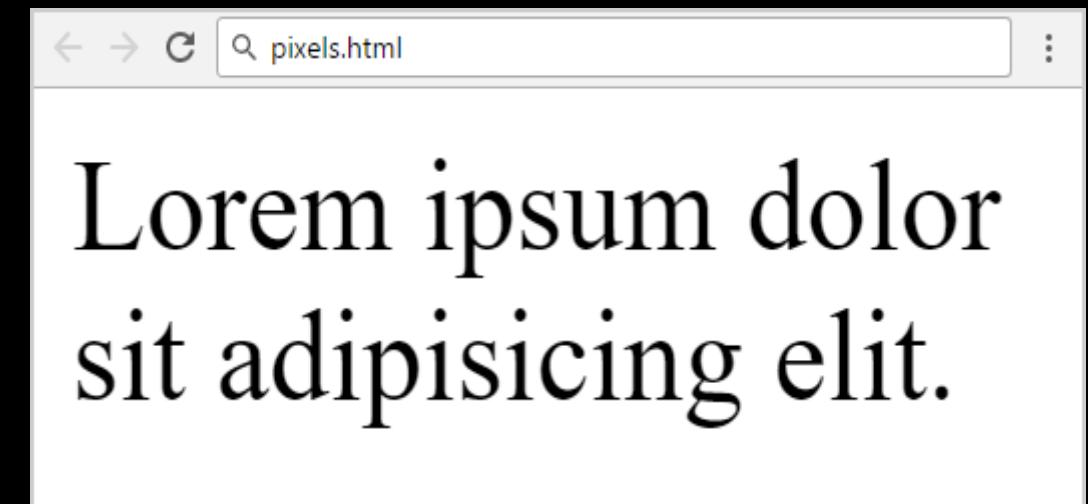
The opacity values
are from 0.0 to 1.0

Size Values (px)

- **Pixels:** fixed size units (logical pixels, not physical)

```
<div>  
    Lorem ipsum dolor  
    sit adipisicing elit.  
</div>
```

```
div {  
    font-size: 24px  
}
```



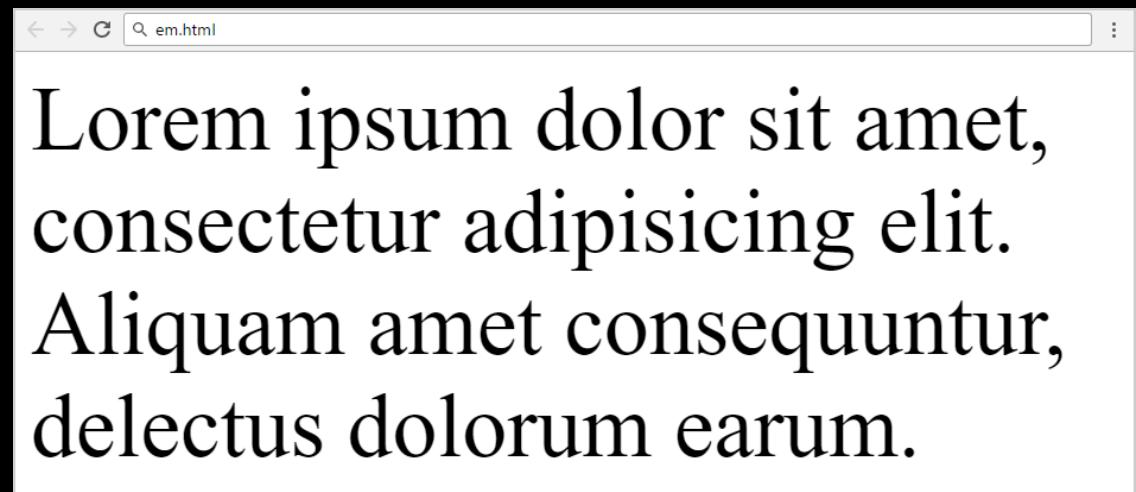
Size Values (em)

- Em's: scalable unit (based on the parent element)

```
<div>
  <div class="nested-div">
    Lorem ipsum dolor
    sit adipisicing elit...
  </div>
</div>
```

Parent <div>
font: 24px

```
div { font-size: 24px }
.nested-div { font-size: 1.8em }
```



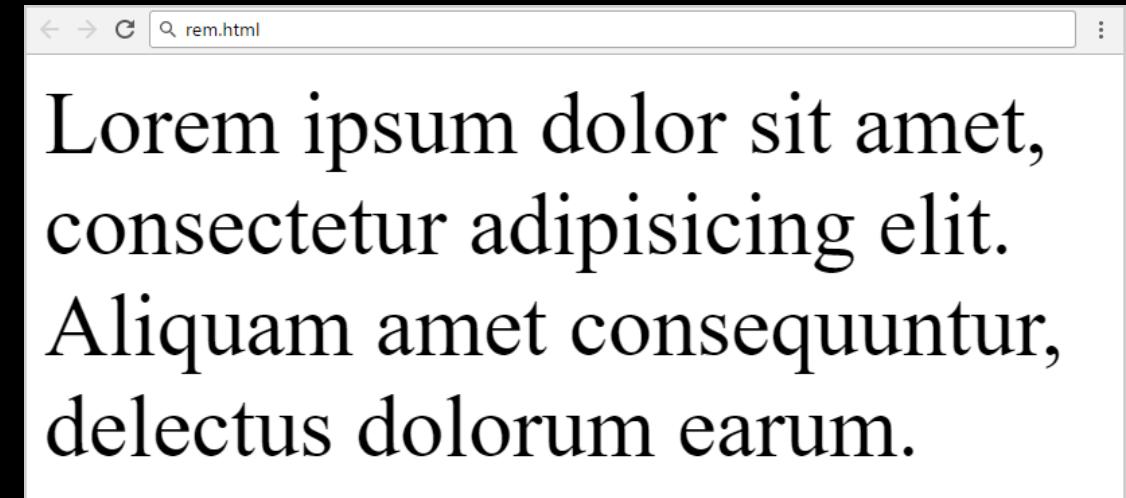
$1.8\text{em} = 1.8 * 24\text{px} = 43.2\text{px}$

<http://pxtoem.com>

Size Values (rem)

- Rem's: scalable unit (based on the `html` element)

```
<div>
  <div class="nested-div">
    Lorem ipsum dolor
    sit adipisicing elit...
  </div>
</div>
```



```
html { font-size: 25px }
div { font-size: 2rem }
.nested-div { font-size: 1.5rem }
```

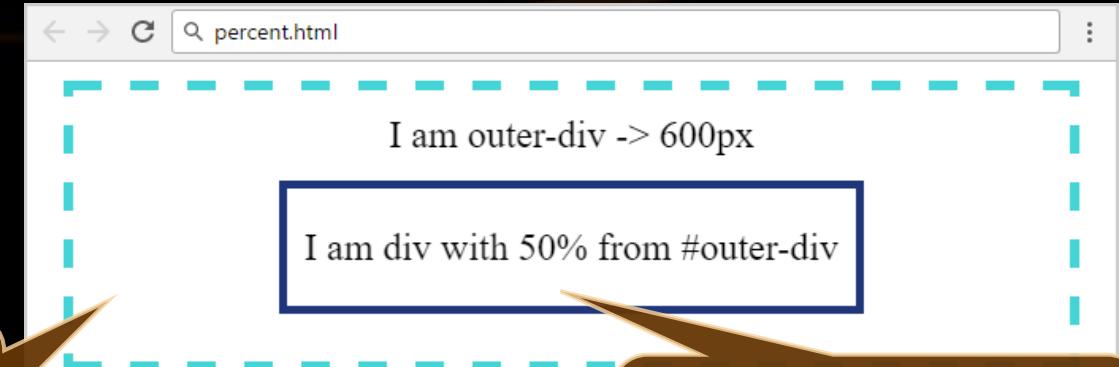
2rem = 2 *
25px = 50px

1.5rem = 1.5 *
25px = 37.5px

Size in % of the Parent

```
<div id="outer-div">  
    I am outer-div -> 600px  
    <div id="inner-div">  
        I am div with 50% ...  
    </div>  
</div>
```

width:
600px



```
#outer-div {  
    width: 600px;  
    text-align: center;  
}  
  
#inner-div {
```

```
    width: 50%;  
    text-align: center;  
    margin: 0 auto;  
    line-height: 50px;  
}
```

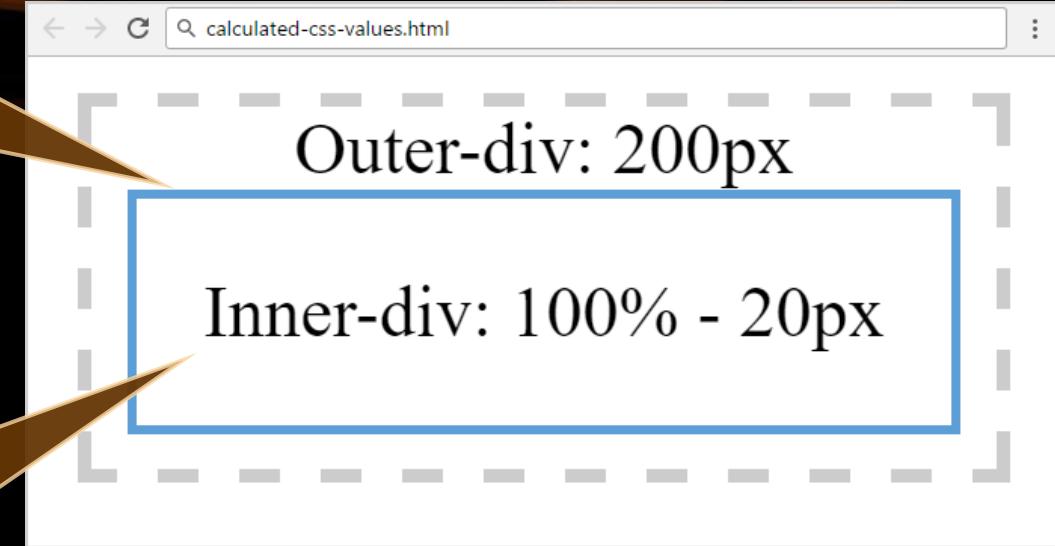
Calculated CSS Values: calc(...) Function

```
<div id="outer-div">  
  Outer-div: 200px  
  <div id="inner-div">  
    Inner-div: 100% - 20px  
  </div>  
</div>
```

width:
200px

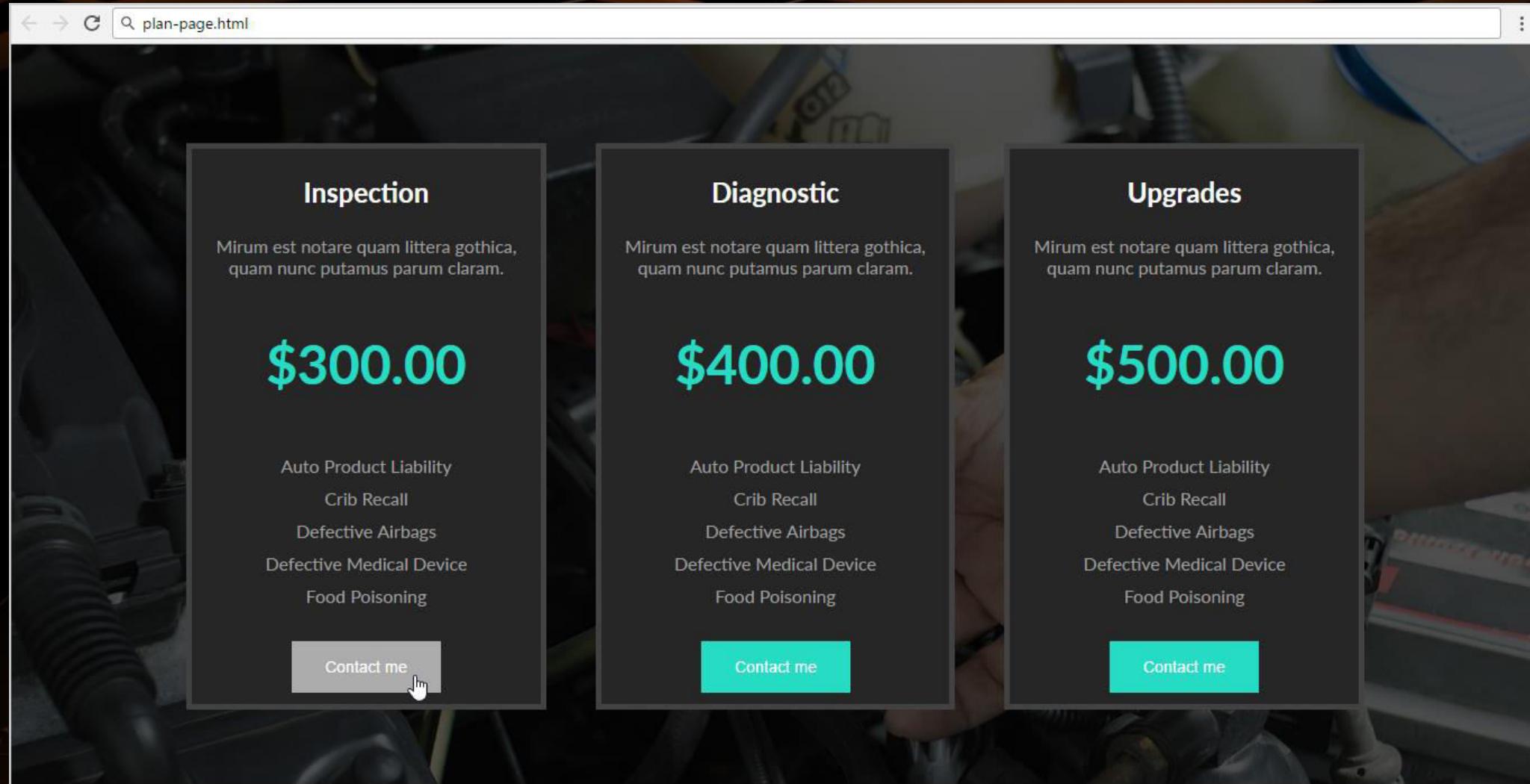
```
#outer-div {  
  width: 200px;  
  height: 80px;  
  text-align: center; }  
  
#inner-div {
```

width:
100% * 200px
- 20px = 180px



```
width: calc(100% - 20px);  
height: 50px;  
text-align: center;  
margin: 0 auto;  
line-height: 50px; }
```

Problem: Plan Page



The screenshot shows a web browser window with the URL "plan-page.html" in the address bar. The page displays three service plans in a grid:

- Inspection**: \$300.00. Includes: Auto Product Liability, Crib Recall, Defective Airbags, Defective Medical Device, Food Poisoning. Contact me button.
- Diagnostic**: \$400.00. Includes: Auto Product Liability, Crib Recall, Defective Airbags, Defective Medical Device, Food Poisoning. Contact me button.
- Upgrades**: \$500.00. Includes: Auto Product Liability, Crib Recall, Defective Airbags, Defective Medical Device, Food Poisoning. Contact me button.

The background of the page features a dark image of mechanical or industrial components.

Check your solution here: <https://judge.softuni.bg/Contests/608>

Solution: Plan Page – CSS

```
body {  
    background: url('plan-  
page.jpg');  
    background-size: cover;  
    font-size: 16px;  
    font-family: Lato, sans-  
serif;  
}  
  
section {  
    text-align: center;  
}
```

```
article {  
    background-color: #262626;  
    display: inline-block;  
    width: 23%;  
    margin: 80px 20px 0 20px;  
    border: 5px solid #424242;  
    color: #a1a1a1;  
}
```

Solution: Plan Page – CSS (2)

```
article h1 {  
    font-size: 1.5em;  
    color: #FFF;  
}  
  
article .price {  
    font-size: 3em;  
    font-weight: bold;  
    color: #27dcc4;  
}  
  
article ul {  
    padding: 0;  
}
```

```
article button {  
    background-color: #27dcc4;  
    color: #FFFFFF;  
    padding: 15px 30px;  
    margin: 10px 0;  
    font-size: 0.9em;  
    cursor: pointer;  
    border: none;  
}
```

Solution: Plan Page – CSS (3)

```
article ul li {  
    list-style-type: none;  
    padding: 5px 0;  
}  
  
article button:hover {  
    background-color: #acacac;  
}
```



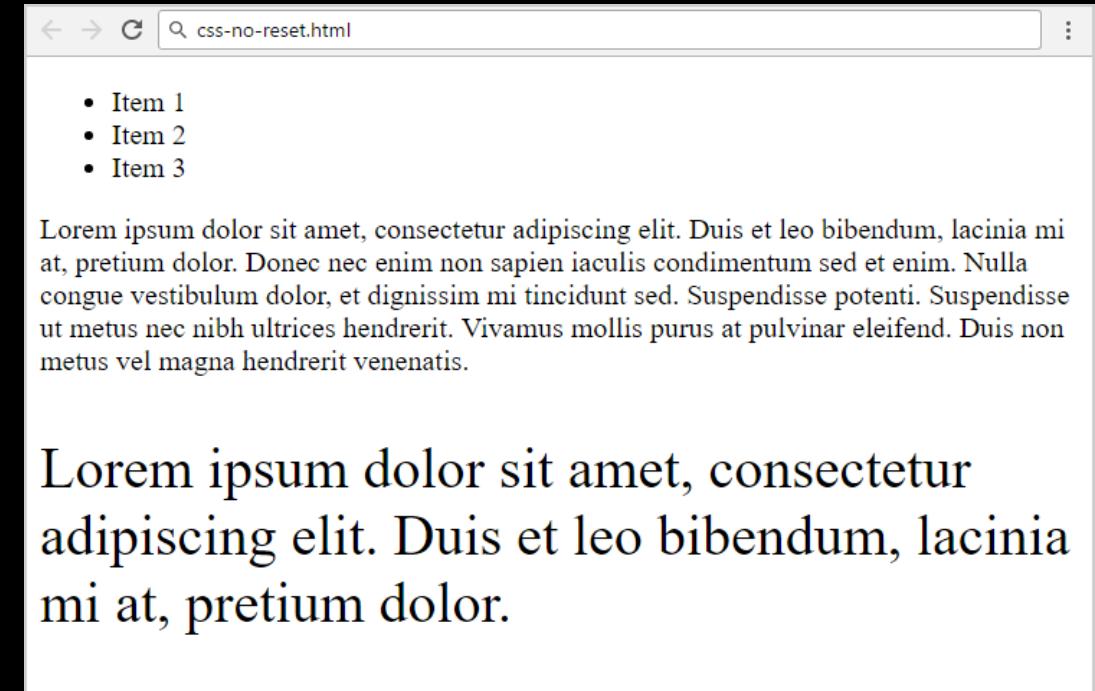
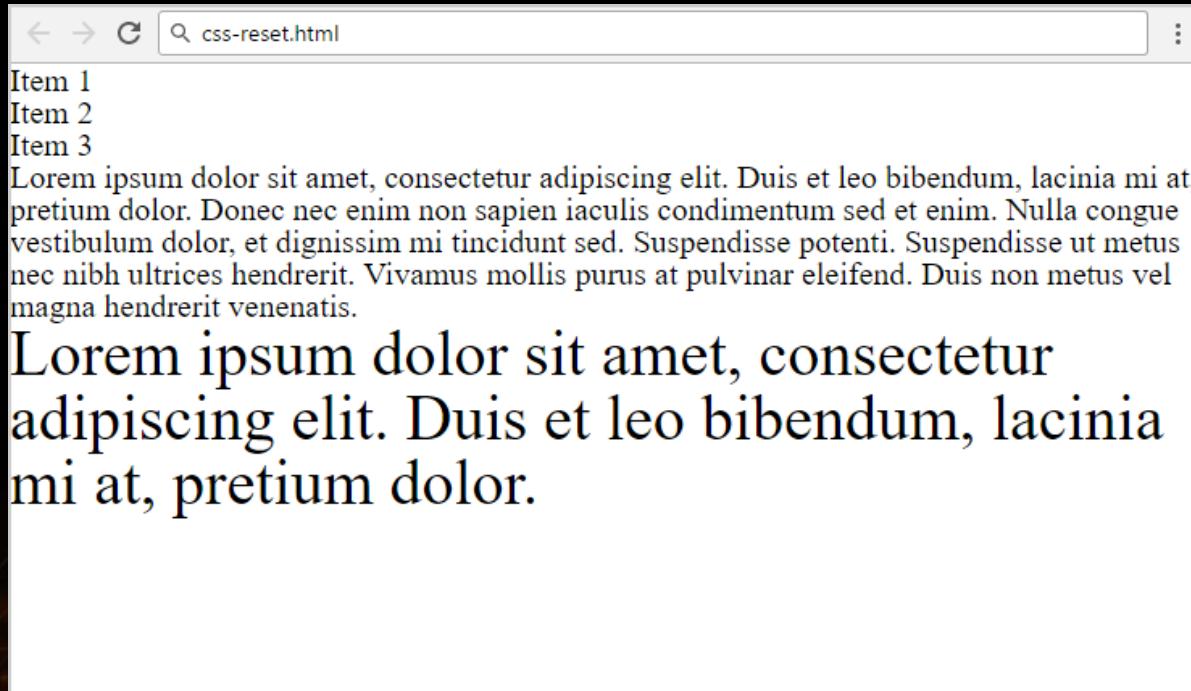
Default Browser Styles and Precedence

Default Styles and CSS Style Precedence

Default Browser Styles

- Reset the browser styles (partially or fully)

```
* { margin: 0; padding:0; }
```



CSS reset tool: <http://meyerweb.com/eric/tools/css/reset/>

Order of Style Definitions

- Priorities of the CSS style definitions:

- External `<link rel="stylesheet" href="...">`

lowest

- Styles in the `<head><style>...</style></head>`

- Inline style attributes: `<p style="...">`

- Using `!important`

highest

```
h1.big { color:red !important }
```

Selector Priority (Specificity)

- Selector priorities depend on:

0

0

0

0

inline styles

number of
id selectors

number of
class
selectors

number of
element
selectors

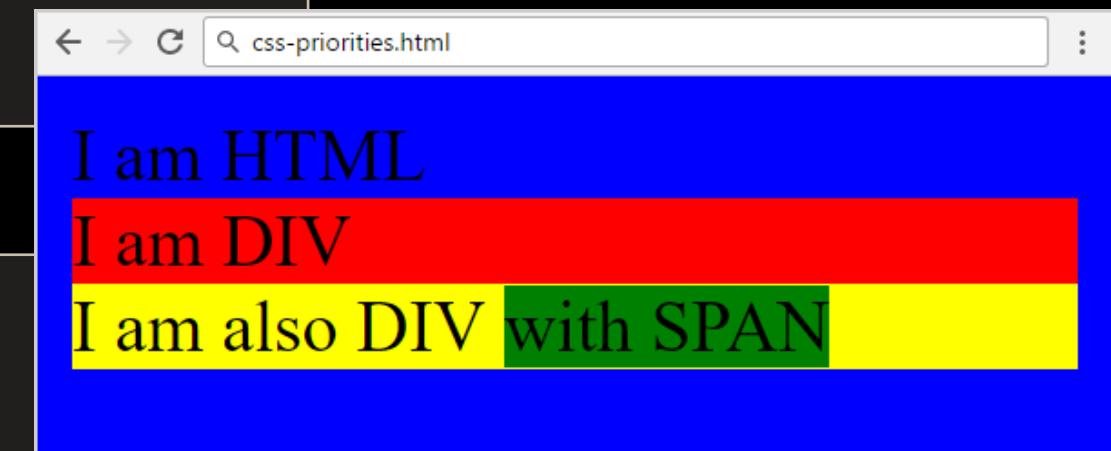
Selector Priority (Specificity) – Example

p { color: #FFF }	0, 0, 0, 1
.intro { color: #345678 }	0, 0, 1, 0
#header { color: #000 }	0, 1, 0, 0
<p style="color: blue">Text</p>	1, 0, 0, 0
p.intro#header { color: #FFF }	0, 1, 1, 1
p.intro.big#header { color: #FFF }	0, 1, 2, 1
p { color: #000 !important }	!important

CSS Priorities – Example

```
<html>  
    I am HTML <div>I am DIV</div>  
    <div id="main">  
        I am also DIV <span>with SPAN</span>  
    </div>  
</html>
```

```
html { background: blue }  
#main { background: yellow }  
div { background:red }  
div > span { background: green }
```



Summary

■ CSS Selectors

```
span { background: DodgerBlue; }
span#identified { color: #EEE; }
span.sky { color: SkyBlue; }
```



■ CSS Values

```
#rbg { color: rgb(192, 41, 2) }
#hex-rgb { color: #C02902; }
#rgba { color:rgba(27, 3, 5, 0.5) }
```

```
font-size: 20px;
font-size: 1.4em;
font-size: 1.4rem;
```

■ Styles Priority

```
h1.big { color:red !important }
```

Web Fundamentals – Course Introduction



Questions?



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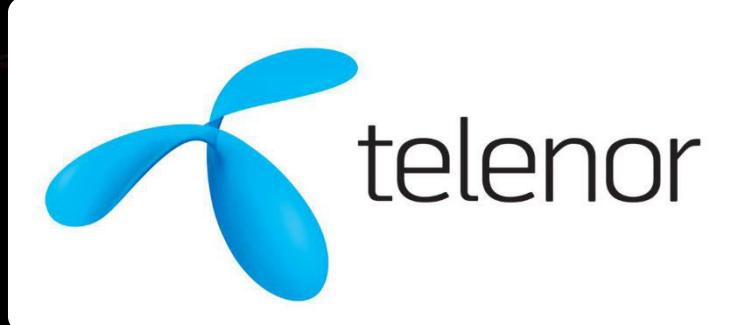
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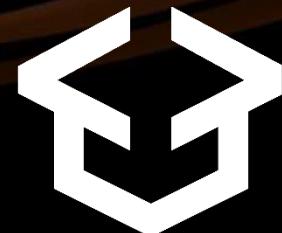
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