# LAYOUT MED CSS (2)





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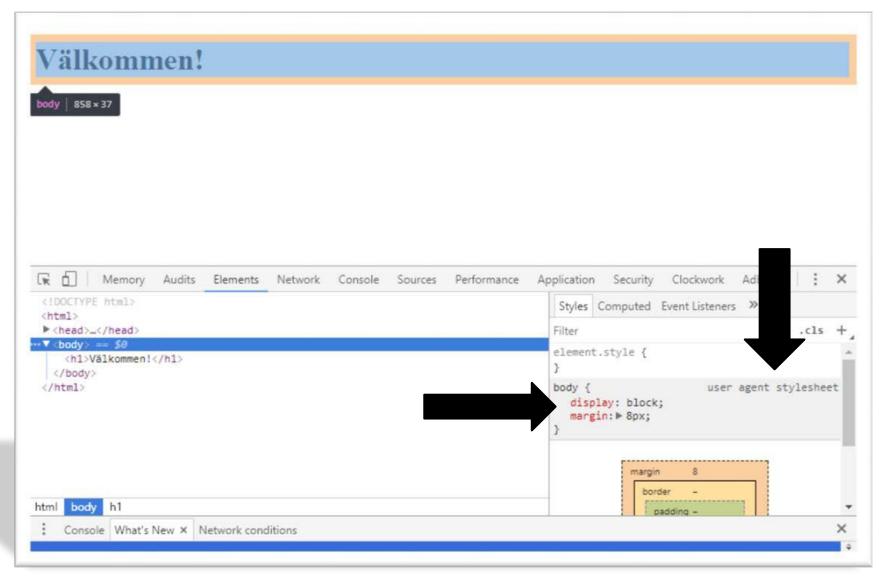




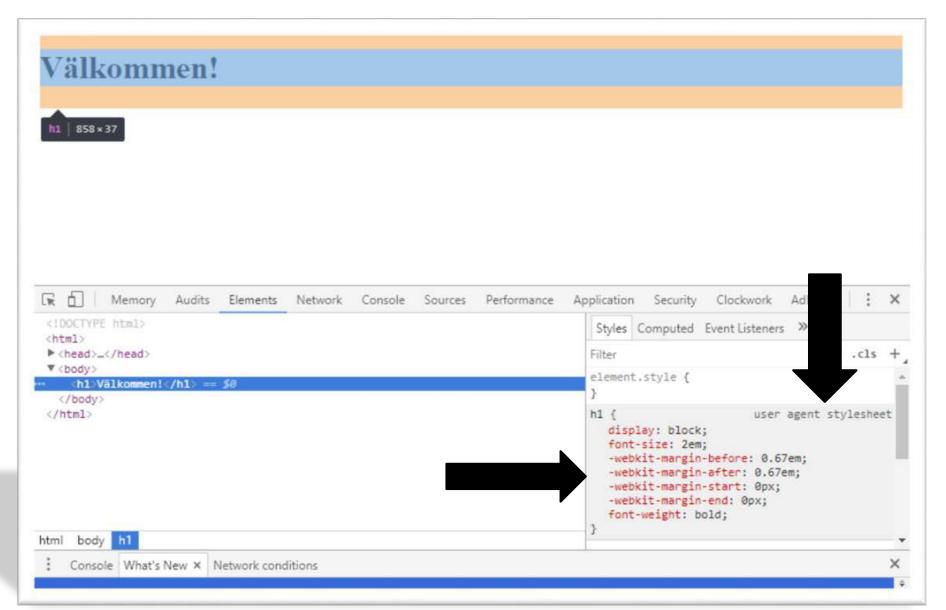
### Dagens agenda

- 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

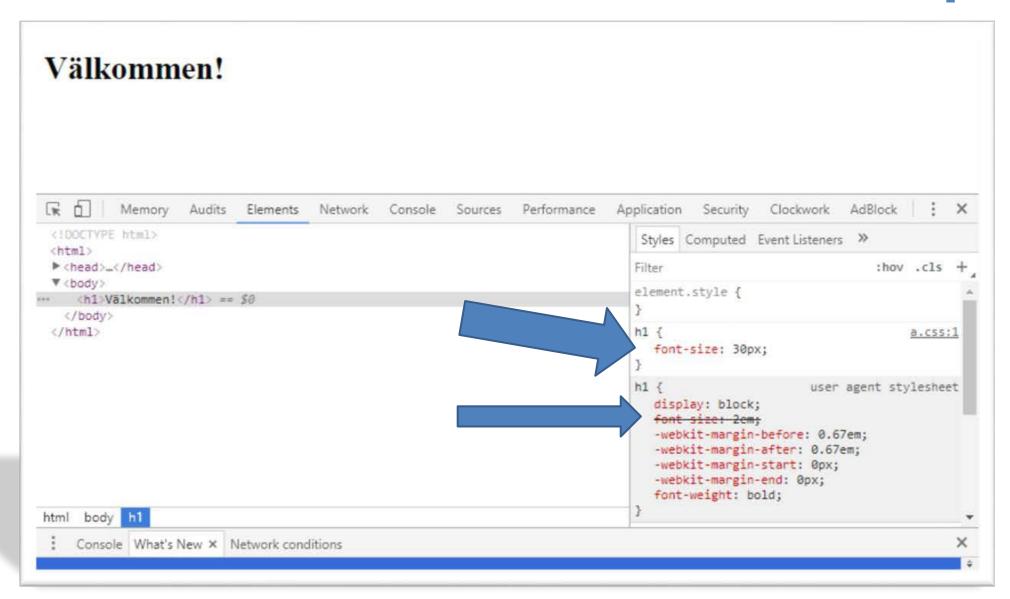
## Förinställda CSS-regler för webbläsaren



## Förinställda CSS-regler för webbläsaren



### Att skriva över webbläsarens evenskaper?



# 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 <a href="https://hypermedia.niformation">hypermedia</a> 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, <a href="Mailing lists">Mailing lists</a>, <a href="Policy">Policy</a>, <a href="November's W3 news">November's W3 news</a>, <a href="Frequently Asked Ouestions">Frequently Asked Ouestions</a>.

#### What's out there?

Pointers to the world's online information, subjects, <u>W3</u> 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.

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Bibliography

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People

A list of some people involved in the project.

History

A summary of the history of the project.

How can I help?

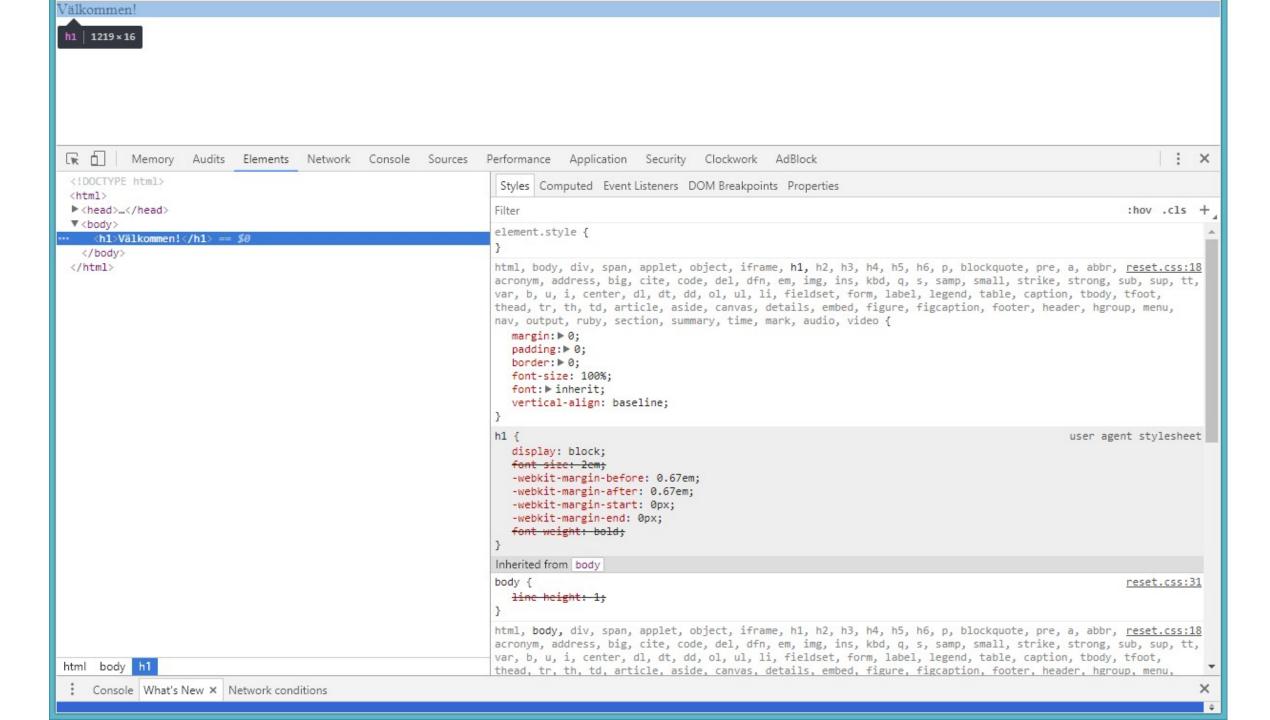
If you would like to support the web..

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;
```



### **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
.class	.intro	Selects all elements with class="intro"	1
#id	#firstname	Selects the element with id="firstname"	1
*	*	Selects all elements	2
element	р	Selects all  elements	1
element,element	div, p	Selects all <div> elements and all  elements</div>	1
element element	div p	Selects all  elements inside <div> elements</div>	1
element>element	div > p	Selects all  elements where the parent is a <div> element</div>	2
element+element	div + p	Selects all  elements that are placed immediately after <div> elements</div>	2

## JU MER SPECIFIK EN SELETOR ÄR, JU HÖGRE PRIORITERAS DEN

Tumregel

### Exempel

### HTML

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

### Webbläsare

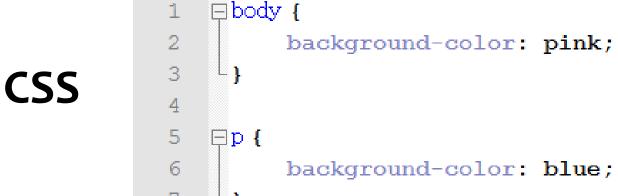
### Välkommen!

Detta är en rad text!

### Exempel

### HTML

```
<!doctype html>
   ⊟<html>
        <head>
            <meta charset="utf-8">
            <title>Demo</title>
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            Detta är en rad text!
15
            Detta är en rad text!
16
17
18
        </body>
19
    L</html>
```



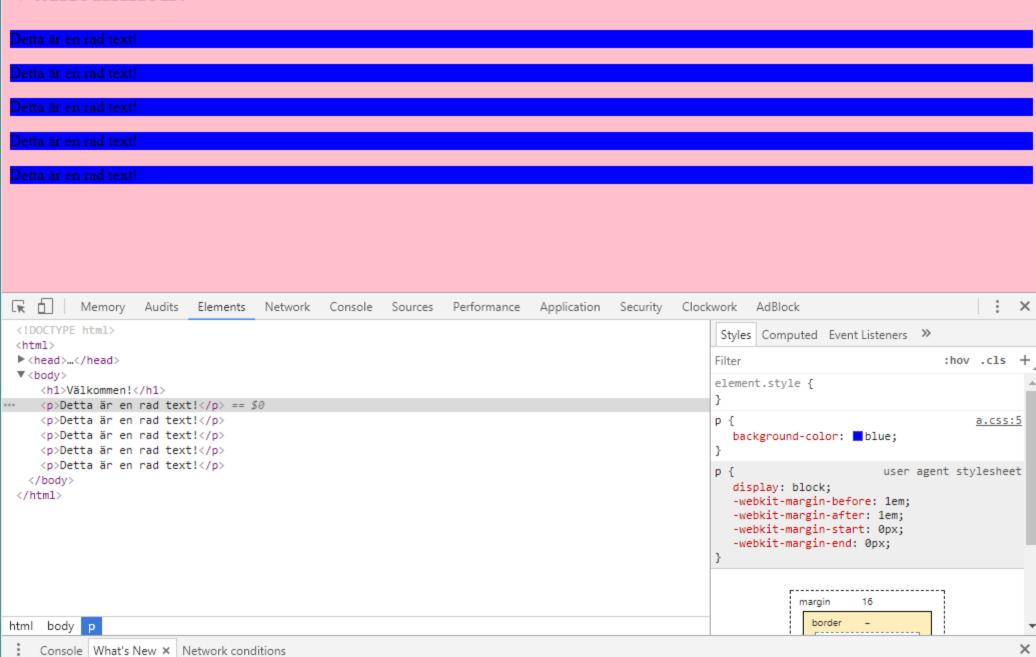
### Webbläsare

```
Välkommen!

Detta är en rad text!

Detta är en rad text!
```

### Välkommen!



### Exempel

### HTML

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

```
body {
    background-color: pink;
    background-color: blue;
    background-color: blue;
    background-color: green;
}

background-color: green;
}
```

### Webbläsare

```
Välkommen!

Detta är en rad text!

Detta är en rad text!
```

### Välkommen!

Detta är en rad text! Memory Audits Elements Network Console Sources Performance Application Security Clockwork AdBlock : × <!DOCTYPE html> Styles Computed Event Listeners >>> <html> :hov .cls + ▶ <head>...</head> Filter ▼ <body> element.style { <h1>Välkommen!</h1> Detta är en rad text! == \$0 a.css:9 Detta är en rad text! .green { Detta är en rad text! background-color: mgreen; Oetta är en rad text! Detta är en rad text! a.css:5 p { </body> background color: | blue: </html> 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 X Network conditions

### Exempel

### HTML

```
<!doctype html>
   ⊟<html>
       <head>
          <meta charset="utf-8">
          <title>Demo</title>
          <link href="a.css" rel="stylesheet">
       </head>
 8
 9
       <body>
          <h1>Välkommen!</h1>
10
12
          Detta är en rad text!
          Detta är en rad text!
13
          Detta är en rad text!
14
15
          Detta är en rad text!
          Detta är en rad text!
16
17
       </body>
18
19
   L</html>
```

```
body {
    background-color: pink;
    background-color: blue;
    background-color: blue;
}

p {
    background-color: green;
    background-color: green;
}

#red {
    background-color: red;
}
```

### Webbläsare

```
Välkommen!

Detta är en rad text!

Detta är en rad text!
```

### Välkommen!

Console What's New X Network conditions

Detta är en rad text! Memory Audits Elements Network Console Sources Performance Application Security Clockwork AdBlock <!DOCTYPE html> Styles Computed Event Listeners >>> <html> ▶ <head>...</head> :hov .cls + Filter ▼ <body> element.style { <h1>Välkommen!</h1> Detta är en rad text! Op>Detta är en rad text! a.css:13 #red { --- Detta är en rad text! == \$0 background-color: mred; Oetta är en rad text! Detta är en rad text! .green { a.css:9 </body> background color: green; </html> a.css:5 background color: | blue; user agent stylesheet display: block; -webkit-margin-before: 1em; -webkit-margin-after: 1em; html body p#red.green -webkit-margin-start: 0px:



### 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 pi are added.

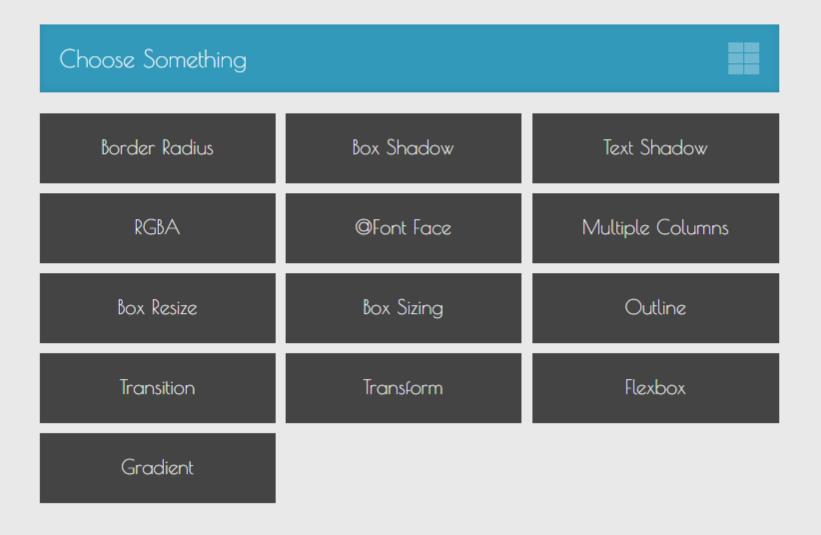
Some of the most important CSS3 modules are:

- 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.

```
.animate {
    display: -webkit-flex;
    display: -moz-flex;
   display: -ms-flex;
   display: -o-flex;
    display: flex;
```

### CSS3 Generator



http://css3generator.com/

# DEMO

Rundade hörn, skugga, animationer, etc.

+ CSS reset

# LAYOUTER - HISTORIK





# CSS 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

- Postitionering: 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/

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**Flexibility** 

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2	Flex LayoutBox Model and Terminology
3	Flex Containers: the 'flex' and 'inline- flex' 'display' values
4	Flex Items
4.1	Absolutely-Positioned FlexChildren
4.2	Flex Item Margins and Paddings
4.3	Flex ItemZ-Ordering
4.4	Collapsed Items
4.5	Automatic Minimum Size of Flex Items
5	Ordering and Orientation
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
6	Flex Lines

## **ess** 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.csswq.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-lfexbox-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/2011/WD-css3-flexbox-20110322/https://www.w3.org/TR/2009/WD-css3-flexbox-20090723/

#### **Test Suite:**

http://testcsswg.org/suites/css-flexbox-1 dev/nightly-unstable/

#### **Editors:**

<u>Tab Atkins Jr.</u> (Google)
<u>Elika J. Etemad / fantasai</u> (Invited Expert)
<u>Rossen Atanassov</u> (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.

C Toggle Contents

#### 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

## Add-on Appended



## Appended and Prepended Add-ons



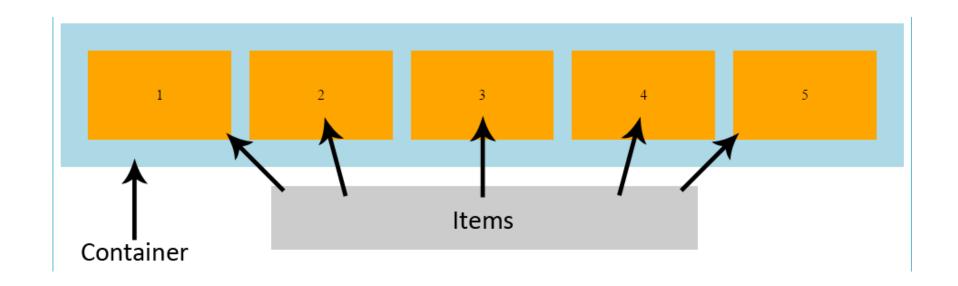
#### Basic Grids

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.



## 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

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, alignitems, align-self, justify-content and order.

Current aligned Usage relative Date relative Filtered All

IE	Edge *	Firefox	Chrome	Safari	Opera	iOS Safari	* Opera Mini	Android * Browser	Opera * Mobile	Chrome for Android	Firefox for Android	UC Browser for Android	Samsung Internet	QQ Browser	Baidu Browser	KaiOS Browser
					10-11.5											
		<sup>1</sup> 2-21 <sup>-</sup>	<sup>1</sup> 4-20 <sup>–</sup>	<sup>1</sup> 3.1-6 <sup>-</sup>	12.1	3.2-6.1										
6-9		22-27	21-28	6.1-8	15-16 <sup>-</sup>	7-8.4		2.1 - 4.3	12							
<sup>2 4</sup> 10 -	12-84	28-79	29-84	9-13	17-69	9-13.3		4.4-4.4.4	12.1				4-11.2			
<sup>4</sup> 11	85	80	85	13.1	70	13.7	all	81	46	85	79	12.12	12.0	10.4	7.12	2.5
		81 - 82	86-88	14-TP		14.0										

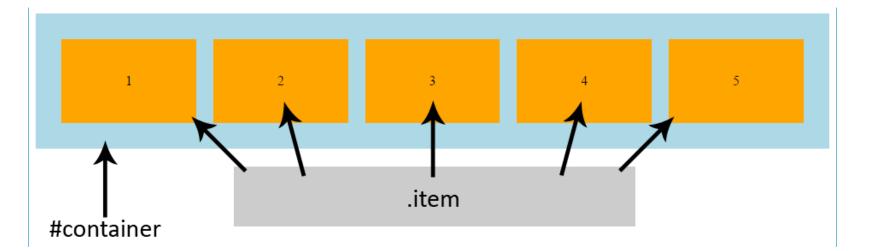
Usage % of all users \$ ?

Global 96.71% + 1.74% = 98.45%

unprefixed: 96.57% + 1.28% = 97.85%

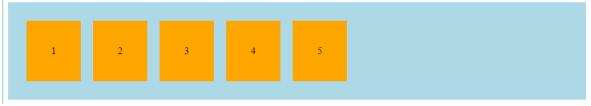
## Vårt upplägg

```
#container{
    background-color: lightblue;
    padding: 20px;
    /* Egenskaper för flexbox */
    display: flex;
}
.item{
    text-align: center;
    background-color: orange;
    margin: 10px;
    padding: 40px;
}
```

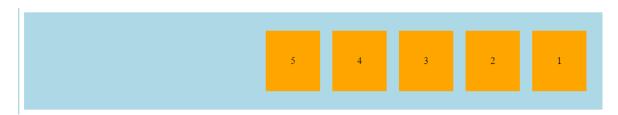


## flex-direction

• flex-direction: row; (standard)



• flex-direction: row-reverse;

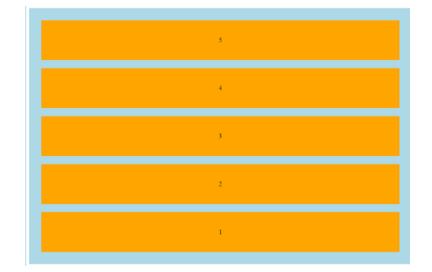


flex-direction: column;



## flex-direction

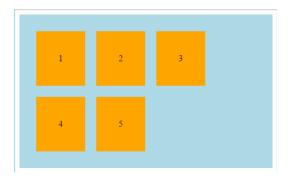
flex-direction: column-reverse;

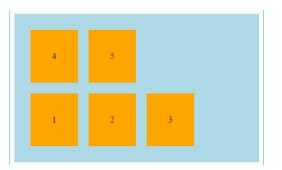


• flex-wrap: nowrap; (standard) – Allt på samma rad

• flex-wrap: wrap;

• flex-wrap: wrap-reverse;



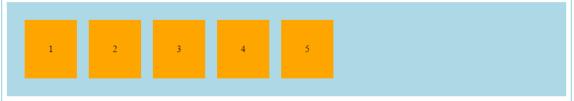


## flex-wrap

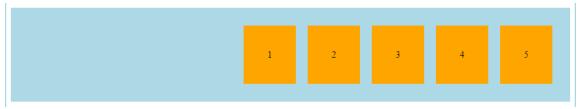


## justify-content

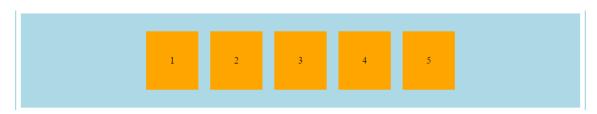
• justify-content: flex-start;



• justify-content: flex-end;

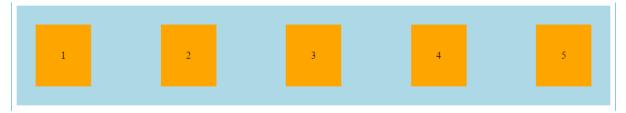


• justify-content: center;

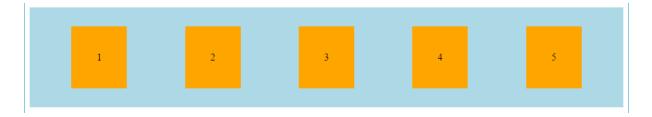


## justify-content

• justify-content: space-between;

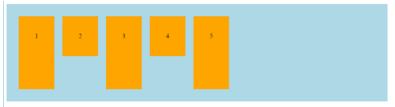


• justify-content: space-around;

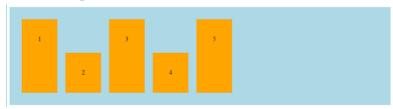


# #container items

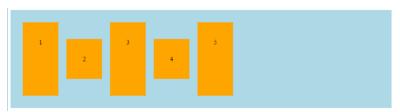
align-items: flex-start; (standard)



• align-items: flex-end;



• align-items: center;

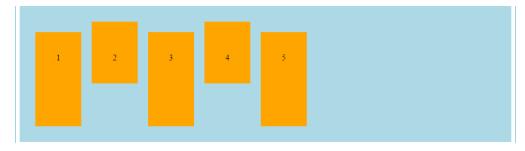


## align-

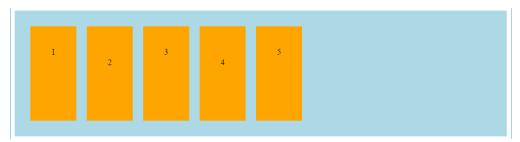
```
#container{
    background-color: lightblue;
    padding: 20px;
    /* Egenskaper för flexbox */
    display: flex;
    align-items: flex-start;
.item{
    text-align: center;
    background-color: orange;
    margin: 10px;
    padding: 40px;
.item:nth-child(odd){
    height: 100px;
```

# #container items

• align-items: baseline;



• align-items: stretch;



## align-

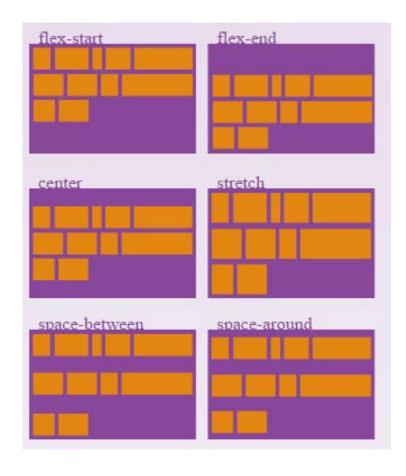
```
#container{
    background-color: lightblue;
    padding: 20px;
    /* Egenskaper för flexbox */
   display: flex;
    align-items: baseline ;
.item{
    text-align: center;
    background-color: orange;
    margin: 10px;
    padding: 40px;
.item:nth-child(odd){
    height: 100px;
.item:nth-child(even) {
    padding-top: 60px;
```

## 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!

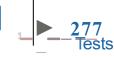
# NYTT OCKSĂ: CSS-GRIDS

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

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## **ess** Grid Layout Module Level 1





W3C Candidate Recommendation, 09 May 2017

#### This version:

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

#### **Latest publishedversion:**

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

#### **Editor's Draft:**

https://drafts.csswq.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-1a yout-20121106/

#### **Test Suite:**

http://test.csswg.org/suites/css-grid-1 dev/nightly-unstable/

#### IssueTracking:

Disposition of Comments

Inline In Spec

GitHub Issues

#### CSS Grid Layout (level 1) ■-cr

Method of using a grid concept to lay out content, providing a mechanism for authors to divide available space for layout into columns and rows using a set of predictable sizing behaviors. Includes support for all grid-\* properties and the fr unit.

Current aligned Usage relative Date relative

IE	* Edge	Firefox	Chrome	Safari	Opera	iOS Safari	* Opera Mini	Android * Browser	Opera * Mobile	Chrome for Android	Firefox for Android	Browser for Android	Samsung Internet	QQ Browser	Baidu Browser	KaiOS Browser	
		2-39	4-28														
		<sup>3</sup> 40-51 <sup>™</sup>	<sup>1</sup> 29-56		10-27												
6-9	<sup>2</sup> 12-15	<sup>4</sup> 52-53	<sup>4</sup> 57	3.1-10	<sup>1</sup> 28-43	3.2-10.2							4-5.4				
<sup>2</sup> 10 <sup>-</sup>	16-84	54-79	58-84	10.1-13	44-69	10.3-13.3		2.1-4.4.4	12-12.1				6.2-11.2				
<sup>2</sup> 11 <sup>-</sup>	85	80	85	13.1	70	13.7	all	81	46	85	79	12.12	12.0	10.4	7.12	2.5	
		81-82	86-88	14-TP		14.0											

% of all users

93.84%

93.84% + 1.28% = 95.12%

Usage

Global

unprefixed:

