

# LAYOUT MED CSS (2)







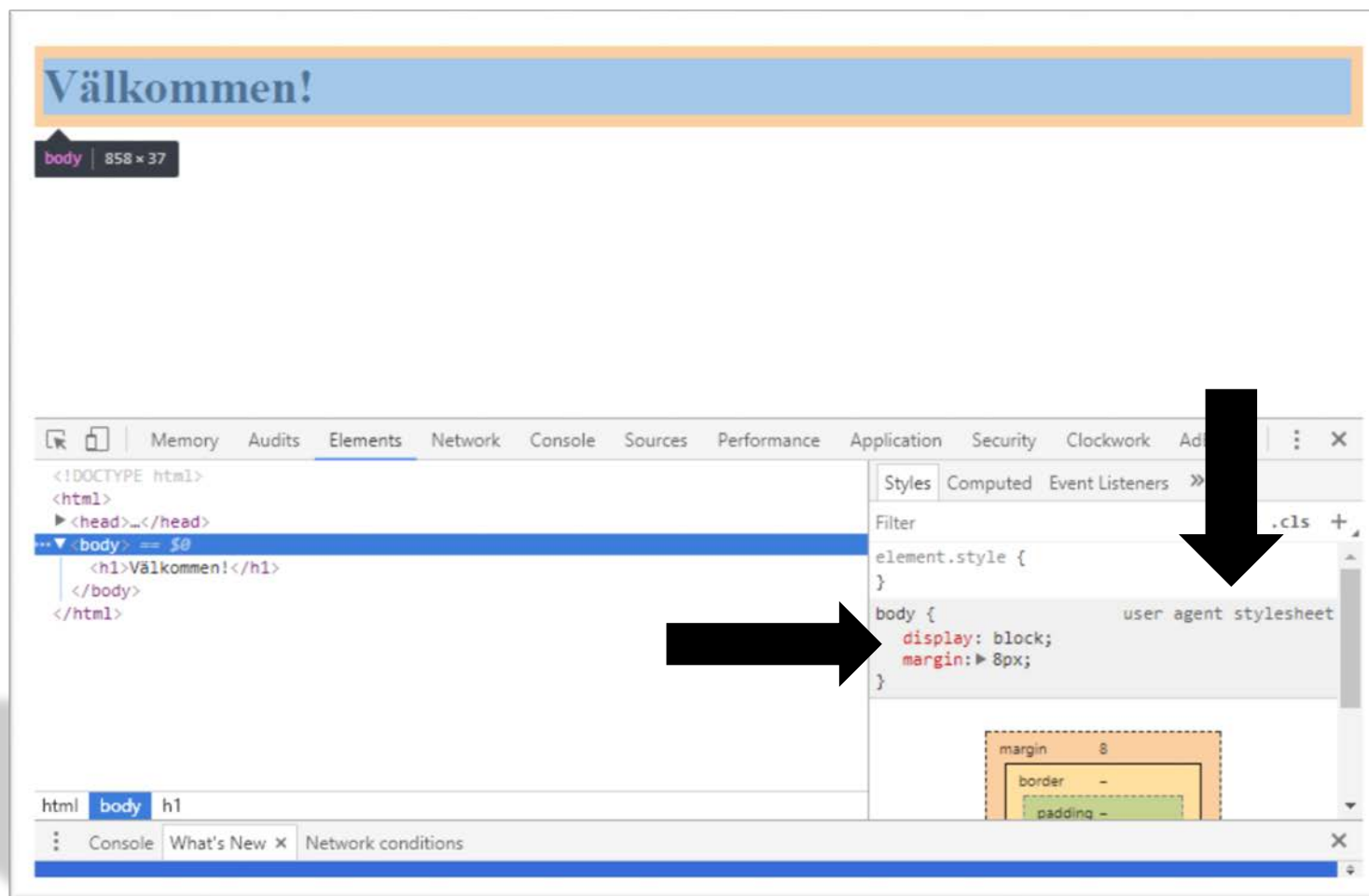
## Dagens agenda

- Tips och trix kring CSS
  - CSS reset
  - Repetition av arv (och viktighet av CSS-regler)
  - "Nya" CSS 3-egenskaper
  - CSS-animationer
- Layout med Flexbox
- Layout med Grids
- Demos! =)

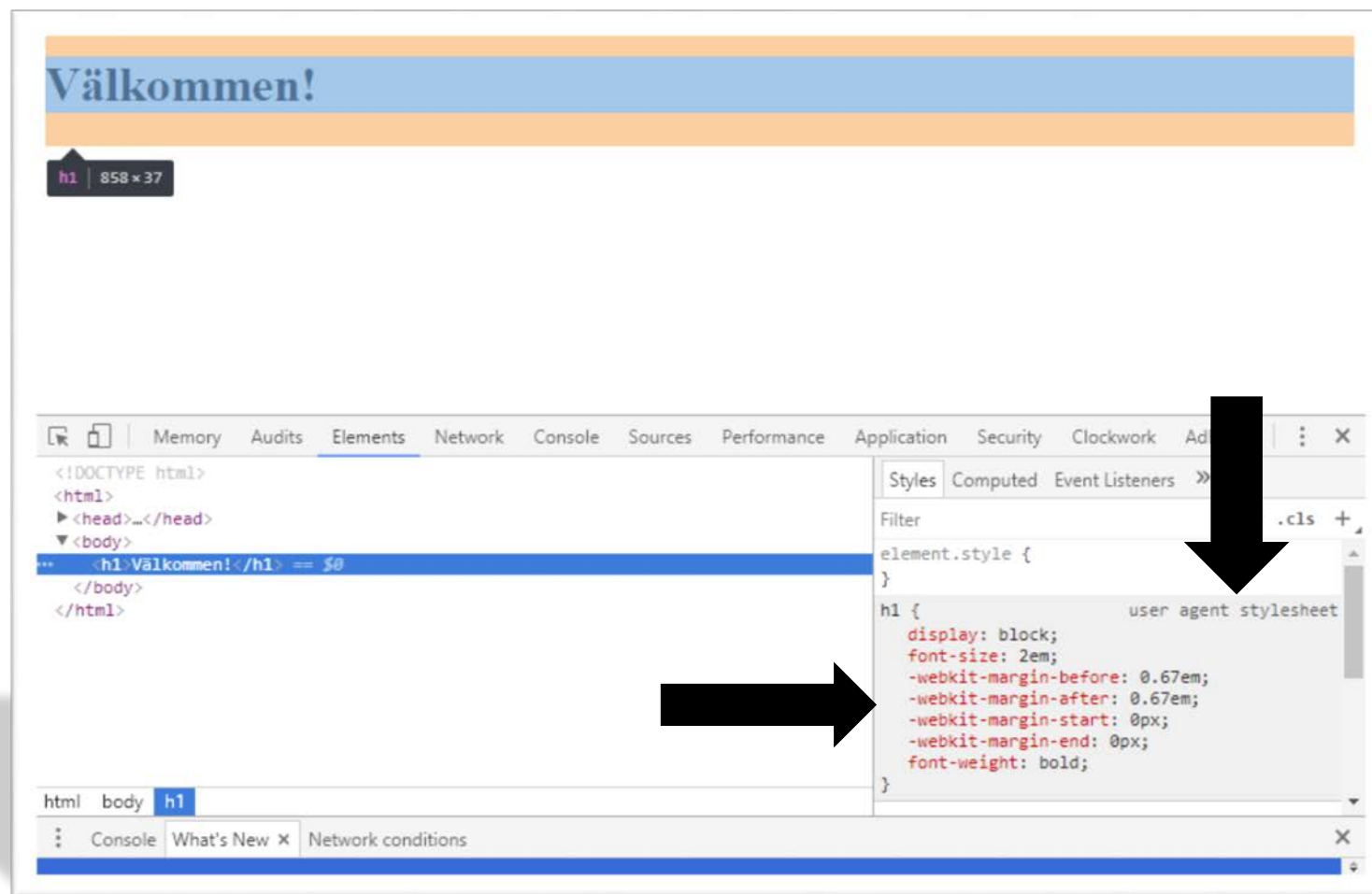




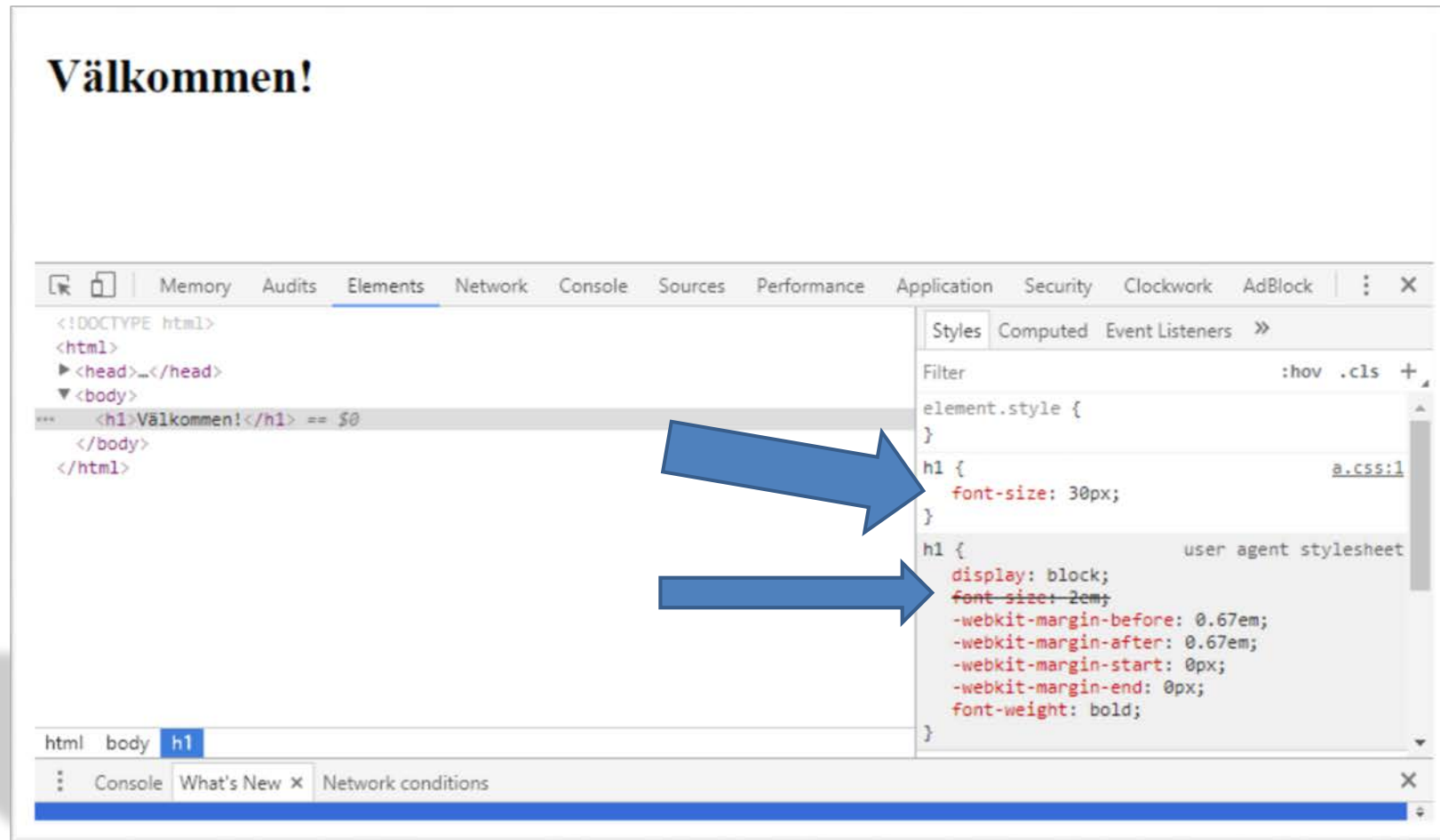
# Förinställda CSS-regler för webbläsaren



# Förinställda CSS-regler för webbläsaren



# Att skriva över webbläsarens evenaskaper?



# MEN DETTA ÄR JU JOBBIGT – HUR VET JAG ALLA WEBBLÄSARENS FÖRINSTÄLLDA CSS-EGENSKAPER?

... och hur ändrar jag dessa?



# CSS: reset?

## World Wide Web

The WorldWideWeb (W3) is a wide-area [hypermedia](#) information retrieval initiative aiming to give universal access to a large universe of documents.

Everything there is online about W3 is linked directly or indirectly to this document, including an [executive summary](#) of the project, [Mailing lists](#) , [Policy](#) , November's [W3 news](#) , [Frequently Asked Questions](#) .

### [What's out there?](#)

Pointers to the world's online information, [subjects](#) , [W3 servers](#), etc.

### [Help](#)

on the browser you are using

### [Software Products](#)

A list of W3 project components and their current state. (e.g. [Line Mode](#) ,[X11 Viola](#) , [NeXTStep](#) , [Servers](#) , [Tools](#) , [Mail robot](#) , [Library](#) )

### [Technical](#)

Details of protocols, formats, program internals etc

### [Bibliography](#)

Paper documentation on W3 and references.

### [People](#)

A list of some people involved in the project.

### [History](#)

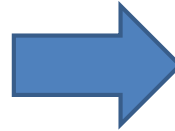
A summary of the history of the project.

### [How can I help ?](#)

If you would like to support the web..

### [Getting code](#)

Getting the code by [anonymous FTP](#) , etc.



## World Wide Web

The WorldWideWeb (W3) is a wide-area hypermedia information retrieval initiative aiming to give universal access to a large universe of documents.

Everything there is online about W3 is linked directly or indirectly to this document, including an executive summary of the project, Mailing lists , Policy , November's W3 news , Frequently Asked Questions . What's out there?

Pointers to the world's online information, subjects , W3 servers, etc.

### Help

on the browser you are using

### Software Products

A list of W3 project components and their current state. (e.g. Line Mode ,X11 Viola , NeXTStep , Servers , Tools , Mail robot , Library )

### Technical

Details of protocols, formats, program internals etc

### Bibliography

Paper documentation on W3 and references.

### People

A list of some people involved in the project.

### History

A summary of the history of the project.

### How can I help ?

If you would like to support the web..

### Getting code

Getting the code by anonymous FTP , etc.



```
/* http://meyerweb.com/eric/tools/css/reset/
v2.0 | 20110126
License: none (public domain)
*/

html, body, div, span, applet, object, iframe,
h1, h2, h3, h4, h5, h6, p, blockquote, pre,
a, abbr, acronym, address, big, cite, code,
del, dfn, em, img, ins, kbd, q, s, samp,
small, strike, strong, sub, sup, tt, var,
b, u, i, center,
dl, dt, dd, ol, ul, li,
fieldset, form, label, legend,
table, caption, tbody, tfoot, thead, tr, th, td,
article, aside, canvas, details, embed,
figure, figcaption, footer, header, hgroup,
menu, nav, output, ruby, section, summary,
time, mark, audio, video {
    margin: 0;
    padding: 0;
    border: 0;
    font-size: 100%;
    font: inherit;
    vertical-align: baseline;
}
/* HTML5 display-role reset for older browsers */
article, aside, details, figcaption, figure,
footer, header, hgroup, menu, nav, section {
    display: block;
}
body {
    line-height: 1;
}
ol, ul {
    list-style: none;
}
blockquote, q {
    quotes: none;
}
blockquote:before, blockquote:after,
q:before, q:after {
    content: '';
    content: none;
}
table {
    border-collapse: collapse;
    border-spacing: 0;
}
```

Välkommen!

h1 | 1219 x 16

Memory Audits Elements Network Console Sources Performance Application Security Clockwork ADBlock

```
<!DOCTYPE html>
<html>
  <head>...</head>
  <body>
    ... <h1>Välkommen!</h1> == $0
    </body>
  </html>
```

Styles Computed Event Listeners DOM Breakpoints Properties

Filter

:hov .cls +

```
element.style {
}
```

html, body, div, span, applet, object, iframe, h1, h2, h3, h4, h5, h6, p, blockquote, pre, a, abbr, [reset.css:18](#) acronym, address, big, cite, code, del, dfn, em, img, ins, kbd, q, s, samp, small, strike, strong, sub, sup, tt, var, b, u, i, center, dl, dt, dd, ol, ul, li, fieldset, form, label, legend, table, caption, tbody, tfoot, thead, tr, th, td, article, aside, canvas, details, embed, figure, figcaption, footer, header, hgroup, menu, nav, output, ruby, section, summary, time, mark, audio, video {

```
  margin: 0;
  padding: 0;
  border: 0;
  font-size: 100%;
  font: inherit;
  vertical-align: baseline;
}
```

h1 { user agent stylesheet

```
  display: block;
  font-size: 2em;
  -webkit-margin-before: 0.67em;
  -webkit-margin-after: 0.67em;
  -webkit-margin-start: 0px;
  -webkit-margin-end: 0px;
  font-weight: bold;
}
```

Inherited from body

body { [reset.css:31](#)

```
  line-height: 1;
}
```

html, body, div, span, applet, object, iframe, h1, h2, h3, h4, h5, h6, p, blockquote, pre, a, abbr, [reset.css:18](#) acronym, address, big, cite, code, del, dfn, em, img, ins, kbd, q, s, samp, small, strike, strong, sub, sup, tt, var, b, u, i, center, dl, dt, dd, ol, ul, li, fieldset, form, label, legend, table, caption, tbody, tfoot, thead, tr, th, td, article, aside, canvas, details, embed, figure, figcaption, footer, header, hgroup, menu,

html body h1

Console What's New Network conditions

# CSS reset

## Fördelar

- Full kontroll över sin CSS-kod
- Tar bort ev. skillnader mellan webbläsare

## Nackdelar

- Mer kod att skriva, då vi ej använder den ”färdiga” koden webbläsaren
- Man måste tänka på att formge *alla element* som ska formges.
  - <strong> är nu inte fetstilt, t.ex.
  - Listor har inga nummer/punkter
  - Etc.



# ATT HÅLLA KOLL PÅ VILKA EGENSKAPER SOM GÄLLER

---

Inte alltid så enkelt som man tror!

| Selector                  | Example           | Example description   | CSS |
|---------------------------|-------------------|---|-----|
| <i>.class</i>             | <i>.intro</i>     | Selects all elements with class="intro"                                   | 1   |
| <i>#id</i>                | <i>#firstname</i> | Selects the element with id="firstname"                                   | 1   |
| <i>*</i>                  | <i>*</i>          | Selects all elements  | 2   |
| <i>element</i>            | <i>p</i>          | Selects all <p> elements  | 1   |
| <i>element,element</i>    | <i>div, p</i>     | Selects all <div> elements and all <p> elements                           | 1   |
| <i>element element</i>    | <i>div p</i>      | Selects all <p> elements inside <div> elements                            | 1   |
| <i>element&gt;element</i> | <i>div &gt; p</i> | Selects all <p> elements where the parent is a <div> element              | 2   |
| <i>element+element</i>    | <i>div + p</i>    | Selects all <p> elements that are placed immediately after <div> elements | 2   |

JU MER SPECIFIK EN SELETOR ÄR,  
JU HÖGRE PRIORITERAS DEN

Tumregel

# CSS

```
1 body {  
2     background-color: pink;  
3 }
```

## Exempel

## HTML

```
1 <!doctype html>  
2 <html>  
3   <head>  
4     <meta charset="utf-8">  
5     <title>Demo</title>  
6     <link href="a.css" rel="stylesheet">  
7   </head>  
8  
9   <body>  
10    <h1>Välkommen!</h1>  
11  
12    <p>Detta är en rad text!</p>  
13    <p>Detta är en rad text!</p>  
14    <p>Detta är en rad text!</p>  
15    <p>Detta är en rad text!</p>  
16    <p>Detta är en rad text!</p>  
17  
18  </body>  
19 </html>
```

## Webbläsare

### Välkommen!

Detta är en rad text!

Detta är en rad text!

Detta är en rad text!

Detta är en rad text!

Detta är en rad text!



# Exempel

## HTML

```
1 <!doctype html>
2 <html>
3   <head>
4     <meta charset="utf-8">
5     <title>Demo</title>
6     <link href="a.css" rel="stylesheet">
7   </head>
8
9   <body>
10    <h1>Välkommen!</h1>
11
12    <p>Detta är en rad text!</p>
13    <p>Detta är en rad text!</p>
14    <p>Detta är en rad text!</p>
15    <p>Detta är en rad text!</p>
16    <p>Detta är en rad text!</p>
17
18  </body>
19 </html>
```

## CSS

```
1 body {
2   background-color: pink;
3 }
4
5 p {
6   background-color: blue;
7 }
```

## Webbläsare

### Välkommen!

Detta är en rad text!

Detta är en rad text!

Detta är en rad text!

Detta är en rad text!

Detta är en rad text!

# Välkommen!

Detta är en rad text!

Detta är en rad text!

Detta är en rad text!

Detta är en rad text!

Detta är en rad text!

Memory Audits Elements Network Console Sources Performance Application Security Clockwork AdBlock

```
<!DOCTYPE html>
<html>
  <head>...</head>
  <body>
    <h1>Välkommen!</h1>
    <p>Detta är en rad text!</p> == $0
    <p>Detta är en rad text!</p>
    <p>Detta är en rad text!</p>
    <p>Detta är en rad text!</p>
    <p>Detta är en rad text!</p>
  </body>
</html>
```

Styles Computed Event Listeners

Filter :hov .cls +

element.style {  
}

p {  
 background-color: blue; [a.css:5](#)  
}

p {  
 display: block;  
 -webkit-margin-before: 1em;  
 -webkit-margin-after: 1em;  
 -webkit-margin-start: 0px;  
 -webkit-margin-end: 0px;  
}

margin 16  
border -

html body p

Console What's New Network conditions

# Exempel HTML

```
1 <!doctype html>
2 <html>
3   <head>
4     <meta charset="utf-8">
5     <title>Demo</title>
6     <link href="a.css" rel="stylesheet">
7   </head>
8
9   <body>
10    <h1>Välkommen!</h1>
11
12    <p class="green">Detta är en rad text!</p>
13    <p>Detta är en rad text!</p>
14    <p class="green">Detta är en rad text!</p>
15    <p>Detta är en rad text!</p>
16    <p class="green">Detta är en rad text!</p>
17
18  </body>
19 </html>
```

## CSS

```
1 body {
2     background-color: pink;
3 }
4
5 p {
6     background-color: blue;
7 }
8
9 .green {
10     background-color: green;
11 }
```

## Webbläsare

### Välkommen!

Detta är en rad text!

Detta är en rad text!

Detta är en rad text!

Detta är en rad text!

Detta är en rad text!



# Välkommen!

Detta är en rad text!

Detta är en rad text!

Detta är en rad text!

Detta är en rad text!

Detta är en rad text!

Memory Audits Elements Network Console Sources Performance Application Security Clockwork AdBlock

<!DOCTYPE html>  
<html>  
 <head>...</head>  
 <body>  
 <h1>Välkommen!</h1>  
 <p class="green">Detta är en rad text!</p> == \$0  
 <p>Detta är en rad text!</p>  
 <p class="green">Detta är en rad text!</p>  
 <p>Detta är en rad text!</p>  
 <p class="green">Detta är en rad text!</p>  
 </body>  
</html>

Styles Computed Event Listeners

Filter :hov .cls +

element.style {  
}  
.green {  
 background-color: green; a.css:9  
}  
p {  
 background-color: blue; a.css:5  
}  
p {  
 user agent stylesheet  
 display: block;  
 -webkit-margin-before: 1em;  
 -webkit-margin-after: 1em;  
 -webkit-margin-start: 0px;  
 -webkit-margin-end: 0px;  
}

html body p.green

Console What's New Network conditions

# Exempel

## HTML

```
1 <!doctype html>
2 <html>
3   <head>
4     <meta charset="utf-8">
5     <title>Demo</title>
6     <link href="a.css" rel="stylesheet">
7   </head>
8
9   <body>
10    <h1>Välkommen!</h1>
11
12    <p class="green">Detta är en rad text!</p>
13    <p>Detta är en rad text!</p>
14    <p class="green" id="red">Detta är en rad text!</p>
15    <p>Detta är en rad text!</p>
16    <p class="green">Detta är en rad text!</p>
17
18  </body>
19 </html>
```

## CSS

```
1 body {
2     background-color: pink;
3 }
4
5 p {
6     background-color: blue;
7 }
8
9 .green {
10     background-color: green;
11 }
12
13 #red {
14     background-color: red;
15 }
```

## Webbläsare

### Välkommen!

Detta är en rad text!

Detta är en rad text!

Detta är en rad text!

Detta är en rad text!

Detta är en rad text!

# Välkommen!

Detta är en rad text!

Detta är en rad text!

Detta är en rad text!

Detta är en rad text!

Detta är en rad text!

Memory Audits Elements Network Console Sources Performance Application Security Clockwork ADBlock

```
<!DOCTYPE html>
<html>
  <head>...</head>
  <body>
    <h1>Välkommen!</h1>
    <p class="green">Detta är en rad text!</p>
    <p>Detta är en rad text!</p>
    ... <p class="green" id="red">Detta är en rad text!</p> == $0
    <p>Detta är en rad text!</p>
    <p class="green">Detta är en rad text!</p>
  </body>
</html>
```

Styles Computed Event Listeners

Filter :hov .cls +

element.style {  
}  
#red {  
 background-color: red; a.css:13  
}  
.green {  
 background-color: green; a.css:9  
}  
p {  
 background-color: blue; a.css:5  
}  
p {  
 display: block;  
 -webkit-margin-before: 1em;  
 -webkit-margin-after: 1em;  
 -webkit-margin-start: 0px;  
}

html body p#red.green

Console What's New Network conditions



## CSS3

### CSS3 Introduction

CSS3 Rounded Corners

CSS3 Border Images

CSS3 Backgrounds

CSS3 Colors

CSS3 Gradients

CSS3 Shadows

CSS3 Text

CSS3 Fonts

CSS3 2D Transforms

CSS3 3D Transforms

CSS3 Transitions

CSS3 Animations

CSS3 Images

CSS3 Buttons

CSS3 Pagination

CSS3 Multiple Columns

CSS3 User Interface

CSS3 Box Sizing

CSS3 Flexbox

CSS3 Media Queries

CSS3 MQ Examples

## CSS3 Modules

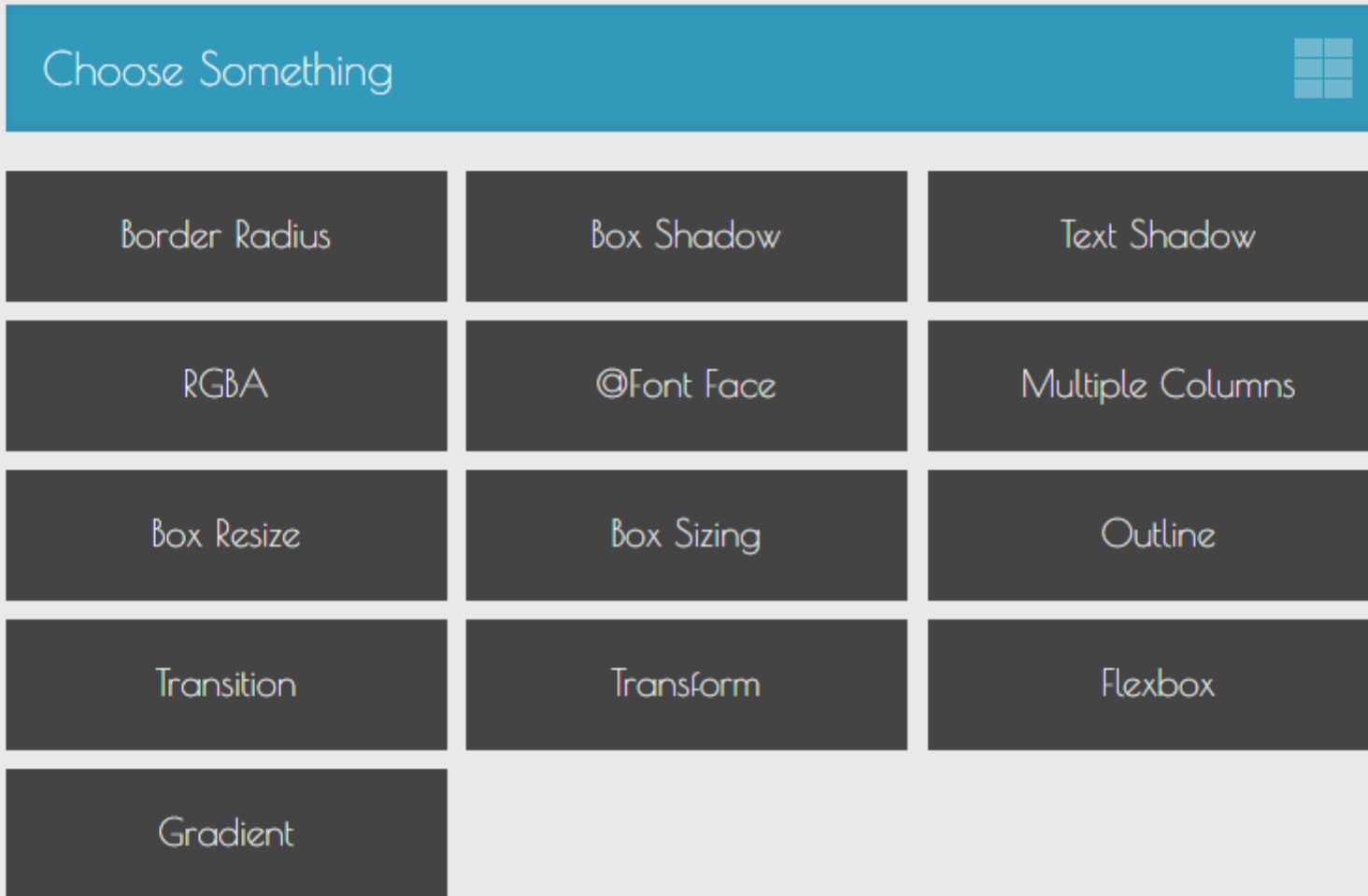
CSS3 has been split into "modules". It contains the "old CSS specification" (which has been split into smaller pieces). In addition, new features are added.

Some of the most important CSS3 modules are:

- Selectors
- Box Model
- Backgrounds and Borders
- Image Values and Replaced Content
- Text Effects
- 2D/3D Transformations
- Animations
- Multiple Column Layout
- User Interface

Most of the new CSS3 properties are implemented in modern browsers.

# CSS3 Generator



<http://css3generator.com/>

# DEMO

---

Rundade hörn, skugga, animationer, etc.

+ CSS reset

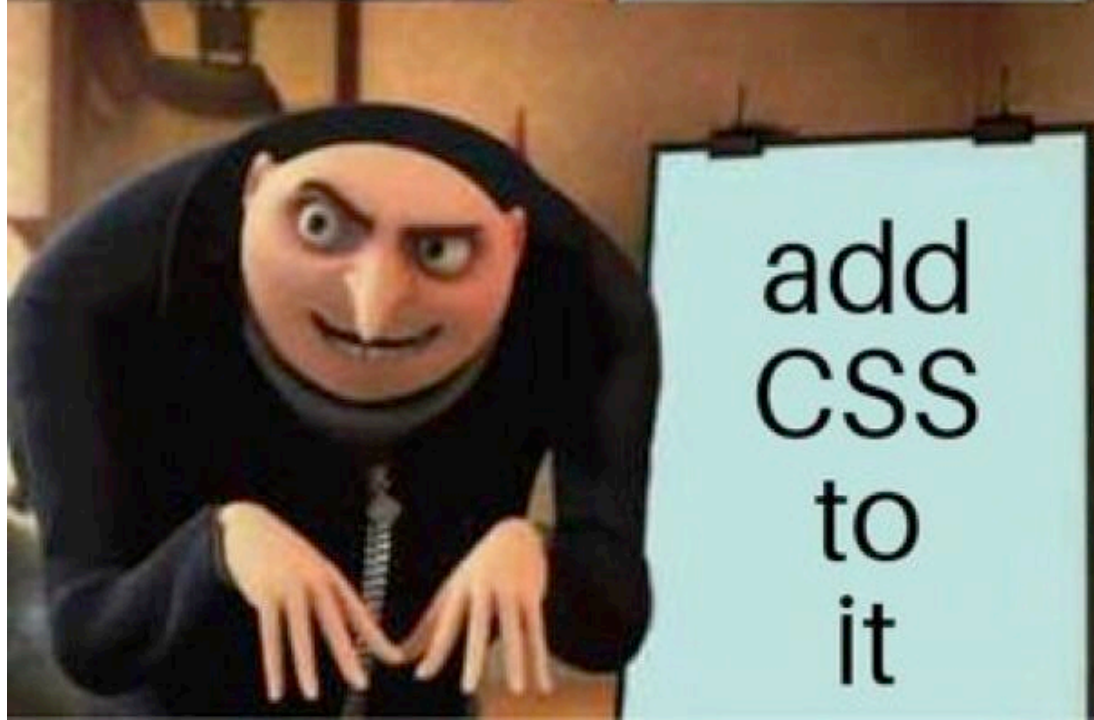
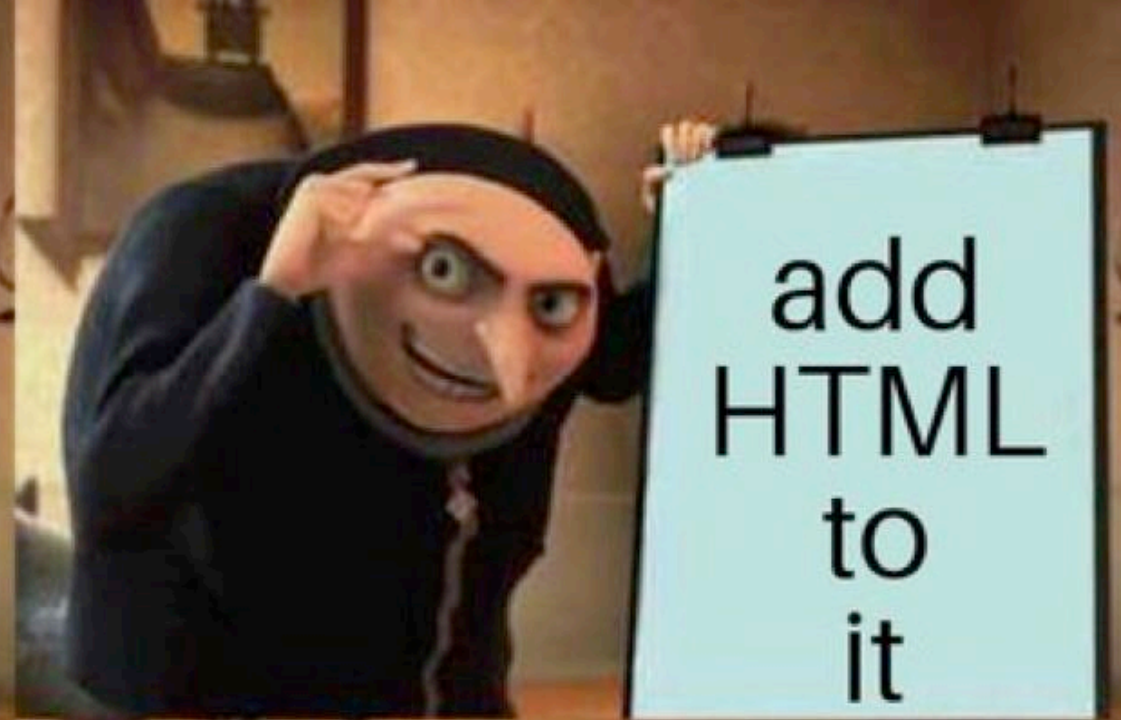
# LAYOUTER - HISTORIK

---

**ONE DOES NOT SIMPLY...**

**KNOW HELL UNTIL THEY'VE TRIED  
WEB DEVELOPMENT WITH CSS**





CSS

IS

AWESOME

# CSS 1: 1996

- Formatera text (typsnitt, fetstilt, kursivt)
- Färg för text och element
- Textattribut (avstånd mellan ord, mellan rader, etc.)
- Placering av element (text, bilder, tabeller, m.m.)
- Marginaler, "luft" (padding), ramar, positionering
- M.m.



# CSS 2: 2004

- Positionering: Absolute, fixed, relative
- Z-index
- Nya text-egenskaper (t.ex. skuggor)



# CSS 2.1: 2007 (2009, 2011)

- Media typer
- Visuella effekter
- Tabeller
- Bättre selektorer
- M.m.







# CSS 3: ?

- Bättre selektorer
- Media Queries
- Kolumner
- Flexibel layout
- Grids layout
- M.m.



# FLEXBOX

---

<https://css-tricks.com/snippets/css/a-guide-to-flexbox/>

## TABLE OF CONTENTS

|          |   |
|----------|---|
| <b>1</b> | <b>Introduction</b>   |
| 1.1      | Overview  |
| 1.2      | Module interactions   |
| <b>2</b> | <b>Flex Layout Box Model and Terminology</b>                          |
| <b>3</b> | <b>Flex Containers: the ‘flex’ and ‘inline-flex’ ‘display’ values</b> |
| <b>4</b> | <b>Flex Items</b>   |
| 4.1      | Absolutely-Positioned Flex Children                                   |
| 4.2      | Flex Item Margins and Paddings  |
| 4.3      | Flex Item Z-Ordering  |
| 4.4      | Collapsed Items   |
| 4.5      | Automatic Minimum Size of Flex Items                                  |
| <b>5</b> | <b>Ordering and Orientation</b>                                       |
| 5.1      | Flex Flow Direction: the ‘flex-direction’ property                    |
| 5.2      | Flex Line Wrapping: the ‘flex-wrap’ property                          |
| 5.3      | Flex Direction and Wrap: the ‘flex-flow’ shorthand                    |
| 5.4      | Display Order: the ‘order’ property                                   |
| 5.4.1    | Reordering and Accessibility  |
| <b>6</b> | <b>Flex Lines</b>   |
| <b>7</b> | <b>Flexibility</b>  |

# CSS Flexible Box Layout Module Level 1

W3C Candidate Recommendation, 19 October 2017

**This version:**

<https://www.w3.org/TR/2017/CR-css-flexbox-1-20171019/>

**Latest published version:**

<https://www.w3.org/TR/css-flexbox-1/>

**Editor's Draft:**

<https://drafts.csswg.org/css-flexbox/>

**Previous Versions:**

<https://www.w3.org/TR/2016/CR-css-flexbox-1-20160526/>

<https://www.w3.org/TR/2016/CR-css-flexbox-1-20160301/>

<https://www.w3.org/TR/2015/WD-css-flexbox-1-20150514/>

<https://www.w3.org/TR/2014/WD-css-flexbox-1-20140925/>

<https://www.w3.org/TR/2014/WD-css-flexbox-1-20140325/>

<https://www.w3.org/TR/2012/CR-css3-flexbox-20120918/>

<https://www.w3.org/TR/2012/WD-css3-flexbox-20120612/>

<https://www.w3.org/TR/2012/WD-css3-flexbox-20120322/>

<https://www.w3.org/TR/2011/WD-css3-flexbox-20111129/>

<https://www.w3.org/TR/2011/WD-css3-flexbox-20110322/>

<https://www.w3.org/TR/2009/WD-css3-flexbox-20090723/>

**Test Suite:**

[http://test.csswg.org/suites/css-flexbox-1\\_dev/nightly-unstable/](http://test.csswg.org/suites/css-flexbox-1_dev/nightly-unstable/)

**Editors:**

[Tab Atkins Jr.](#) (Google)

[Elika J. Etemad / fantasai](#) (Invited Expert)

[Rossen Atanassov](#) (Microsoft)






**I'm Centered!**

This box is both vertically and horizontally centered. Even if the text in this box changes to make it wider or taller, the box will still be centered. Go ahead, give it a try. Just click to edit the text.

# Sticky Footer

Click the button below to hide the contents of this page. Notice how the footer sticks to the bottom of the window even when there's not enough content to fill the page.

 Toggle Contents

 Star 11,344

 Follow @philwalton 8,279 followers

 Tweet



## Nested Media Objects



### Media Object Title

Phasellus vel felis purus. Aliquam consequat pellentesque dui, non mollis erat dictum sit amet. Curabitur non quam dictum, consectetur arcu in, vehicula justo.



Mauris porta arcu id magna adipiscing lacinia at congue lacus. Vivamus blandit quam quis tincidunt egestas. Etiam posuere lectus sed sapien malesuada molestie.



Vestibulum ac turpis non lacus dignissim dignissim eu sed dui. Proin a ligula sit amet massa malesuada mattis eu a ante. Nunc porttitor sed quam quis sollicitudin. Vestibulum ac turpis non lacus dignissim dignissim eu sed dui.



Rutrum risus aliquam vitae.



### Media Object Title

Phasellus vel felis purus. Aliquam consequat pellentesque dui, non mollis erat dictum sit amet. Curabitur non quam dictum, consectetur arcu in, vehicula justo. Donec tortor massa, eleifend nec viverra in, aliquet at eros. Mauris laoreet condimentum mauris, non tempor massa fermentum ut.




Donec imperdiet sem leo, id rutrum risus aliquam vitae.



Mauris porta arcu id magna adipiscing lacinia at congue lacus. Vivamus blandit quam quis tincidunt egestas. Etiam posuere lectus sed sapien malesuada molestie. Aliquam vitae pharetra dolor. Nullam non mattis nunc.

### Add-on Prepended

|        |                      |
|--------|----------------------|
| Amount | <input type="text"/> |
|--------|----------------------|

|   |                      |
|---|----------------------|
|  | <input type="text"/> |
|---|----------------------|

### Add-on Appended

|                      |    |
|----------------------|----|
| <input type="text"/> | Go |
|----------------------|----|

|                      |   |
|----------------------|---|
| <input type="text"/> |  |
|----------------------|---|

### Appended and Prepended Add-ons

|   |             |      |
|---|-------------|------|
|  | Example One | Send |
|---|-------------|------|

|   |             |         |
|---|-------------|---------|
|  | Example One | Encrypt |
|---|-------------|---------|

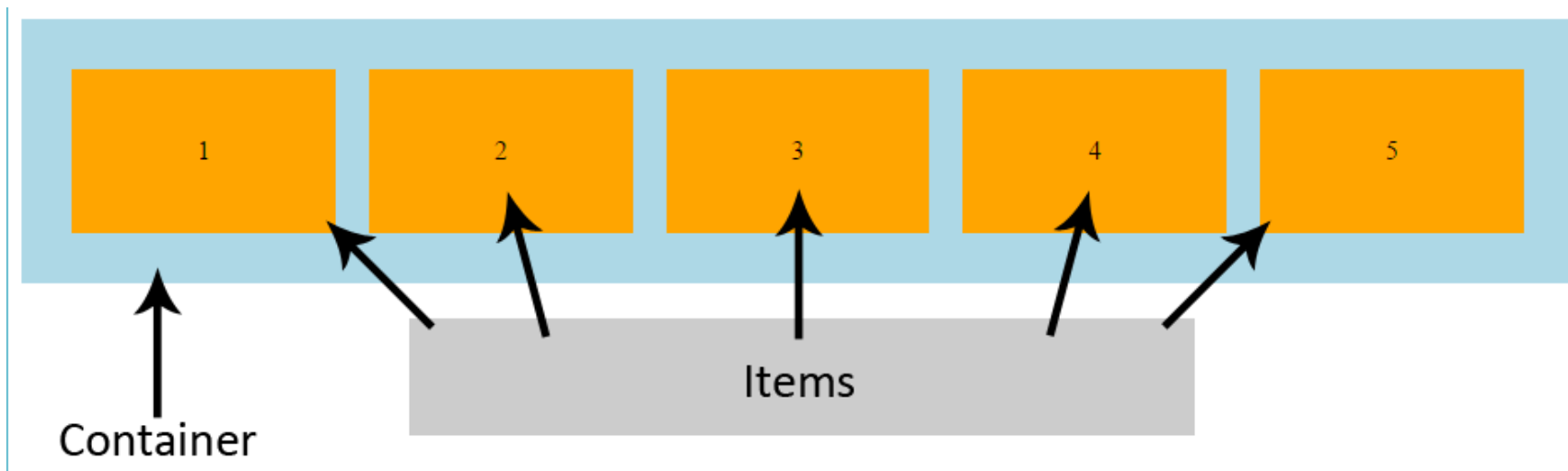
## Basic Grids

The grid cells below do not specify any widths, they just naturally space themselves equally and expand to fit the entire row. They're also equal height by default.

|   |     |  |     |
|---|-----|--|-----|
| 1/2   |     | 1/2  |     |
| 1/3   | 1/3 | 1/3  |     |
| 1/4   | 1/4 | 1/4  | 1/4 |
| Full-height, even when my content doesn't fill the space. |     | Lorem ipsum dolor sit amet, consectetur adipiscing elit. Vestibulum mollis velit non gravida venenatis. Praesent consequat lectus purus, ut scelerisque velit condimentum eu. Maecenas sagittis ante ut turpis varius interdum. Quisque tellus ipsum, eleifend non ipsum id, suscipit ultricies neque. |     |

# Vad är flexbox?

- Ett sätt att positionera ut element på en webbsida
  - Ett alternativ till att använda t.ex. float för att bygga layouter
- Flexbox utgår från att positionerna ut barn-element i en "container" på olika sätt.



# Om Flexbox

## Fördelar

- Enkelt att anpassa elements storlek efter dess innehåll
- Enkelt att centrera element (vertikalt & horisontellt)
- Enkelt att sätta i vilken ordning som element ska visas

## Nackdelar

- Dåligt stöd för äldre webbläsare, även ”nyare” versioner av IE (IE 11 har stöd)
- Svårt att bygga ”bra” layouter, mer för att strukturera innehåll

# CSS Flexible Box Layout Module 📄 - CR

Usage % of all users

Global 92.41% + 3.31% = 95.71%

unprefixed: 92.13% + 2.69% = 94.82%

Method of positioning elements in horizontal or vertical stacks.  
Support includes all properties prefixed with `flex`, as well as `display: flex`, `display: inline-flex`, `align-content`, `align-items`, `align-self`, `justify-content` and `order`.

| Current aligned | Usage relative | Date relative | Show all | ?      |              |              |                    |                        |                  |
|-----------------|----------------|---------------|----------|--------|--------------|--------------|--------------------|------------------------|------------------|
| IE              | Edge *         | Firefox       | Chrome   | Safari | iOS Safari * | Opera Mini * | Chrome for Android | UC Browser for Android | Samsung Internet |
|                 |                |               | 49       |        |              |              |                    |                        |                  |
|                 |                |               | 63       |        |              |              |                    |                        |                  |
|                 |                |               | 67       |        | 10.3         |              |                    |                        |                  |
|                 |                | 61            | 68       |        | 11.2         |              |                    |                        | 4                |
| <sup>4</sup> 11 | 17             | 62            | 69       | 11.1   | 11.4         | all          | 67                 | 11.8                   | 7.2              |
|                 | 18             | 63            | 70       | 12     | 12           |              |                    |                        |                  |
|                 |                | 64            | 71       | TP     |              |              |                    |                        |                  |
|                 |                |               | 72       |        |              |              |                    |                        |                  |

Notes Known issues (9) Resources (13) Feedback

Most partial support refers to supporting an **older version** of the specification or an **older syntax**.

<sup>4</sup> Partial support is due to large amount of bugs present (see known issues)

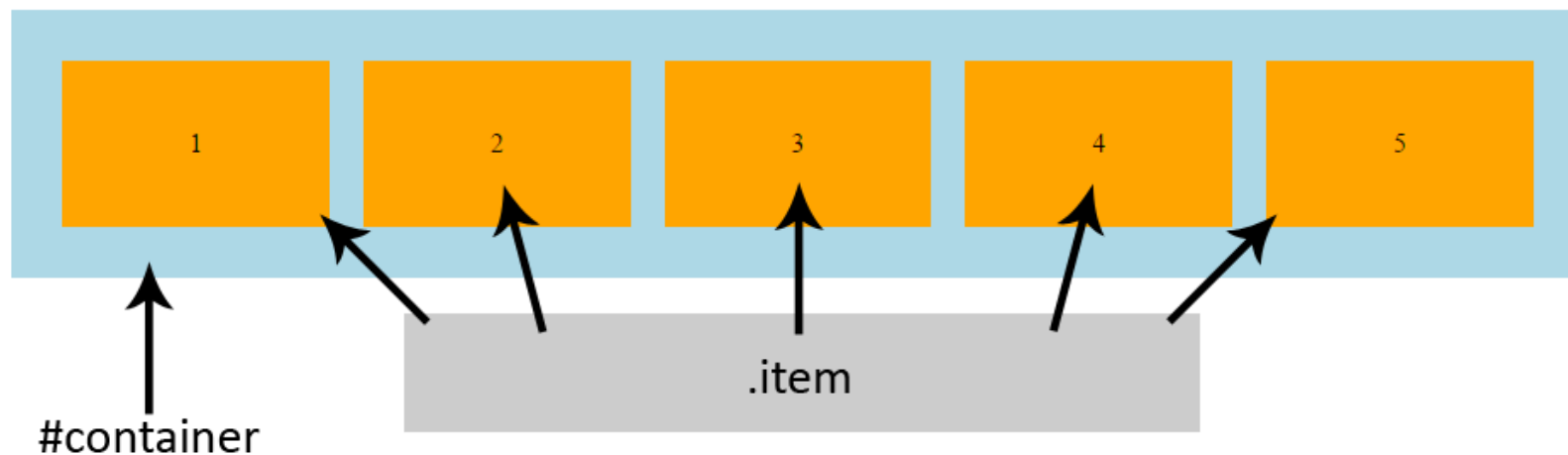


# Vårt upplägg

```
<div id="container">
  <div class="item">1</div>
  <div class="item">2</div>
  <div class="item">3</div>
  <div class="item">4</div>
  <div class="item">5</div>
</div>
```

```
#container{
  background-color: lightblue;
  padding: 20px;
  /* Egenskaper för flexbox */
  display: flex;
}

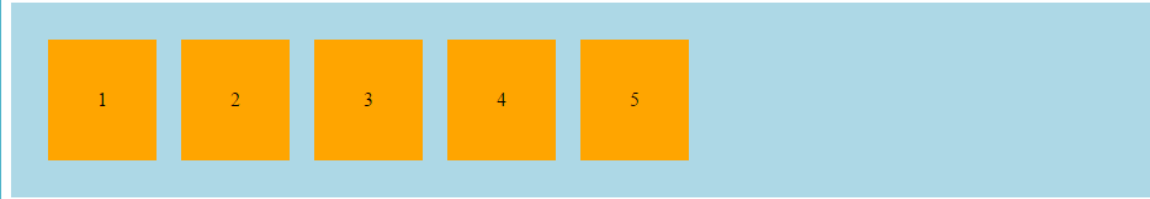
.item{
  text-align: center;
  background-color: orange;
  margin: 10px;
  padding: 40px;
}
```



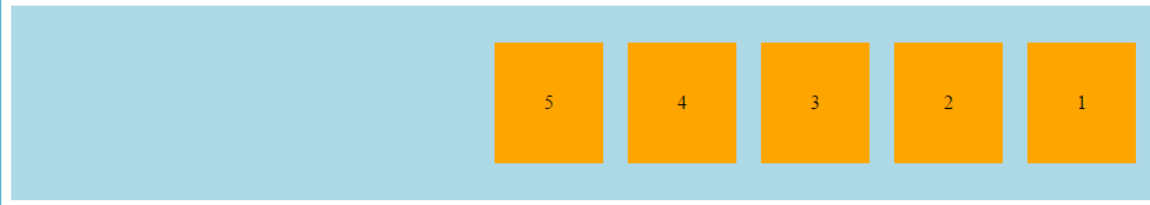
# #container

## flex-direction

- flex-direction: row: (standard)

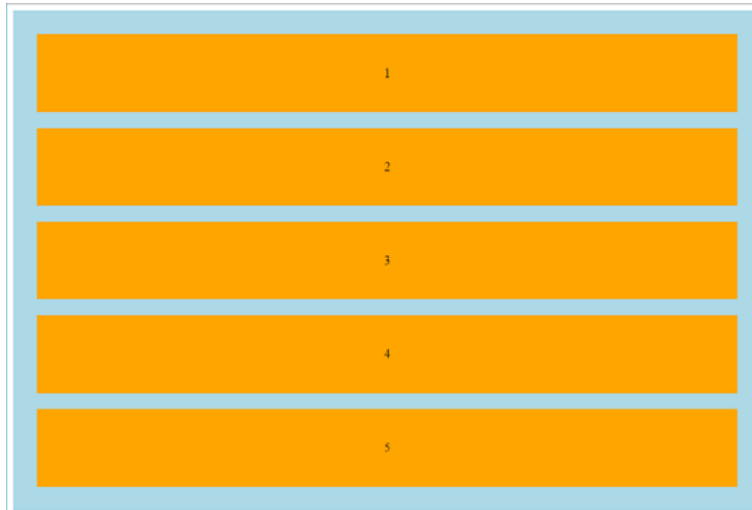


- flex-direction: row-reverse;



# #container

flex-direction: column;



# flex-direction

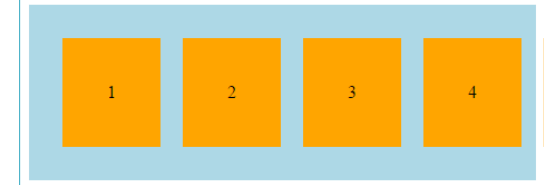
flex-direction: column-reverse;



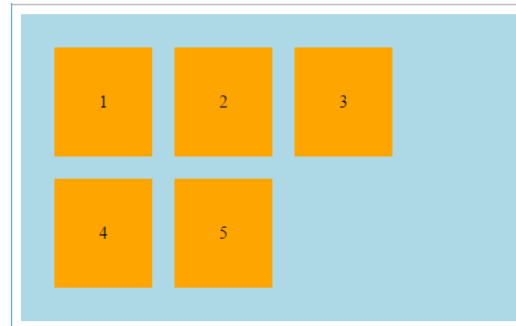
# #container

- flex-wrap: nowrap; (standard) – Allt på samma rad

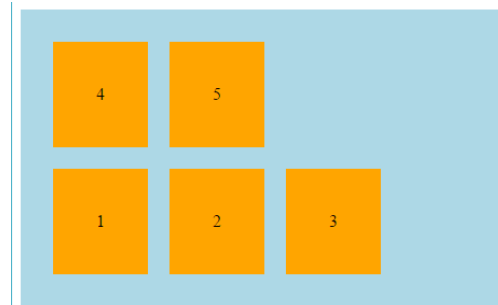
## flex-wrap



- flex-wrap: wrap;



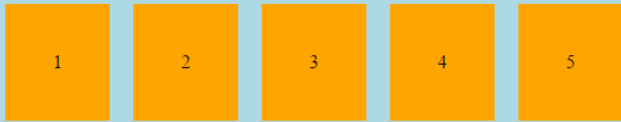
- flex-wrap: wrap-reverse;



# #container

# justify-content

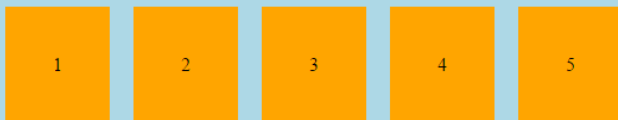
- justify-content: flex-start;



- justify-content: flex-end;



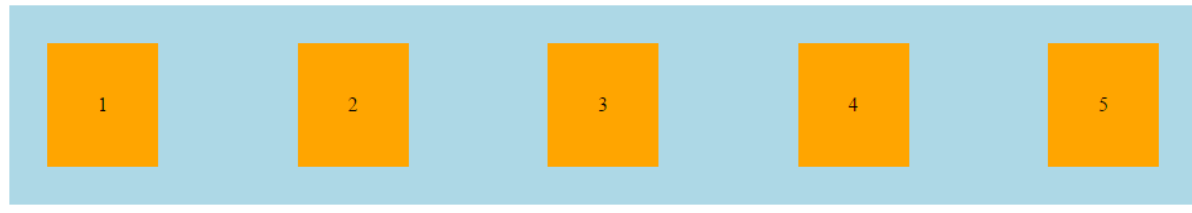
- justify-content: center;



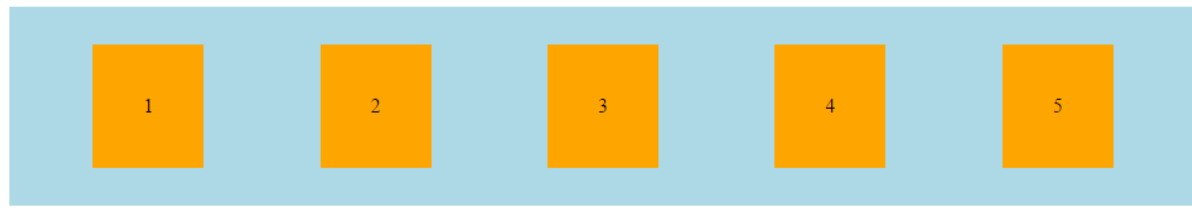
# #container

# justify-content

- justify-content: space-between;

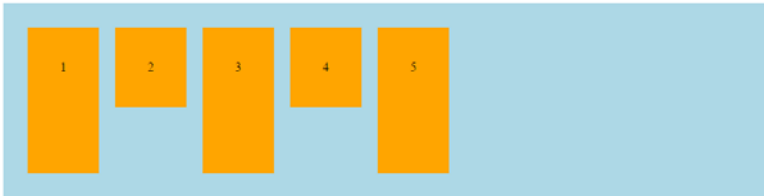


- justify-content: space-around;

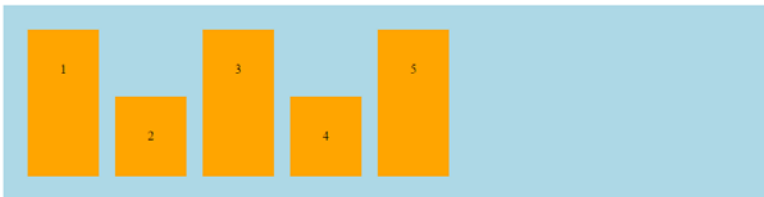


# #container items

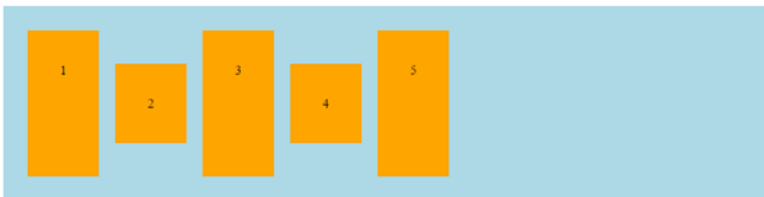
- align-items: flex-start; (standard)



- align-items: flex-end;



- align-items: center;



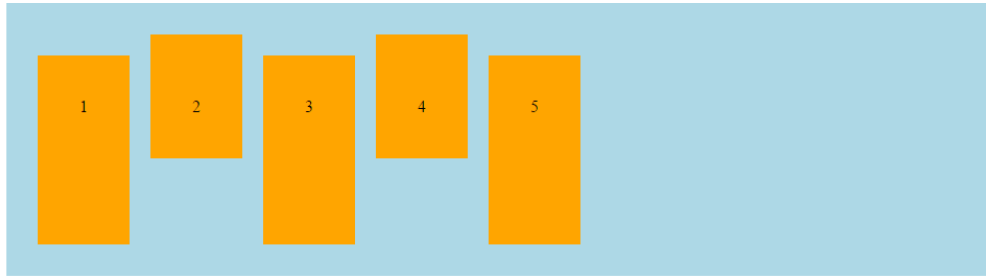
## align-

```
#container{  
  background-color: lightblue;  
  padding: 20px;  
  /* Egenskaper för flexbox */  
  display: flex;  
  align-items: flex-start;  
}  
  
.item{  
  text-align: center;  
  background-color: orange;  
  margin: 10px;  
  padding: 40px;  
}  
  
.item:nth-child(odd){  
  height: 100px;  
}
```

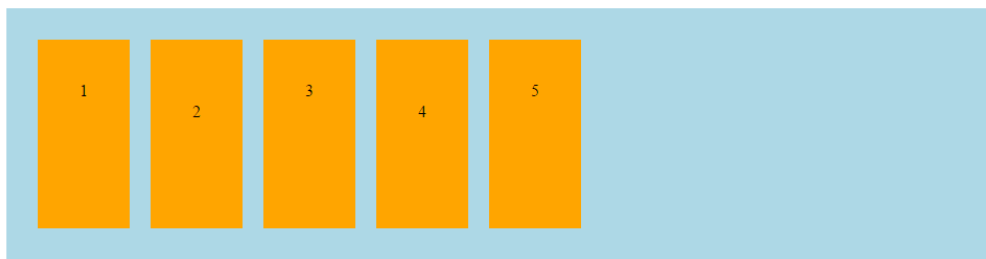


# #container items

- align-items: baseline;



- align-items: stretch;



## align-

```
#container{
  background-color: lightblue;
  padding: 20px;
  /* Egenskaper för flexbox */
  display: flex;
  align-items: baseline ;
}

.item{
  text-align: center;
  background-color: orange;
  margin: 10px;
  padding: 40px;
}

.item:nth-child(odd){
  height: 100px;
}

.item:nth-child(even){
  padding-top: 60px;
}
```

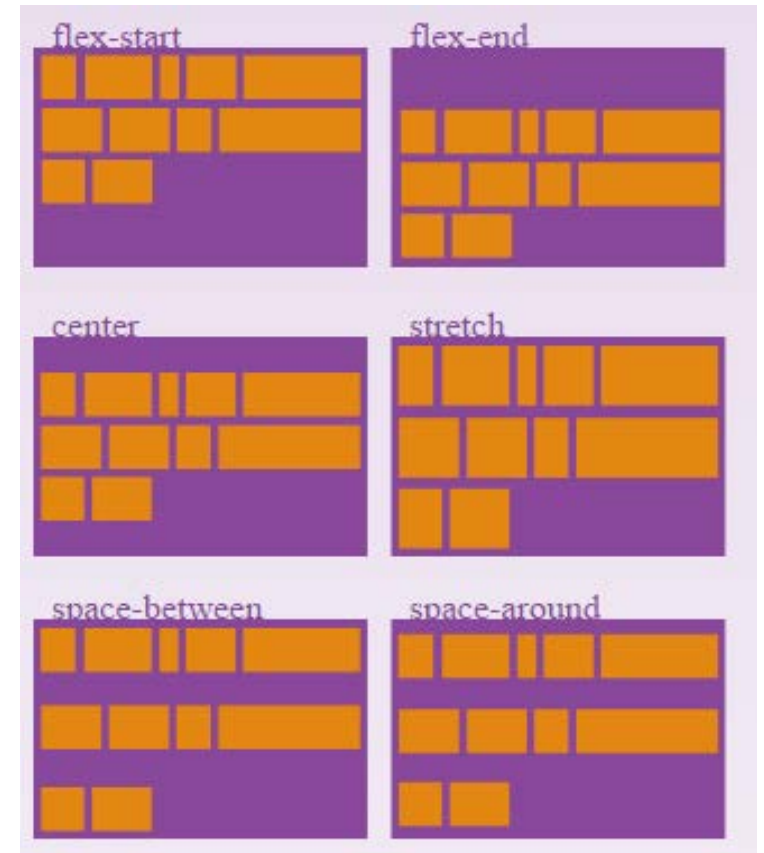
# #container

- Används bara vid flera rader

```
.container { align-content: flex-start | flex-end | center | space-between | space-around | stretch; }
```

<https://css-tricks.com/snippets/css/a-guide-to-flexbox/>

# align-content



# HUR MAN POSITIONERAR .ITEM

---

<https://css-tricks.com/snippets/css/a-guide-to-flexbox/>

# DEMO!

---

# NYTT OCKSÅ: CSS-GRIDS

---

<https://css-tricks.com/snippets/css/complete-guide-grid/>

## TABLE OF CONTENTS

**1 Introduction**

## 1.1 Background and Motivation

## 1.1.1 Adapting Layouts to Available Space

## 1.1.2 Source-Order Independence

**2 Overview**

## 2.1 Declaring the Grid

## 2.2 Placing Items

## 2.3 Sizing the Grid

**3 Grid Layout Concepts and Terminology**

## 3.1 Grid Lines

## 3.2 Grid Tracks and Cells

## 3.3 Grid Areas

**4 Reordering and Accessibility****5 Grid Containers**

## 5.1 Establishing Grid Containers: the 'grid' and 'inline-grid' 'display' values

## 5.2 Sizing Grid Containers

## 5.3 Clamping Overly Large Grids

**6 Grid Items**

## 6.1 Grid Item Display

## 6.2 Grid Item Sizing

# CSS Grid Layout Module Level 1

W3C Candidate Recommendation, 09 May 2017

▶ 277 Tests ×

**This version:**

<https://www.w3.org/TR/2017/CR-css-grid-1-20170509/>

**Latest published version:**

<https://www.w3.org/TR/css-grid-1/>

**Editor's Draft:**

<https://drafts.csswg.org/css-grid/>

**Previous Versions:**

<https://www.w3.org/TR/2017/CR-css-grid-1-20170209/>

<https://www.w3.org/TR/2016/WD-css-grid-1-20160519/>

<https://www.w3.org/TR/2015/WD-css-grid-1-20150917/>

<https://www.w3.org/TR/2015/WD-css-grid-1-20150806/>

<https://www.w3.org/TR/2015/WD-css-grid-1-20150317/>

<https://www.w3.org/TR/2014/WD-css-grid-1-20140513/>

<https://www.w3.org/TR/2014/WD-css-grid-1-20140123/>

<https://www.w3.org/TR/2013/WD-css3-grid-layout-20130402/>

<https://www.w3.org/TR/2012/WD-css3-grid-layout-20121106/>

**Test Suite:**

[http://test.csswg.org/suites/css-grid-1\\_dev/nightly-unstable/](http://test.csswg.org/suites/css-grid-1_dev/nightly-unstable/)

**Issue Tracking:**

[Disposition of Comments](#)

[Inline In Spec](#)

[GitHub Issues](#)

**Editors:**





**YOU ARE  
THE CSS  
TO MY  
HTML**