## The web **IS READY FOR** CI reat graphic design

HIDDE DE VRIES, 16/06/2018 CSS DAY, AMSTERDAM





## Hi, I'm Hidde.







## **GRAPHIC DESIGN** and the WEB

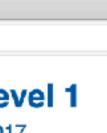




"We're going to run a few workshops" to collect feedback and to get your help with making the spec better and easier to understand "

– Fantasai

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CSS Grid L	Layout Module Level 1 × +	
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TABL 1 1.1 1.1.1 1.1.2 2 2.1 2.2 2.3 3	LE OF CONTENTS	CSS Grid Layout Module Le
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อี้ 1.1	Background and Motivation	W3C Candidate Recommendation, 09 May 201
1.1.1	Adapting Layouts to Available Space	
0 1.1.2	Source-Order Independence	This version:
r e		https://www.w3.org/TR/2017/CR-css-grid-1-20170509/
2 2	Overview	Latest published version:
2.1	Declaring the Grid	https://www.w3.org/TR/css-grid-1/
2.2	Placing Items	Editor's Draft:
2.3	Sizing the Grid	https://drafts.csswg.org/css-grid/
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3	Grid Layout Concepts and Terminology	https://www.w3.org/TR/2017/CR-css-grid-1-20170209/
3.1	Grid Lines	https://www.w3.org/TR/2016/WD-css-grid-1-20160519/
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		https://www.w3.org/TR/2015/WD-css-grid-1-20150317/
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5.3	Clamping Overly Large Grids	Issue Tracking:
6	Grid Items	Disposition of Comments
6.1	Grid Item Display	Inline In Spec
6.2		GitHub Issues
	Grid Item Sizing Reprint Grid Items: the leader's encoder	
6.3	Reordered Grid Items: the 'order' property	Editors: Tab Atkins Jr. (Google)
6.4	Grid Item Margins and Paddings	Elika J. Etemad / fantasai (Invited Expert)
6.5	Z-axis Ordering: the 'z-index' property	Rossen Atanassov (Microsoft)
6.6	Implied Minimum Size of Grid Items	
7	Defining the Grid	Former Editors:
<b>7.</b> 1	The Explicit Grid	Alex Mogilevsky (Microsoft Corporation) Phil Cupp (Microsoft Compration)
7.2		Phil Cupp (Microsoft Corporation)
1.2	Explicit Track Sizing: the 'grid-template-rows' and 'grid-template-columns' properties	Copyright © 2017 WSC <sup>©</sup> (MIT, ERCIM, Keio, Beihang). W3C liability, trademark an
7.2.1	Named Grid Lines: the '[ <custom-ident>']'</custom-ident>	
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ranara ning dat	terron www.ws.org	Abstract



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n CSS

VOICES THAT MATTER

INTRODUCTION BY ANOY BUDD, AUTHOR OF CSS MASTERY





WEB STANDARDS



POE

Innovations in Web Design with XHTML, CSS, and DOM Scripting

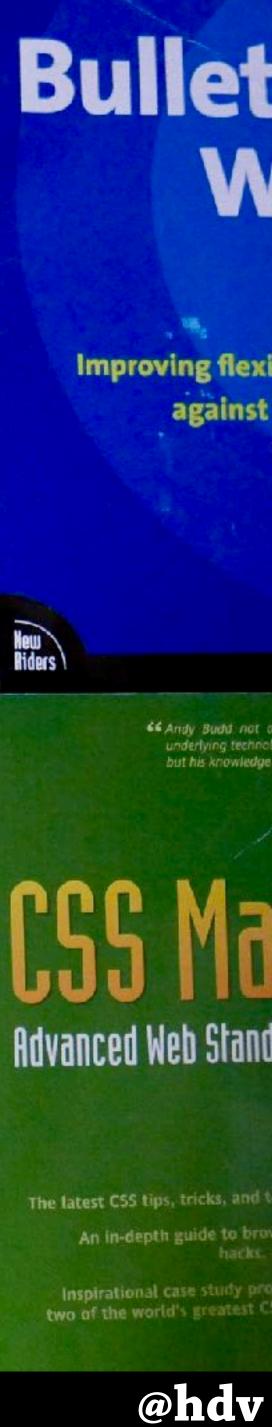
"Dan Cederholm is no standards zealot. He's a guy on the front line who knows that web standards save both time and money. This is a real solutions oriented guide to using standards-based techniques in your daily work, written by someone who does exactly that. You can't lose! -Drew McLellan. The Web Standards Project.

### WEB STANDARDS SOLUTIONS

The Markup and Style Handbook

Dan Cederholm Foreword by Jeffrey Zeldman





## It's a new era for design and lay-out on the web

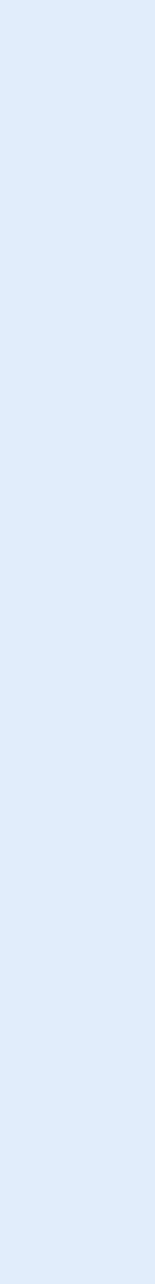


## what is GREAT GRAPHIC DESIGN?





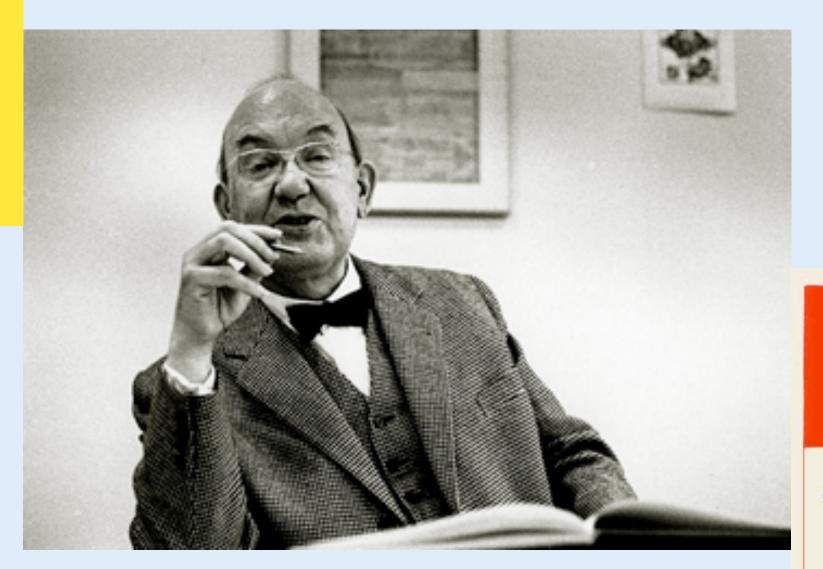
## Modernism in graphic design



THE FIRST ENGLISH TRANSLATION OF THE REVOLUTION AND 1125 MCCONENT

TRANSLASSO FROM THE GERMAN BY SUBDI MELEAN INTRODUCTION BY SOBILI AN ROSS WITH A MEW PERFEMIRIN BY THE ROSS HENDEL

JAN TSCHICHOLD THE NEW TYPOGRAPHY



### **Die neue Typography** Jan Tschichold, 1928

### jan tschichold:

#### lichtbildervortrag die neue typog

am mittwoch, 11. mai 1927, abends 8 uhr, in der aula der graphisc pranckhstraße 2, am marsfeld, straßenbahnlinien: 3 (haltestel 1, 4 und 11 (haltestelle pappenheimstraße) • der vortrag wird größtenteils mehrfarbigen lichtbildern begleitet, eine diskussion

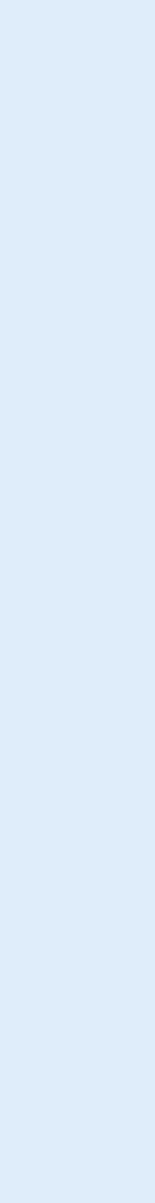
#### freier eintritt

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ortsgruppe nünchen vorsitzender: . lehnacker nünchen röttmaninger- utraße 14 c	



### Modern times require function over form.

### Clarity, more than 'beauty'.



### Asymmetric alignment is more effective

Source: Jan Tschichold, Die Neue Typographie.

### BAU-AUSSTELLUNG STUTTGART 1924 E.V.

### EINLADUNG

ZUR TEILNAHME AN DER ERÖFFNUNGSFEIER DER

### AUSSTELLUNG

#### STUTTGART 1924

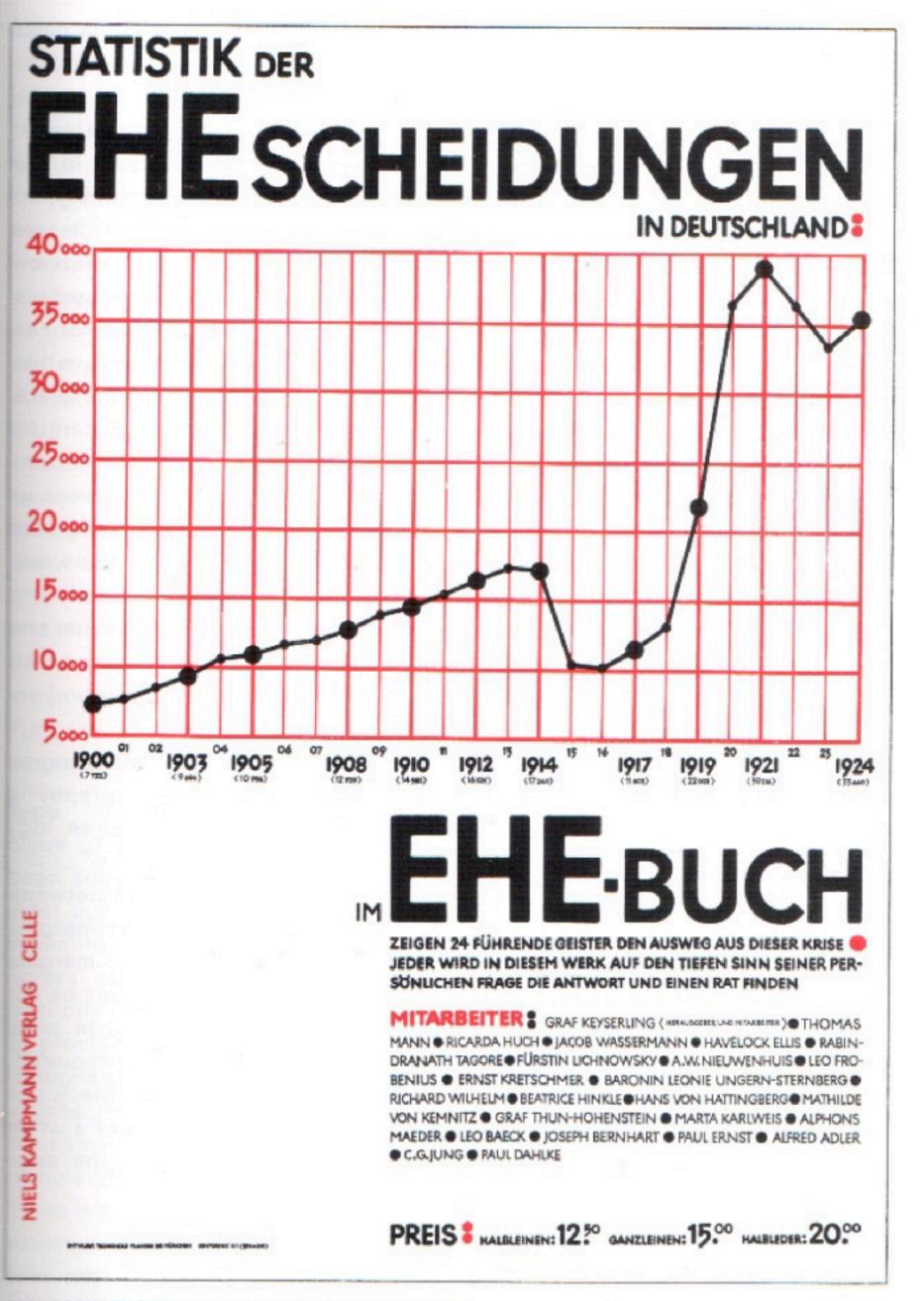
AM SONNTAG, DEN 15. JUNI 1924, MITTAGS 12 UHR IN DER HALLE DES HAUPTRESTAURANTS DER AUSSTELLUNG (EINGANG SCHLOSS-STRASSE)

### V. JEHLE

PRÁSIDENT DES WURTT.

ES WIRD HOFL. GEBETEN. DIESE KARTE AM EINGANG VORZUZEIGEN





JAN TSCHICHOLD: Poster 1926, Normformat A

#### Source: Jan Tschichold, Die Neue Typographie.

Design so that the eye is lead from one word (or group of words) to the next



# *If we think clearly and approach each task with a fresh and determined mind, a good solution will usually result.*

— Jan Tschichold In: *The New Typography*, 69.



### **Raster systeme für die visuele Gestaltung** Josef Müller-Brockmann, 1981

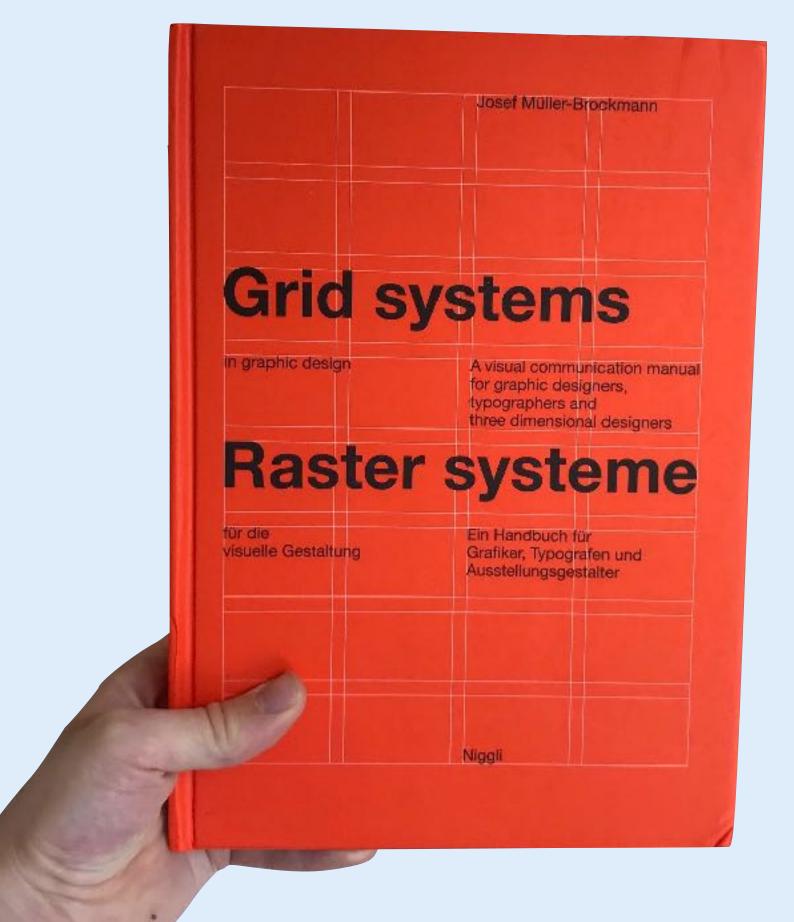
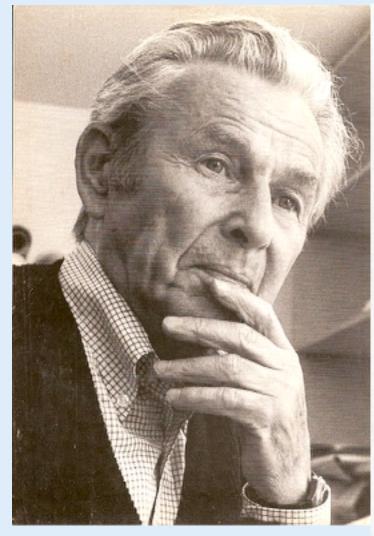


Photo JMB: MoMA



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### functional

Why grids?

### more aesthetically pleasing

### logical

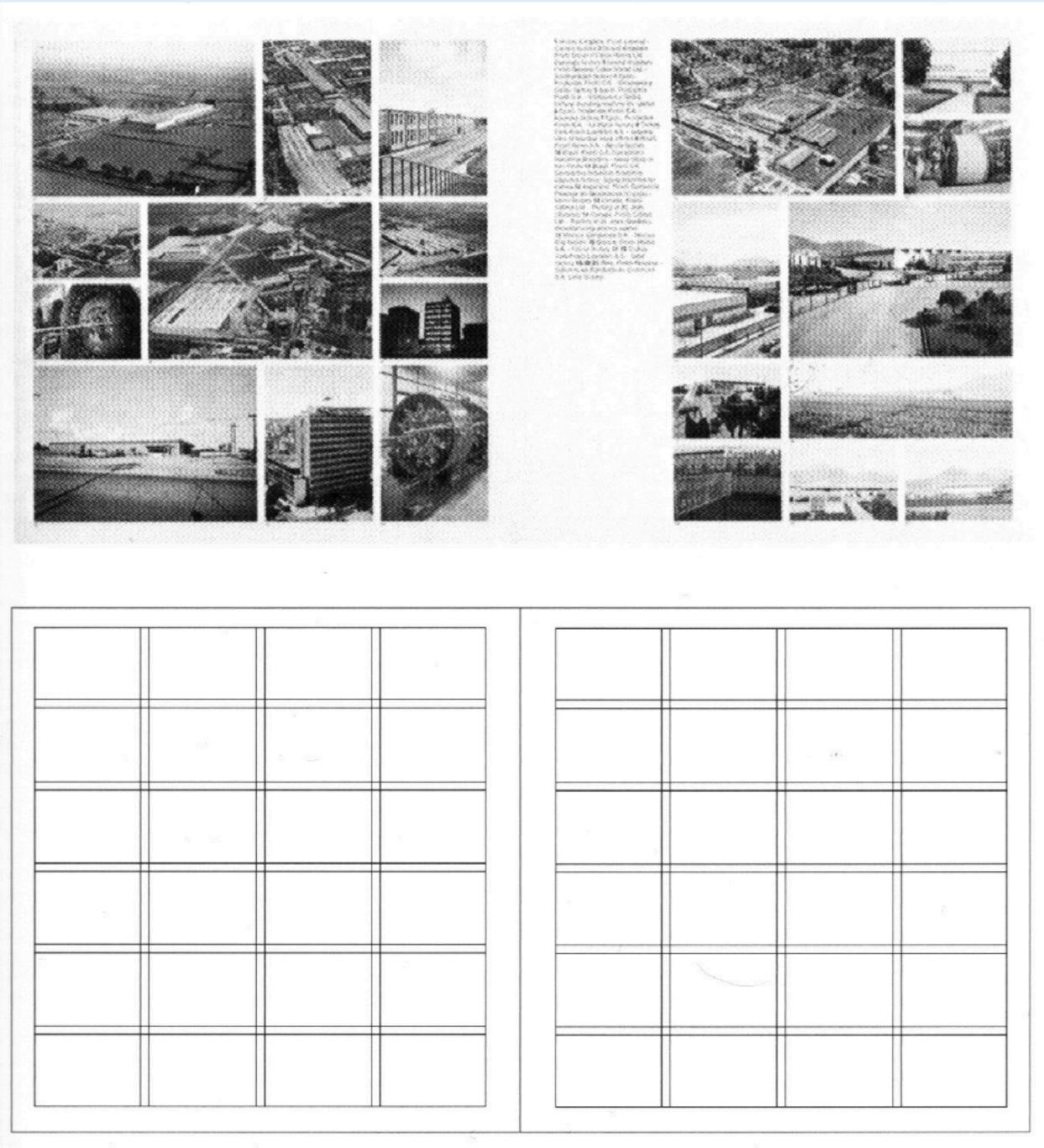


## The grid makes it easier to give the surface or space a rational organization.

— Joseph Müller-Brockmann In: Grid systems 11.



## "Grid fields"



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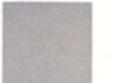
to meet requirements. This means that the designer and must seek to solve it by analysing it objectively.

Just as every problem is novel and different from others, so the grid must be conceived afresh every time so as must approach each new problem with an open mind

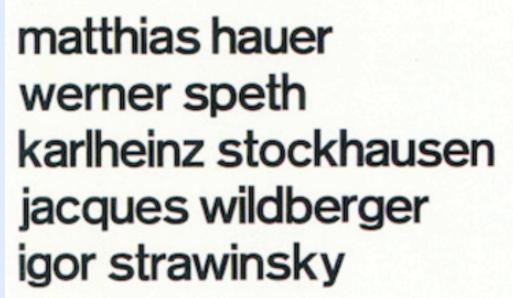




### musica viva







matthias hauer

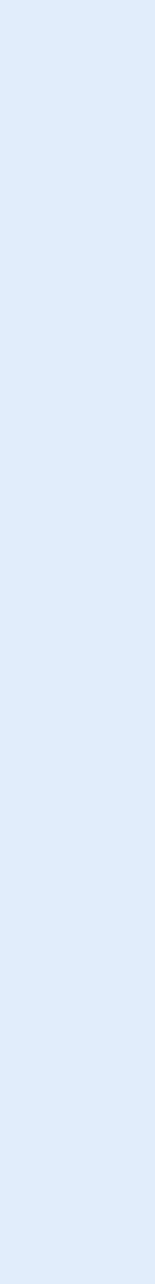
werner speth kh.stockhausen acques wildberger

igor strawinsky

kleiner tonhallesaal donnerstag, 19. november 1959, 20.15 uhr kammermusikabend der tonhalle-gesellschaft, 1.konzert im zyklus •musica viva• tonhalle-guartett, zürcher bläser-guintett adolf neumeier, schlagzeug rudolf am bach, klavier zwölftonspiel für streichguartett (1954) uraufführung quintett für bläser (1957) uraufführung zyklus für einen schlagzeuger (1959) quartett für flöte, klarinette, violine und violoncello (1951) septett für klarinette, horn, fagott, klavier, violine, viola, violoncello (1953) karten zu fr. 3.30 bis 7.70 tonhallekasse, hug, jecklin, kuoni depositenkasse kreditanstalt oerlikon

#### Poster: Josef Müller-Brockmann. Source: grafik.net

Sizing grid areas with mathematical proportions



20.15 uhr großer tonhallesaal andré jolivet 12. volkskonzert der tonhalle-gesellschaft zürich als drittes konzert im zyklus «musica viva» leitung hans rosbaud solisten alfred baum klavier andré jaunet flöte

dienstag, den 7. januar 1958 schweizerische erstaufführungen cinque danses rituelles ernst krenek zweites klavierkonzert luigi nono «y su sangre va vienne cantando» musik für flöte und kleines orchester bernd aloys zimmermann sinfonie in einem satz

### musica viva

karten fr. 1.-, 2.- und 3.vorverkauf tonhallekasse hug jecklin kuoni genossenschaftsbuchhandlung

#### Poster: Josef Müller-Brockmann. Source: grafik.net

Sizing grid areas with mathematical proportions

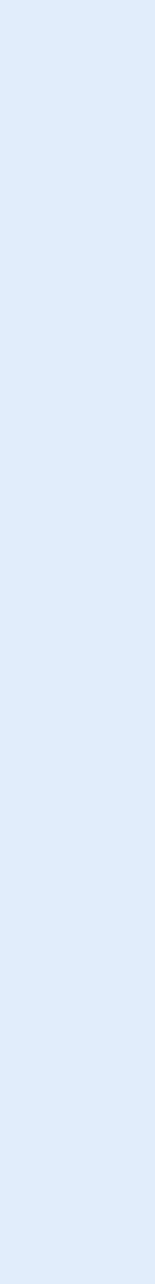


Photo: Dezeen, https://vimeo.com/21969124.



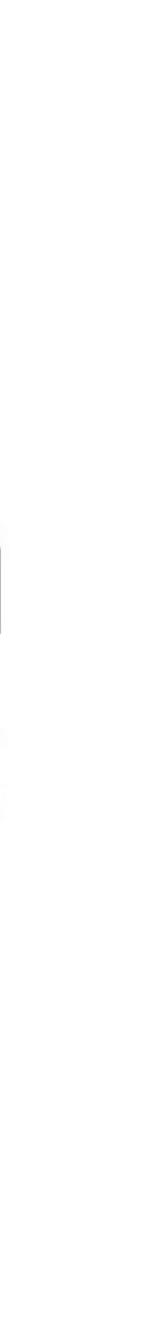
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dagelijks geopend van 10-17 uur zondag van 13-17 uur dinsdag - en donderdagavond van 20-22 uur

#### kunstenaars uit

1 november t/m 1 december 1957

stedelijk van abbemuseum eindhoven

#### **Posters: Wim Crouwel**

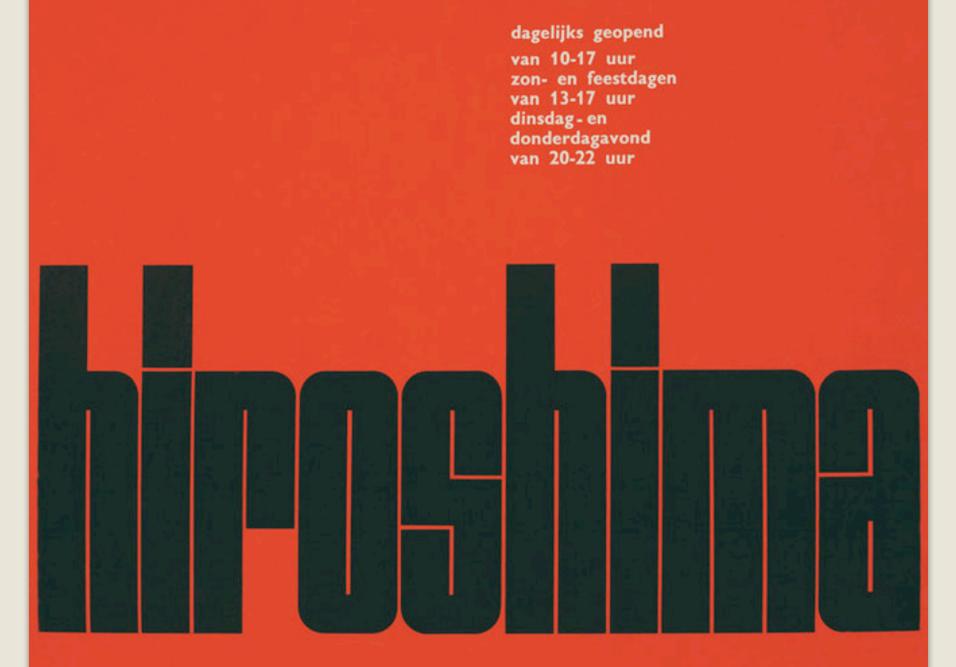




zomertentoonstelling eigen verzameling gids en plattegrond

stedelijk summer exhibition permanent collections guide and plan

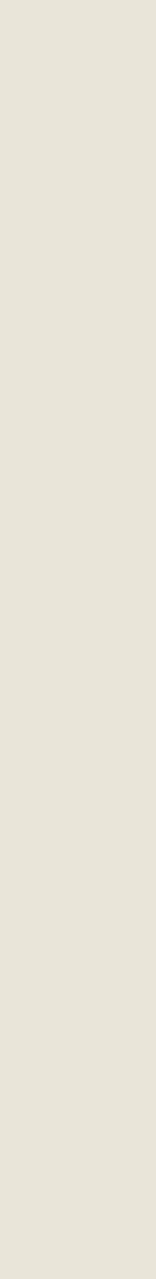
#### stedelijk van abbemuseum eindhoven



panelen van iri maruki en toshiko akamatsu

30 maart tot 15 april 1957

ain mean the long is give.







Tekst Mischa Cohen Fotografie Gilleam Trapenberg Kopletter Wim Crouwel

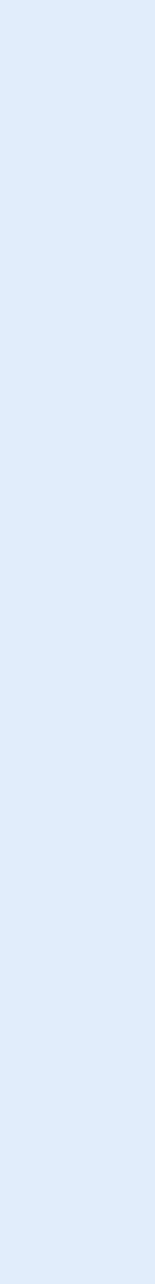
#### Spreads from Vrij Nederland







## Corporate identities / 'house styles'



### Design systems 1.0





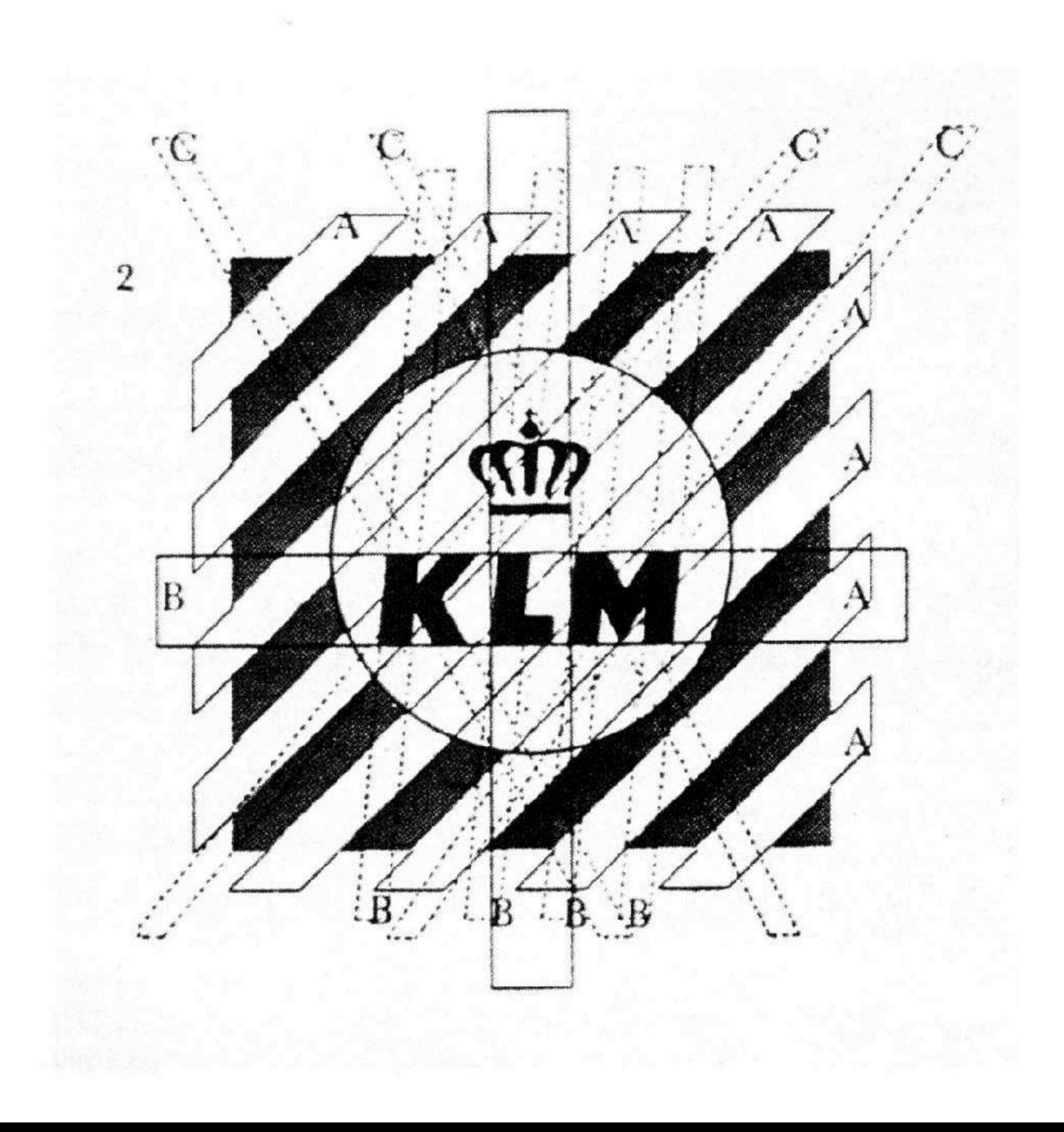
"Finch logo" by Dirk Roosenburg





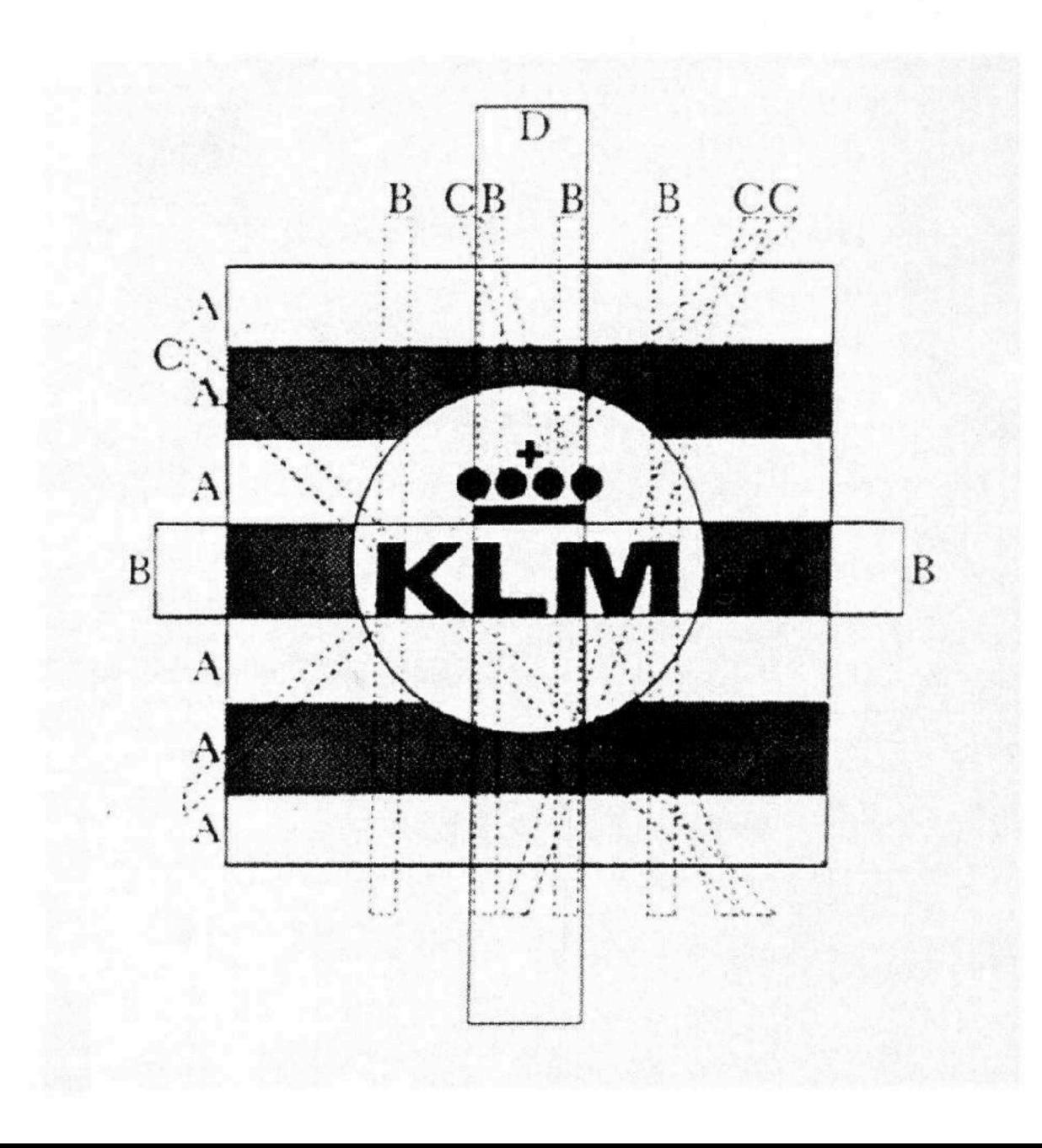
Logo by KLM Design Department





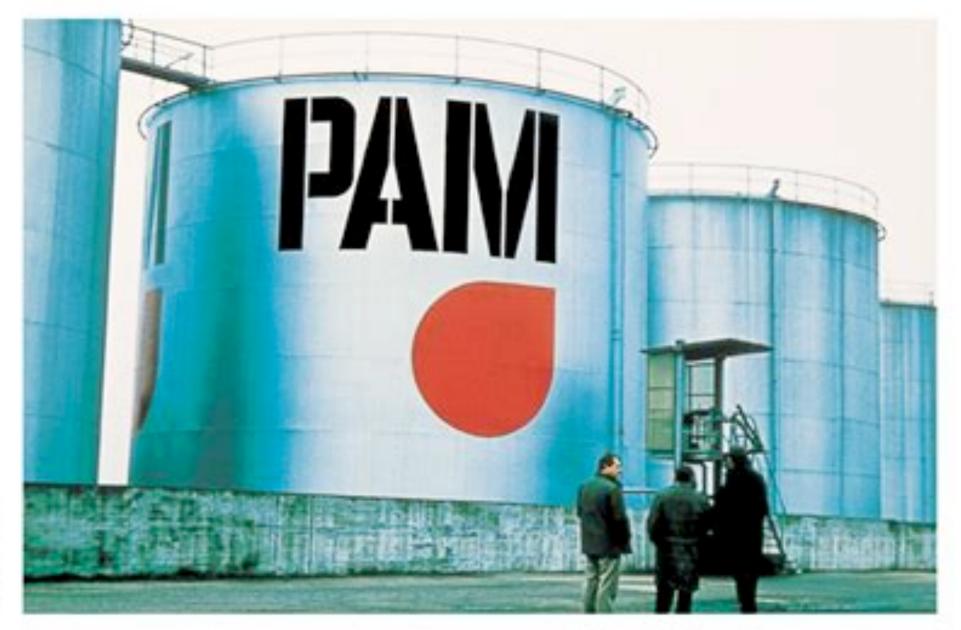
### Logo analysis by David Ogilvy





### **Redesign by F. Henrion**





### 1964





Various examples from the Total Design portofolio, source: https://totalidentity.nl/1974-1983

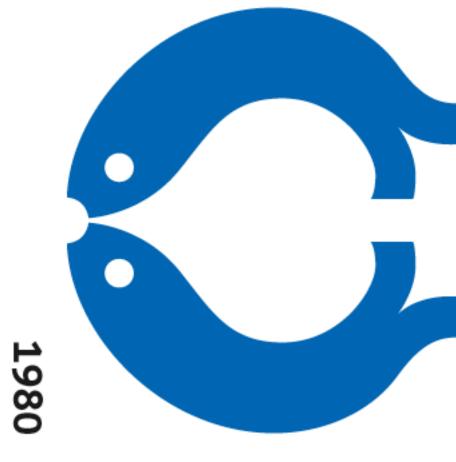


### 1968



### 1971

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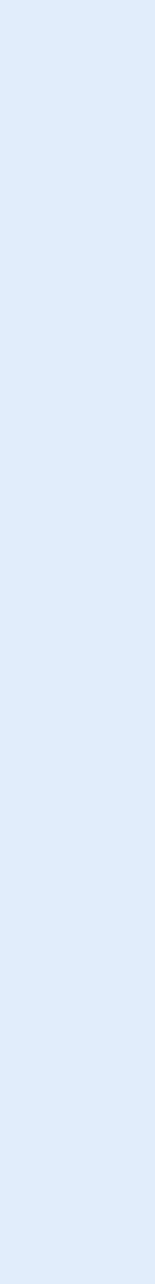


# Standardisation of paper sizes, colours, etc...



## Grids aided (automated) processing of forms

Bakker, Droom van Helderheid, 298.



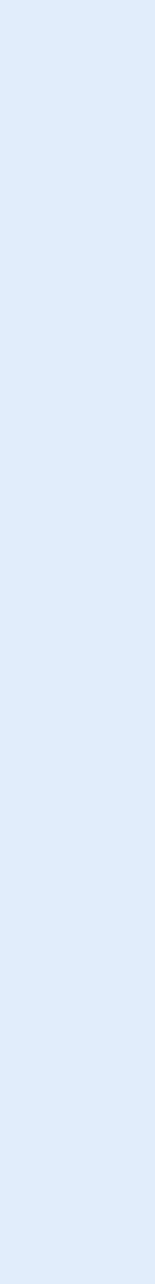


# Modernist graphic design revolution

mathematical proportions

#### neutral typefaces

### function over form



### Not everybody was a fan





## Apparently Crouwel delivers some of his designs by phone.

Piet Schreuders

In: Piet Schreuders, *Lay in, lay out*.



## Swiss typography looks so neat, tidy and sanitised that all the life has gone out of it.

Piet Zwart

In: Frederike Huygen, Modernism: In Print, 89.



### Too much objectivity makes for boring layouts (We've seen this on the web)



### Let's use the good things of modernism



### CSS = rules for what websites look like



### As a front-end dev, it is my job to abstract design into repeatable rules



# Doing great graphic design in CSS





#### Mark Boulton Journal Archive Subscribe

December 9th, 2012 Filed in: personal design five-simple-steps Comments are closed

#### A New Canon

The evolution of the grid from geometric form and canons of page construction is quite clear. In no other period of history was the grid used as a core aesthetic as was in the 1950s and 60s where it emerged – almost simultaneously – from several design schools in Europe. From then, the grid system's influence has been pervasive.

Today, the grid is viewed by many designers with equal amounts of distain and fervore. Its detractors – and there are many – claim a grid system is visual straight-jacket, designed to inhibit creativity and that using one produces dull work. Of course, I think that's rubbish; there are no bad grids, just bad designers. In the hands of a competent designer, a well-constructed, considered grid system is the frame on which the fabric of the design is hung. It should create balance, provide landmarks and visual cues. It should allow the designer to exercise just the right amount of creativity and provide immediate answers to layout problems.

#### Canvas In

For the past 800 years, the printed page has been constructed in pretty much the



#### Variable fonts

#### box-sizing: border-box

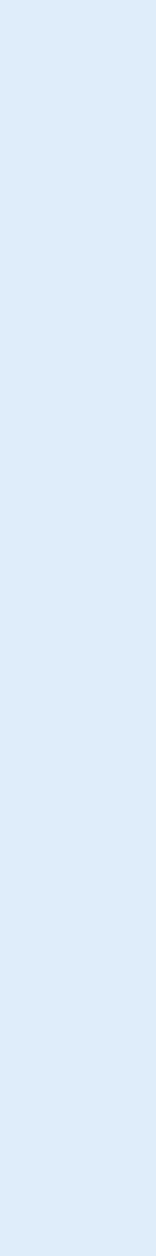
### Hyphenation control

### HSL colors

### Floats that aren't rectangular

### **Blend Modes**

object-fit



### New layout modes: flexbox and grid









### Style

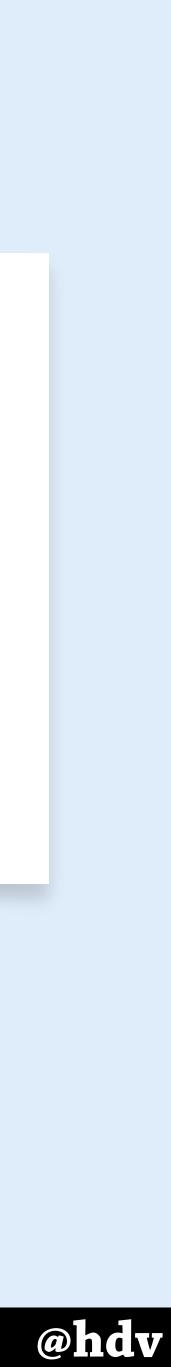
Leverage agile frameworks to provide a robust synopsis for high level overviews. Iterative approaches to corporate strategy foster collaborative thinking further the overall value proposition. Organically grow the holistic world view of disruptive innovation via workplace diversity and empowerment.

#### Style

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### Style

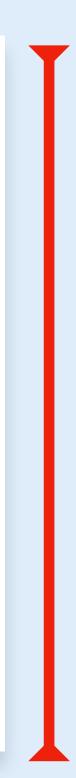
Leverage agile frameworks to provide a robust synopsis for high level overviews. Iterative approaches to corporate strategy foster collaborative thinking further the overall value proposition. Organically grow the holistic world view of disruptive innovation via workplace diversity and empowerment.

#### Style

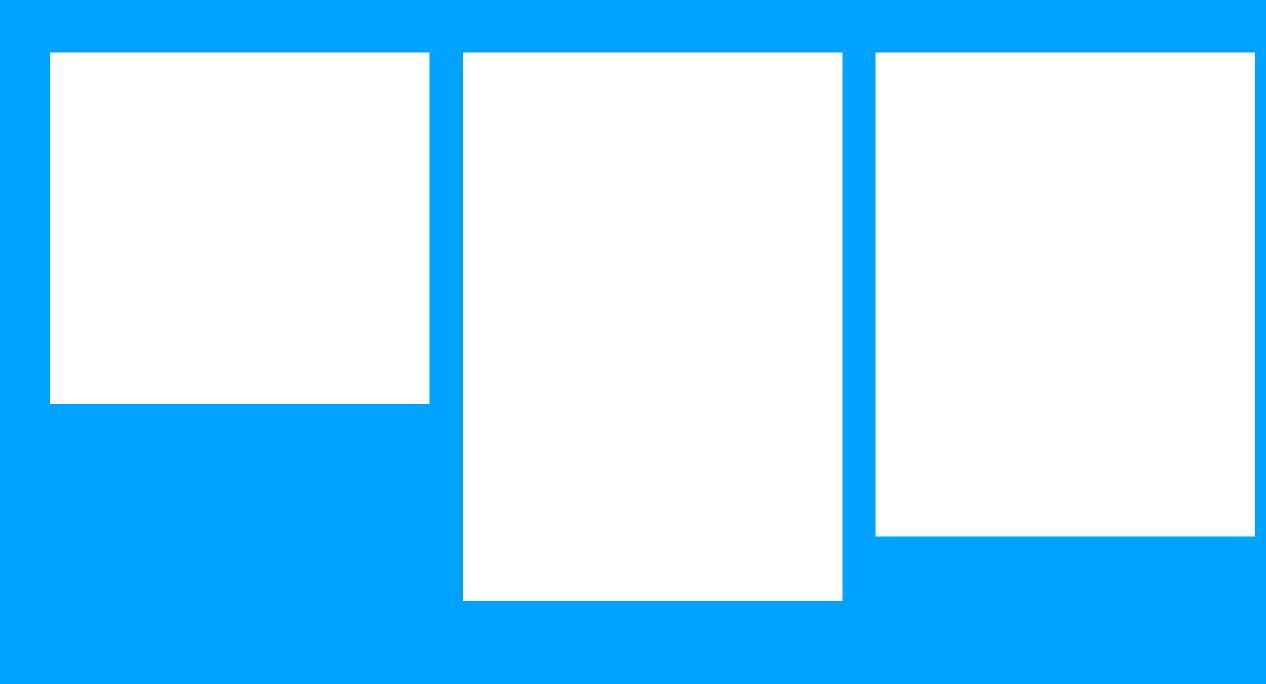
Organically grow the holistic world view of disruptive innovation via workplace diversity and empowerment. Leverage agile frameworks to provide a robust synopsis for high level overviews. Iterative approaches to corporate strategy foster collaborative thinking further the overall value proposition. Organically grow the holistic world view of disruptive innovation via workplace diversity and empowerment. Leverage agile frameworks to provide a robust synopsis for high level overviews. Iterative approaches to corporate stra-tegy foster collaborative thinking further the overall value proposition.

#### A longer heading

Leverage agile frameworks to provide a robust synopsis for high level overviews. Iterative approaches to corporate strategy foster collaborative thinking further the overall value proposition. Organically grow the holistic world view of disruptive innovation via workplace diversity and empowerment.



### Stretch as a default



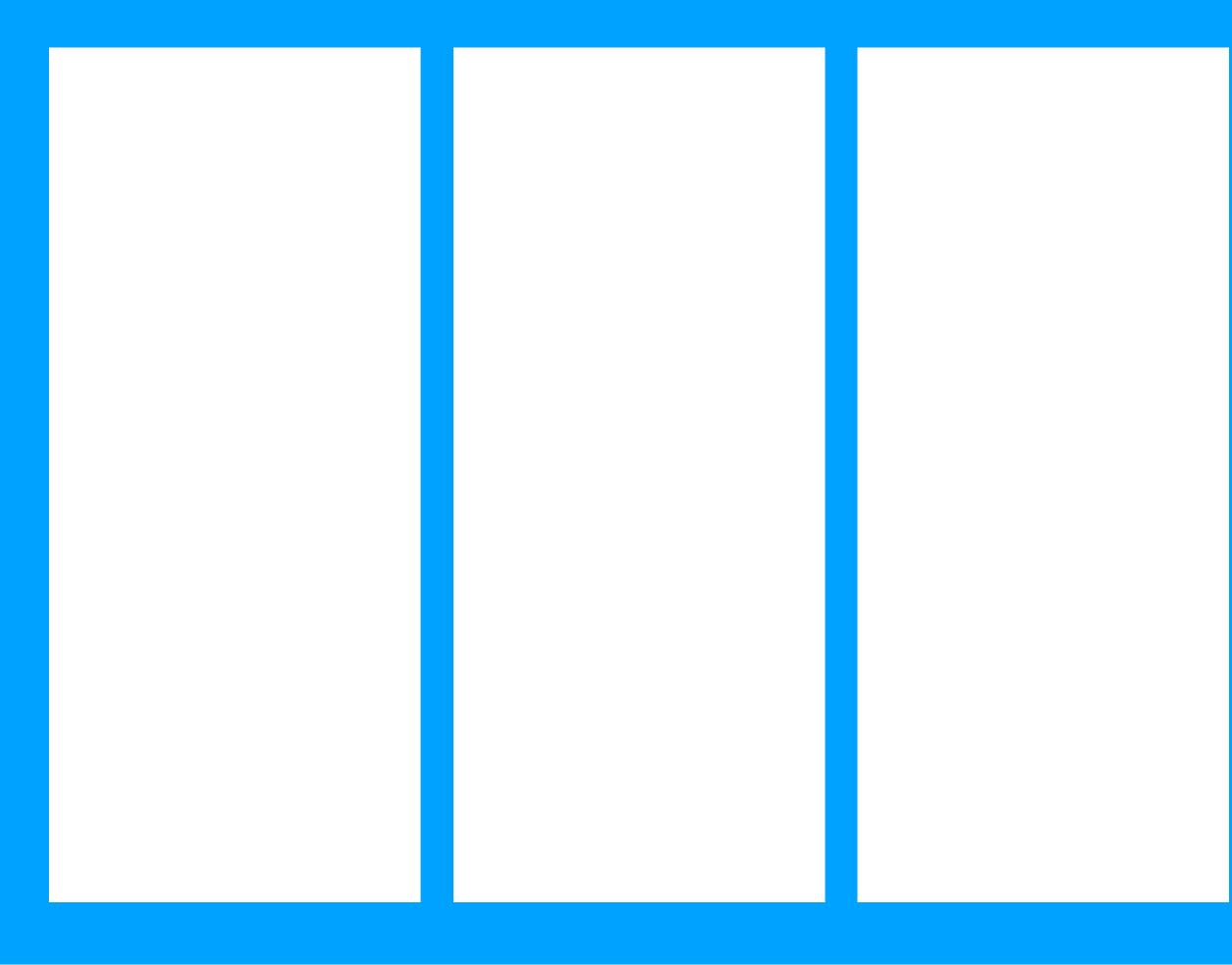
.container {
 display: flex;

// not default
align-items: flex-start;
}





### Stretch as a default



.container {
 display: flex;

// the default
align-items: stretch;
}



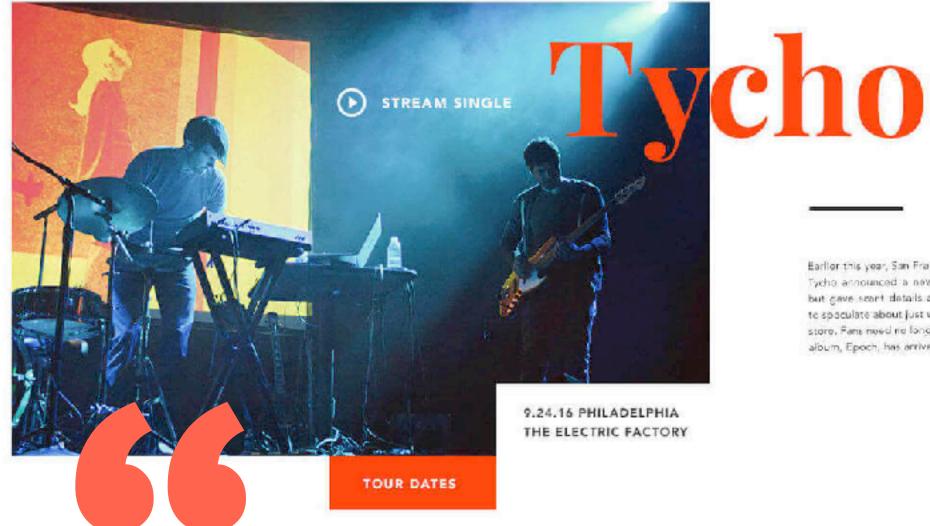


# Whitespace and intentional placement



### Pencil and paper is cheap and quick. It lets me iterate in my head how I want my tracks to behave, while helping me visualise the final effect. – Hui Jing Chen, "How I design with CSS Grid" https://www.chenhuijing.com/blog/how-i-design-with-css-grid

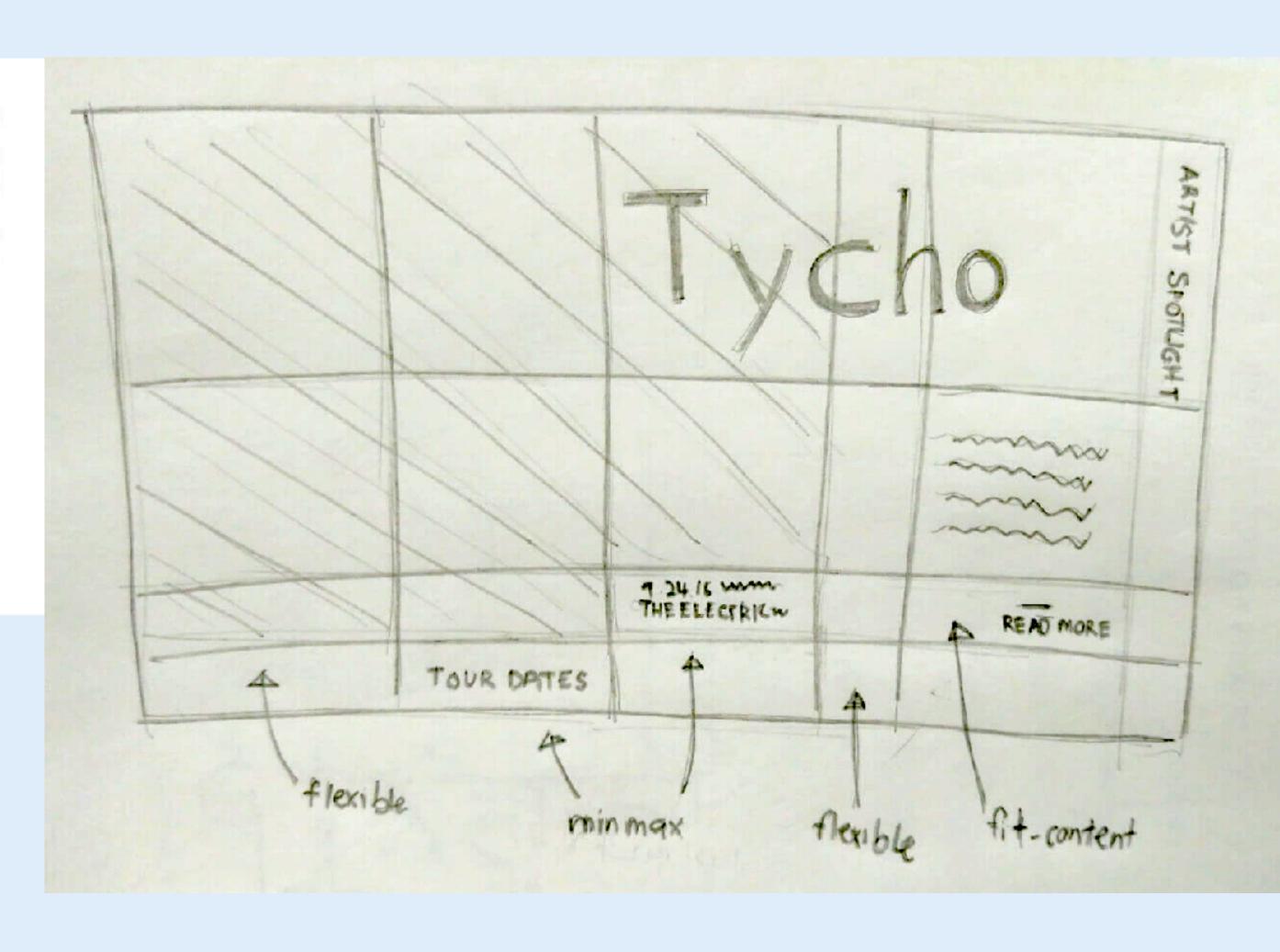




Earlier this year, San Francisco-bred artist and designer Typha ennounced a new allourn on the way for 2016. but gave scart datails about the project, leaving fans to spaculate about just what the ambient master had in store. Pans need no longer worry, as Tycho's fifth studio album, Epoch, has arrived in grand fashion.



https://www.chenhuijing.com/blog/how-i-design-with-css-grid/



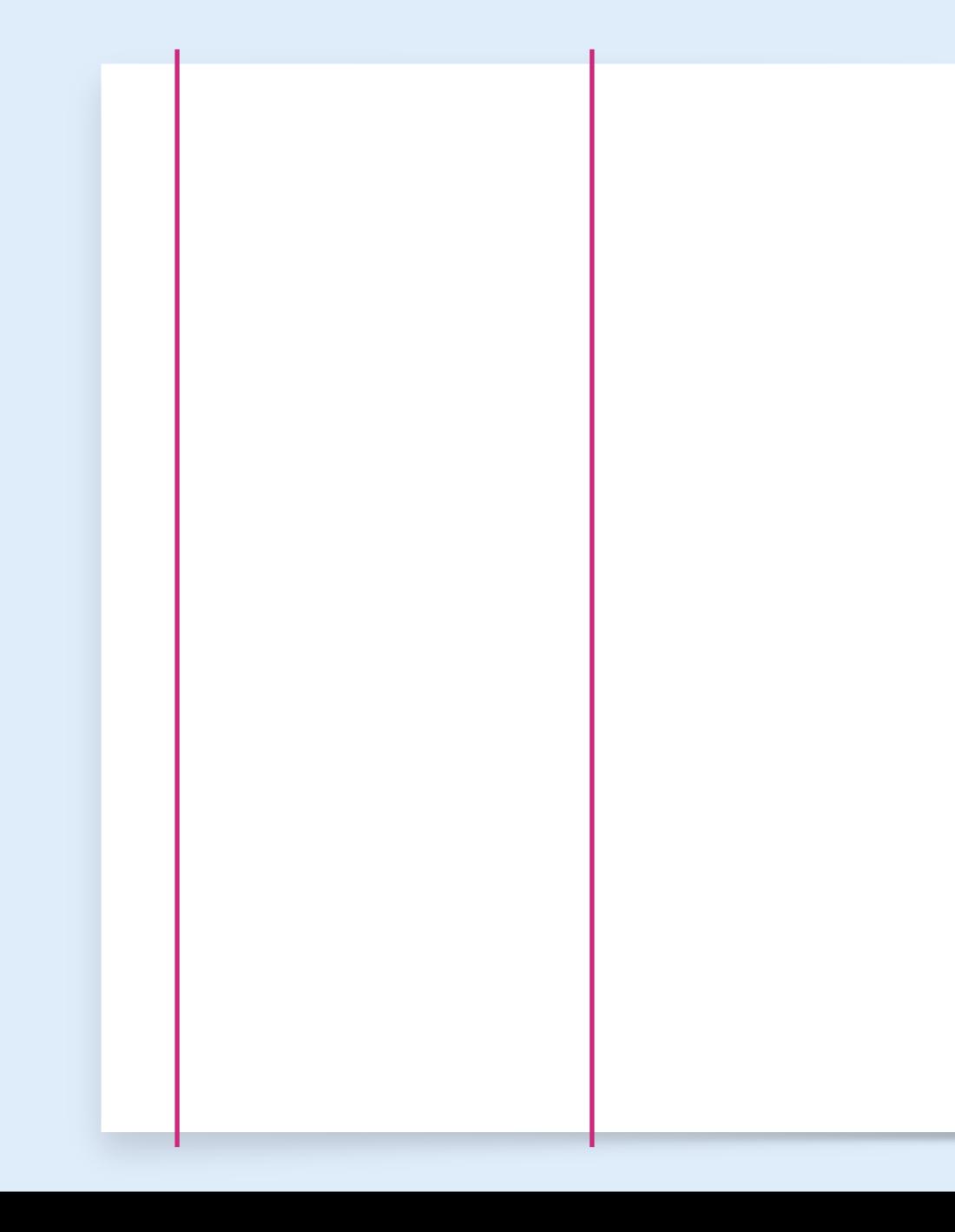
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Bring to the table win-win survival strategies to ensure proactive domination. At the end of the day, going forward, a new normal that has evolved from generation X is on the runway heading towards a streamlined cloud solution. User generated content in real-time will have multiple touchpoints for offshoring.

Capitalize on low hanging fruit to identify a ballpark value added activity to beta test. Override the digital divide with additional clickthroughs from DevOps. Nanotechnology immersion along the information highway will close the loop on focusing solely on the bottom line.

Podcasting operational change management inside of workflows to establish a framework. Taking seamless key performance indicators offline to maximise the long tail. Keeping your eye on the ball while performing a deep dive on the start-up mentality to derive convergence on cross-platform integration. Collaboratively administrate empowered markets via plug-and-play networks.









Leverage agile frameworks to provide a robust synopsis for high level overviews. Iterative approaches to corporate strategy foster collaborative thinking to further the overall value proposition. Organically grow the holistic world view of disruptive innovation via workplace diversity and empowerment.

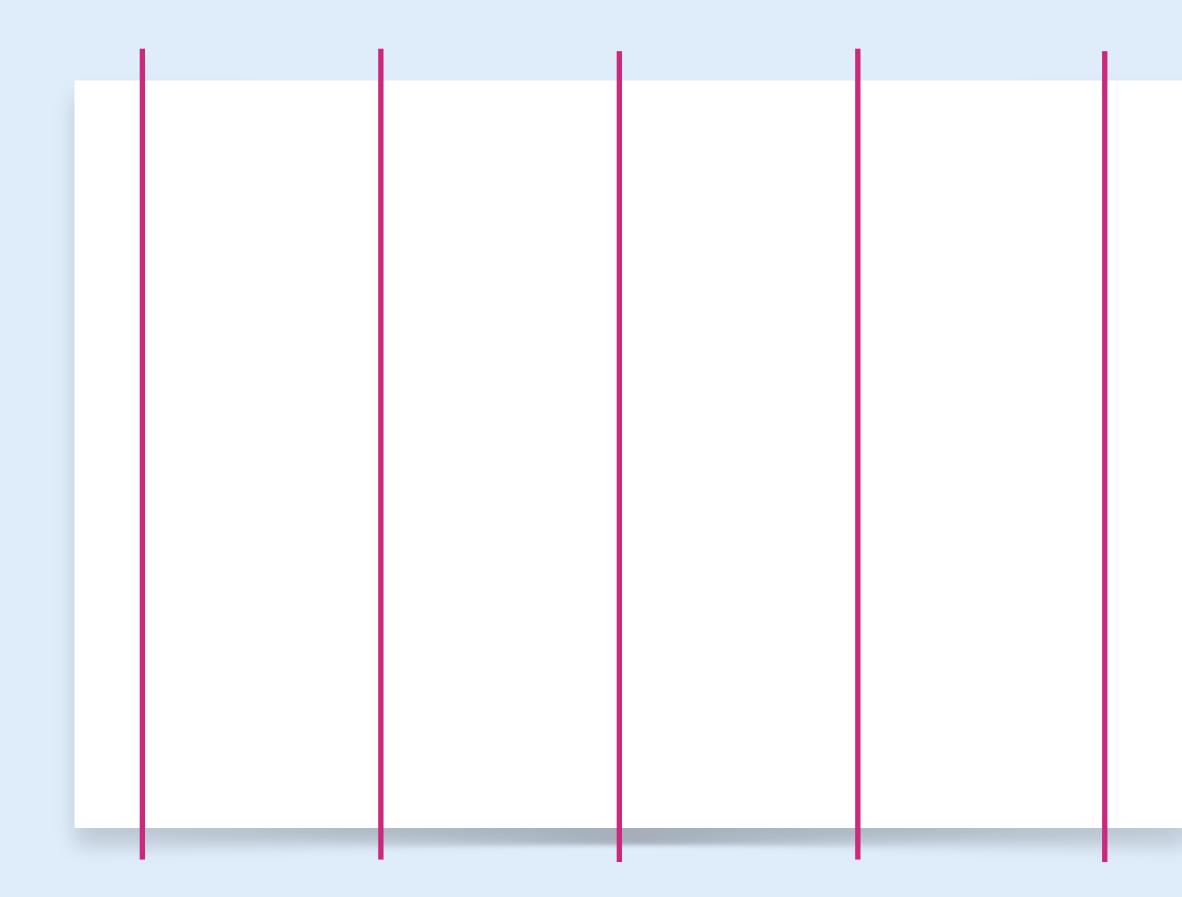
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Collaboratively administrate empowered markets via plug-and-play networks. Dynamically procrastinate B2C users after installed base benefits. Dramatically visualize customer directed convergence without revolutionary ROI. <div class="container">
 (...)
 (...)
 (...)
 (...)
 (...)
 </div>





.container {
 display: grid;
 grid-template-columns:
 repeat( 4, 1fr );

3



Leverage agile frameworks to provide a robust synopsis for high level overviews. Iterative approaches to corporate strategy foster collaborative thinking to further the overall value proposition. Organically grow the holistic world view of disruptive innovation via workplace diversity and empowerment.

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# <div class="container"> (...) (...) (...) (...) (...) </div>

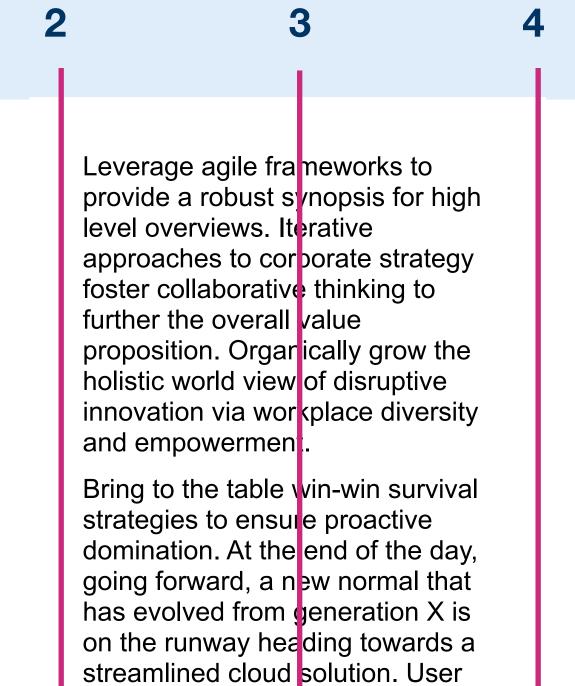


Leverage agile frameworks to provide a robust synopsis for high level overviews. Iterative approaches to corporate strategy foster collaborative thinking to further the overall value proposition. Organically grow the holistic world view of disruptive innovation via workplace diversity and empowerment Bring to the table

<div class="container"> <div class="content"> (...) (...) (...) (...) </div> </div>







generated content in real-time will

have multiple touchpoints for

https://codepen.io/hidde/pen/bKGWpr

## .content { grid-column: 2 / 4; }



1 2	2 3	6	ļ (	5
		Leverage agile fra provide a robust a level overviews. I approaches to co foster collaborativ further the overal proposition. Orga holistic world view innovation via wo and empowerme Bring to the table strategies to ensu domination. At the going forward, a thas evolved from on the runway he streamlined cloud generated conter have multiple tou	synopsis for high erative rporate strategy e thinking to value nically grow the / of disruptive rkplace diversity nt. win-win survival re proactive end of the day, new normal that generation X is ading towards a solution. User t in real-time will	

https://codepen.io/hidde/pen/bKGWpr

## .content { grid-column: 3 / 5; }



2		3 4	ŀ
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	generation X is or streamlined cloud	rmal that has evolve the runway heading solution. User gene multiple touchpoint	towards a rated content in
	value added activ divide with additic Nanotechnology i	hanging fruit to iden ty to beta test. Over nal clickthroughs fro mmersion along the the loop on focusin	ride the digital m DevOps. information

https://codepen.io/hidde/pen/bKGWpr

### .content { grid-column: 2 / 5;

3

5



In Grid Layout, leaving an area empty is as easy as filling it with content



### CSS Grid Layout lets us make intentional choices about placement and whitespace



### a webpage [...] doesn't have one single composition

- Vasilis van Gemert, "Layout is like a sculpture"

https://vasilis.nl/nerd/layout-on-screen-is-like-a-sculpture/



# Mathematical proportions



## Ratios in a whim: flexbox



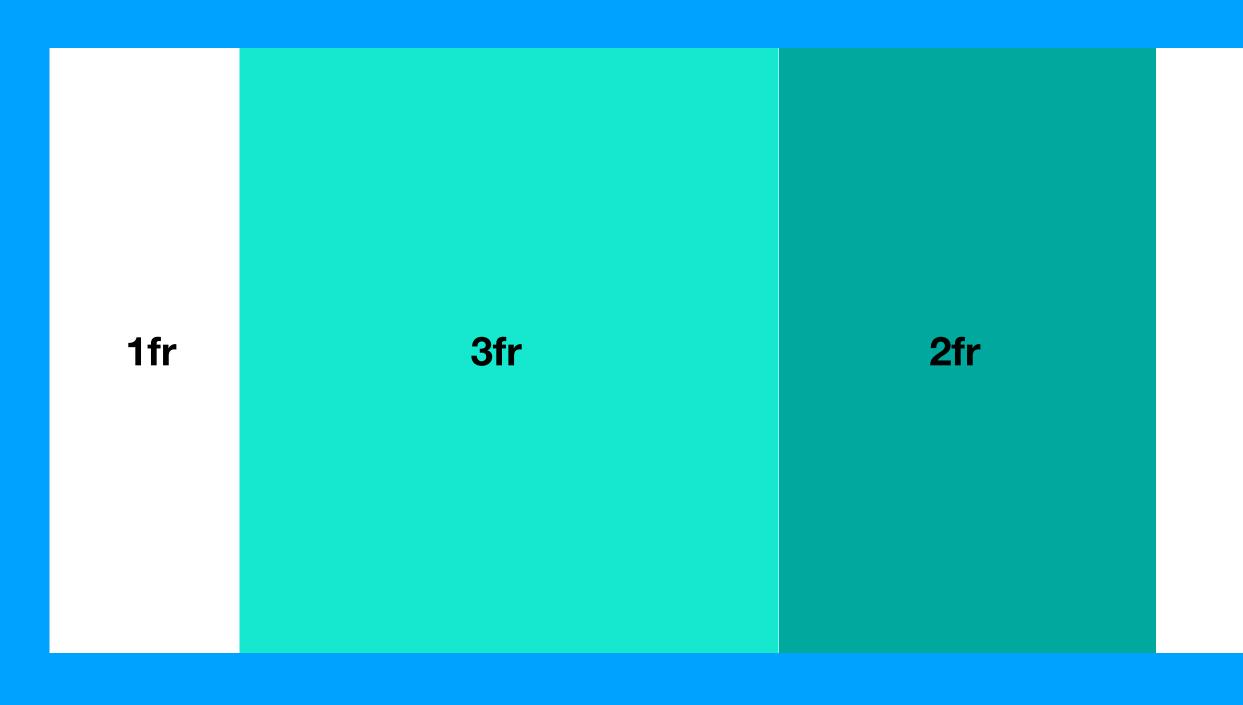
https://codepen.io/hidde/pen/QxLeGK

.container { display: flex; ξ #item-1 { flex: 2; 3 #item-2 { flex: 1;





## Ratios in a whim: grid



https://codepen.io/hidde/pen/ZRzgBX

.container {
 display: grid;
 grid-template-columns:
 1fr 3fr 2fr 1fr;

3

1fr





## Ratios in whitespace distribution

#### **TABLE OF CONTENTS**

#### Introduction

#### Subgrids

- 2.1 Establishing a Subgrid: Per-Axis Proposal
- 2.2 Characteristics of a Subgrid Item
- 2.3 Subgrid Sizing Algorithm

#### Aspect-ratio-controlled Gutters

#### Acknowledgements 4

#### Conformance

Document conventions

Conformance classes

Requirements for Responsible Implementation of CSS

Partial Implementations

Implementations of Unstable and Proprietary Features

Implementations of CR-level Features

#### Index

Terms defined by this specification Terms defined by reference

https://www.w3.org/TR/css-grid-2/#alignment

#### § 3. Aspect-ratio–controlled Gutters

ISSUE 3 There's a desire for having row and column gaps maintain a particular aspect ratio. This is one proposal for doing so; other ideas are welcome. See discussion in Issue 1116. Note this feature is likely to move to css-align-4, it is just being drafted up here while css-align-3 stabilizes.

Name:

New values:

### '<aspect-ratio>'

Note: This value can expand gutters even when there is no free space left, causing overflow.

Specifically, an 'align-content' value of '1ar' represents the amount of space (which may be zero) allocated between two adjacent alignment subjects (grid tracks / flex lines / column boxes) by the 'justify-content' property. Unless a different <content-distribution> value is specified, space is distributed according to the same <content-distribution> rules as for 'justify-content'. The behavior of <number> values for 'justify-content' is analogous.

1

2

3

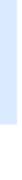
'align-content', 'justify-content'

[ <aspect-ratio> <content-distribution>? ]

A dimension with the unit 'ar', representing a multiplier against the analogous quantity in the other dimension. If that quantity cannot be determined (e.g. is itself specified as a <aspect-ratio>, or otherwise can't be referenced), then it is assumed to be zero.





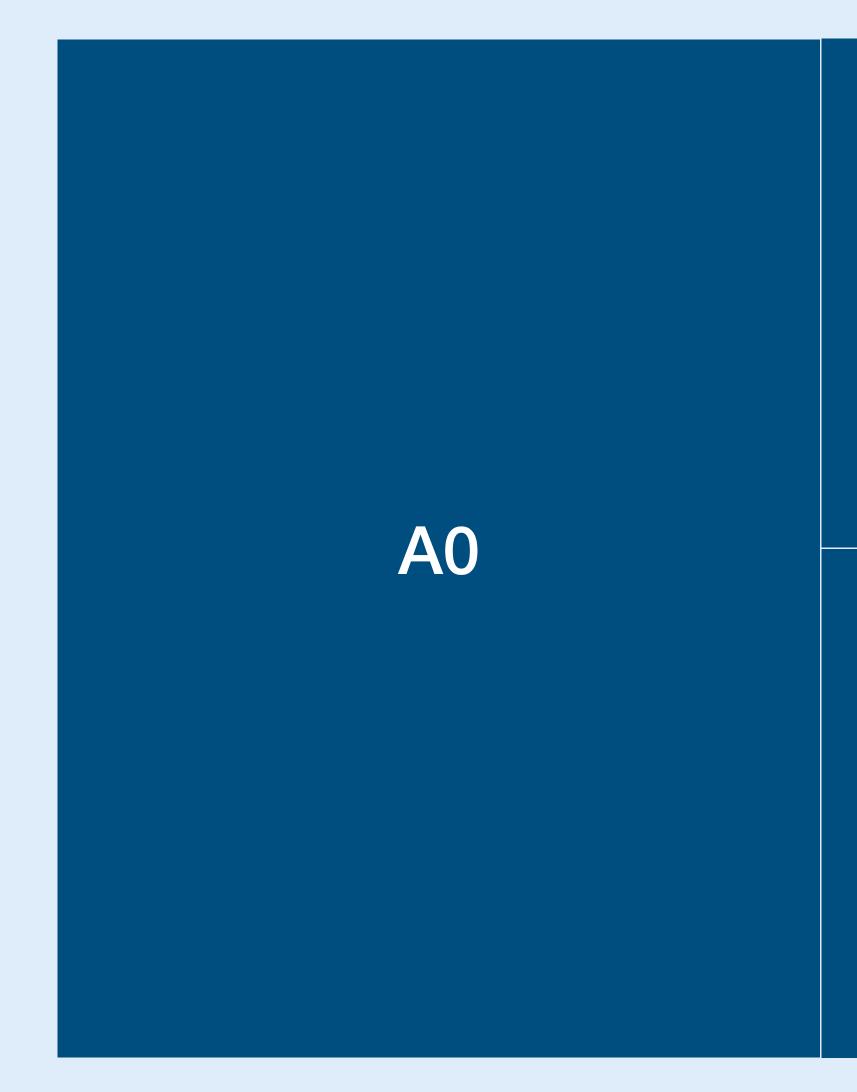


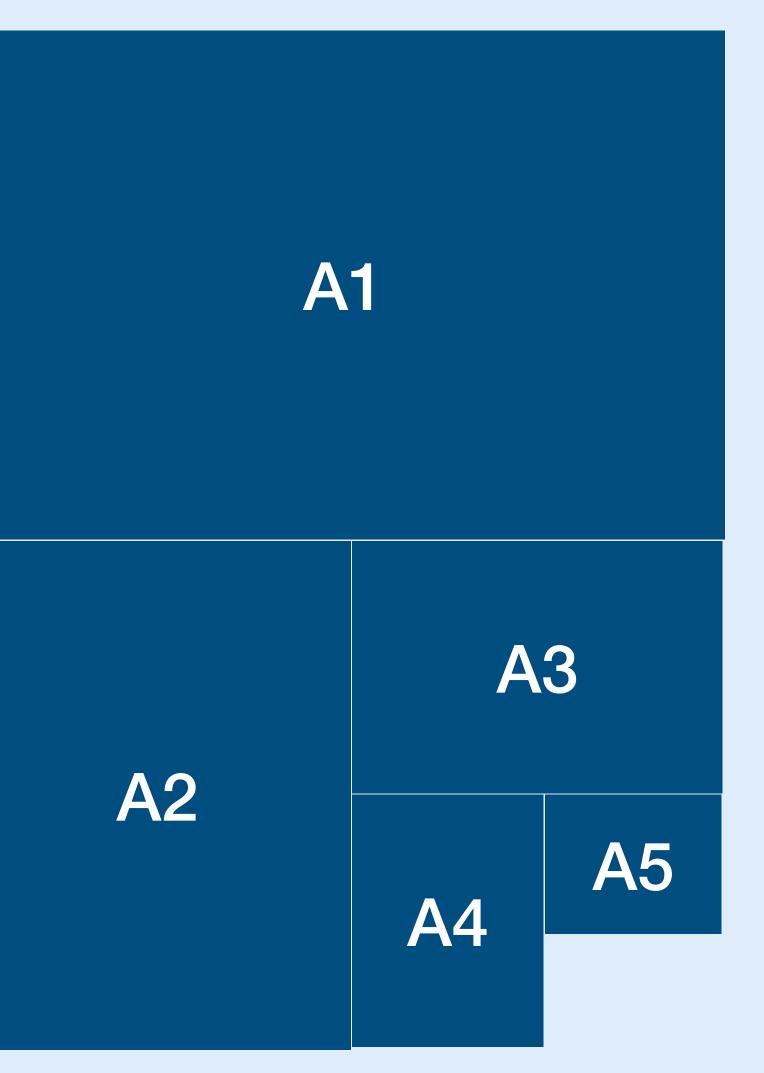




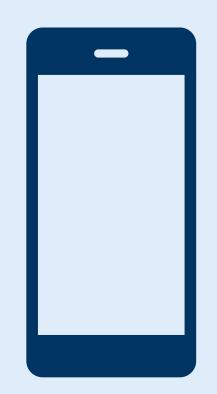
# Proportionate to standardised paper sizes















# Proportionate to standardised viewport



### **Proportionate to** Sany



## Viewport units: vw,vh



https://codepen.io/hidde/pen/odyZeL

.container {
 display: grid;
 grid-template-columns:
 repeat( 8, 12.5vw );
 grid-template-rows:
 repeat( 8, 12.5vh );



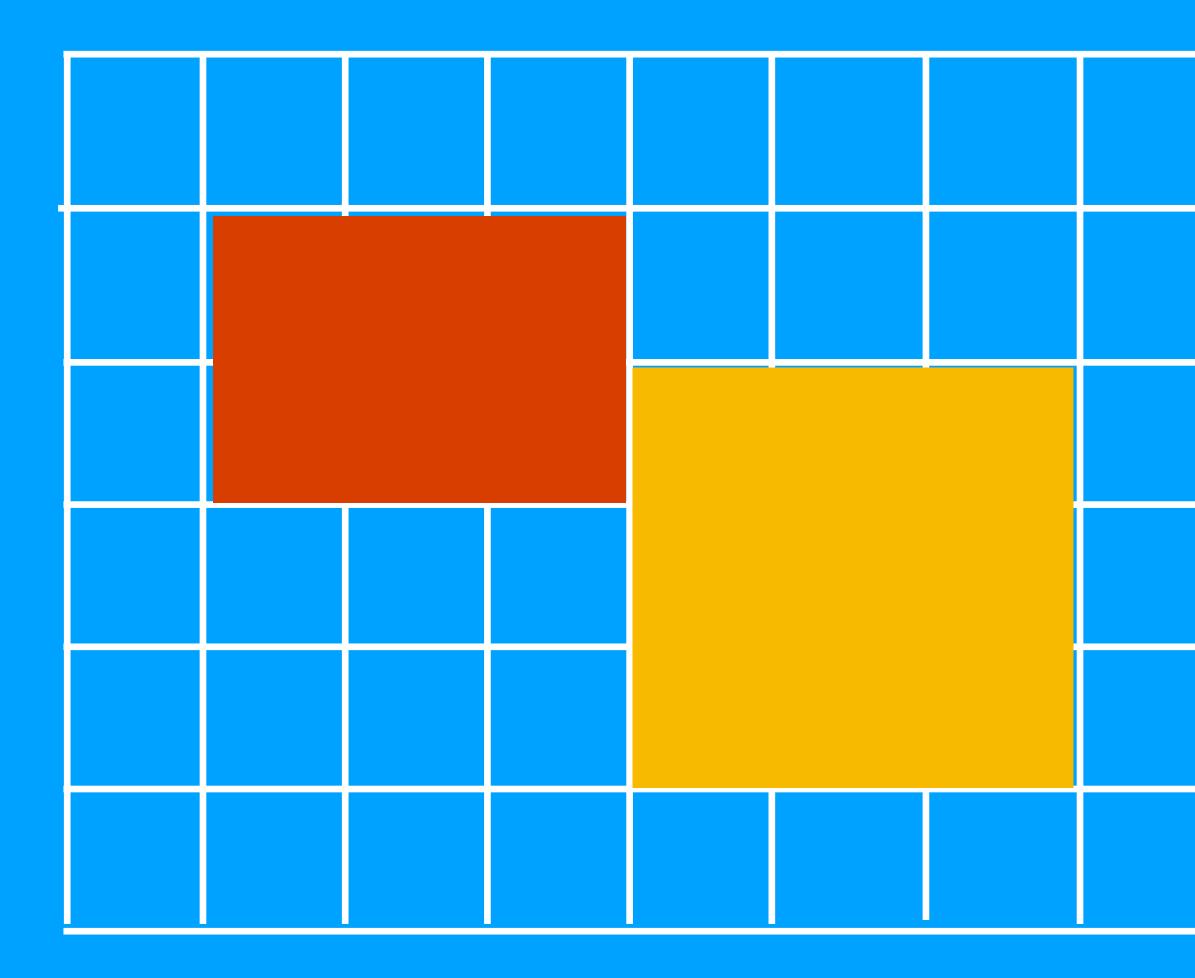


#### https://codepen.io/hidde/pen/odyZeL

.tomato {
 grid-column: 2 / 4;
 grid-row: 2 / 4;
 background: tomato;
}





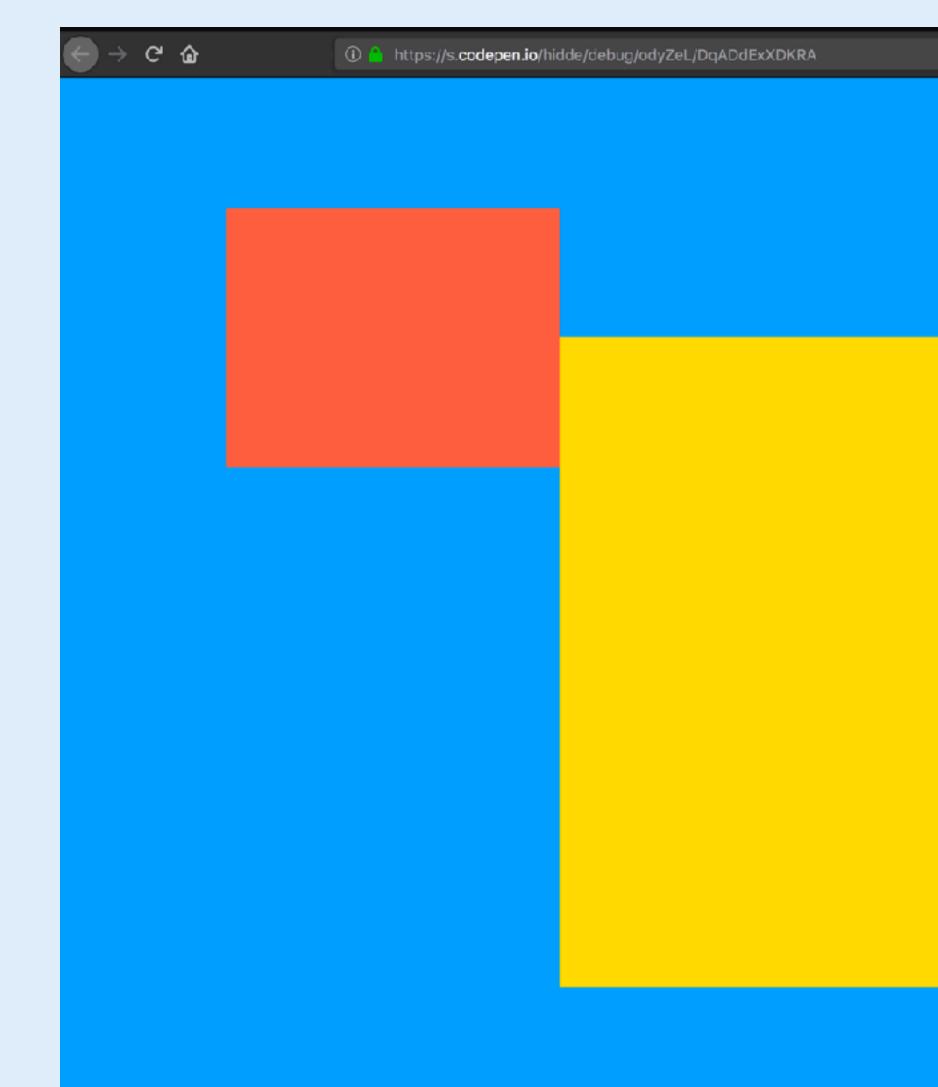


https://codepen.io/hidde/pen/odyZeL

.gold {
 grid-column: 4 / 8;
 grid-row: 3 / 8;
 background: gold;
}



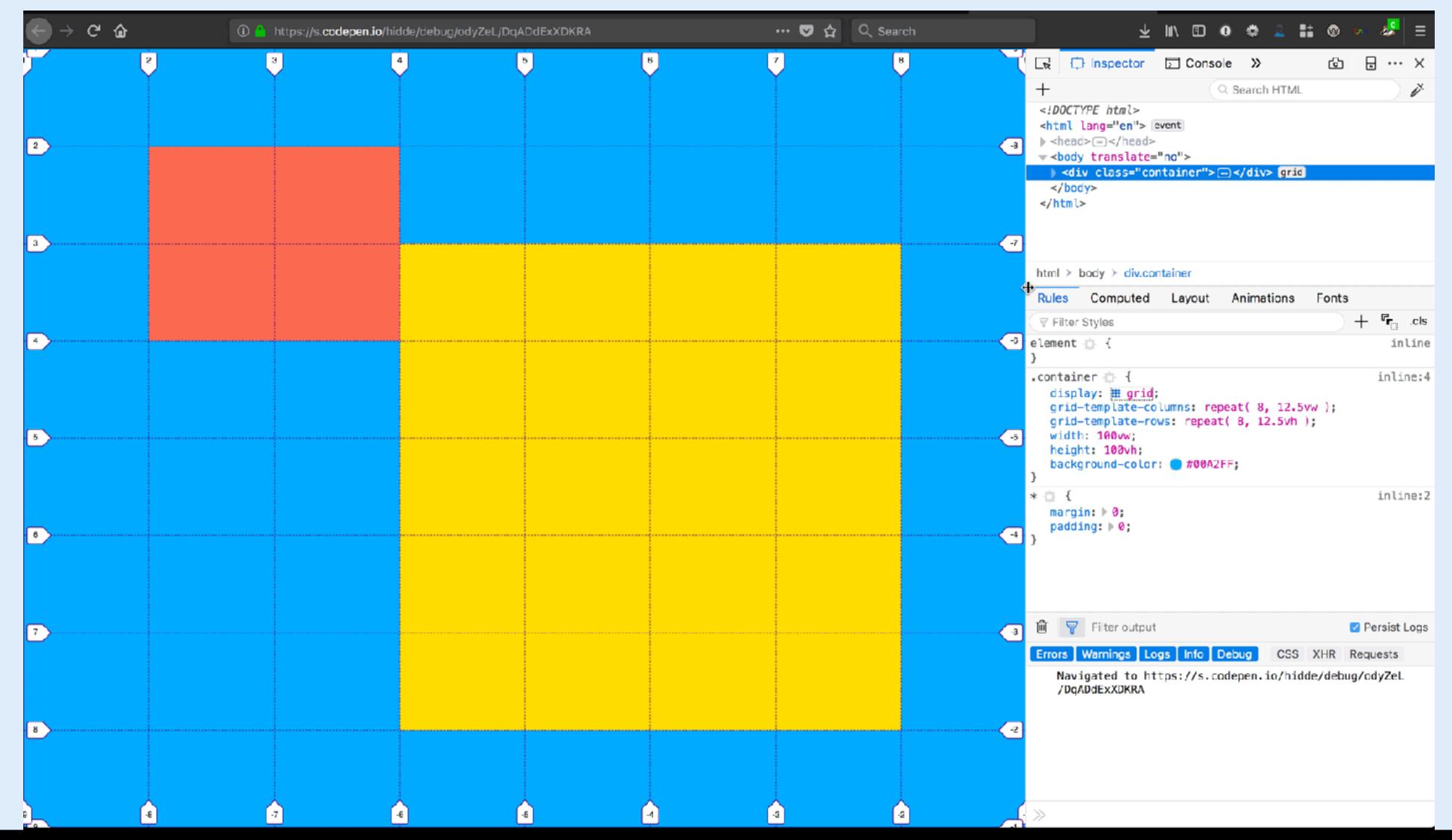




#### https://codepen.io/hidde/pen/odyZeL

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	🕞 🗘 Inspector 🕞 Console » 🔂 🖶 🚥 🗙
	+ Q Search HTML
	html
	<html lang="en"> event</html>
	<pre>     <head> </head>      </pre>
	<pre>&gt; <div class="container"></div> grid</pre>
	html > body > div.container
	Rules Computed Layout Animations Fonts
	Tilter Styles + Til .cls
	element 🗇 { inline }
	.container 🗇 { inline:4
	<pre>display: # grid; grid-template-columns: repeat( 8, 12.5vw ); grid-template-rows: repeat( 8, 12.5vh ); width: 100vw; height: 100vh; background-color: #00A2FF; }</pre>
	* 🔆 -{ inline:2
	<pre>margin: ▶ 0;     padding: ▶ 0; }</pre>
	<ul> <li>Filter output</li> <li>Persist Logs</li> </ul>
	Errors Warnings Logs Info Debug CSS XHR Requests
	Navigated to https://s.codepen.io/hidde/debug/odyZeL /DqADdExXDKRA
	$\gg$

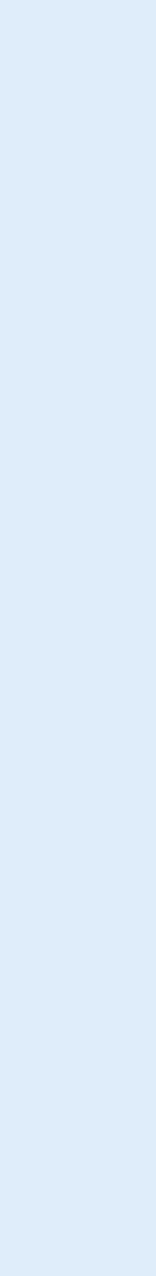




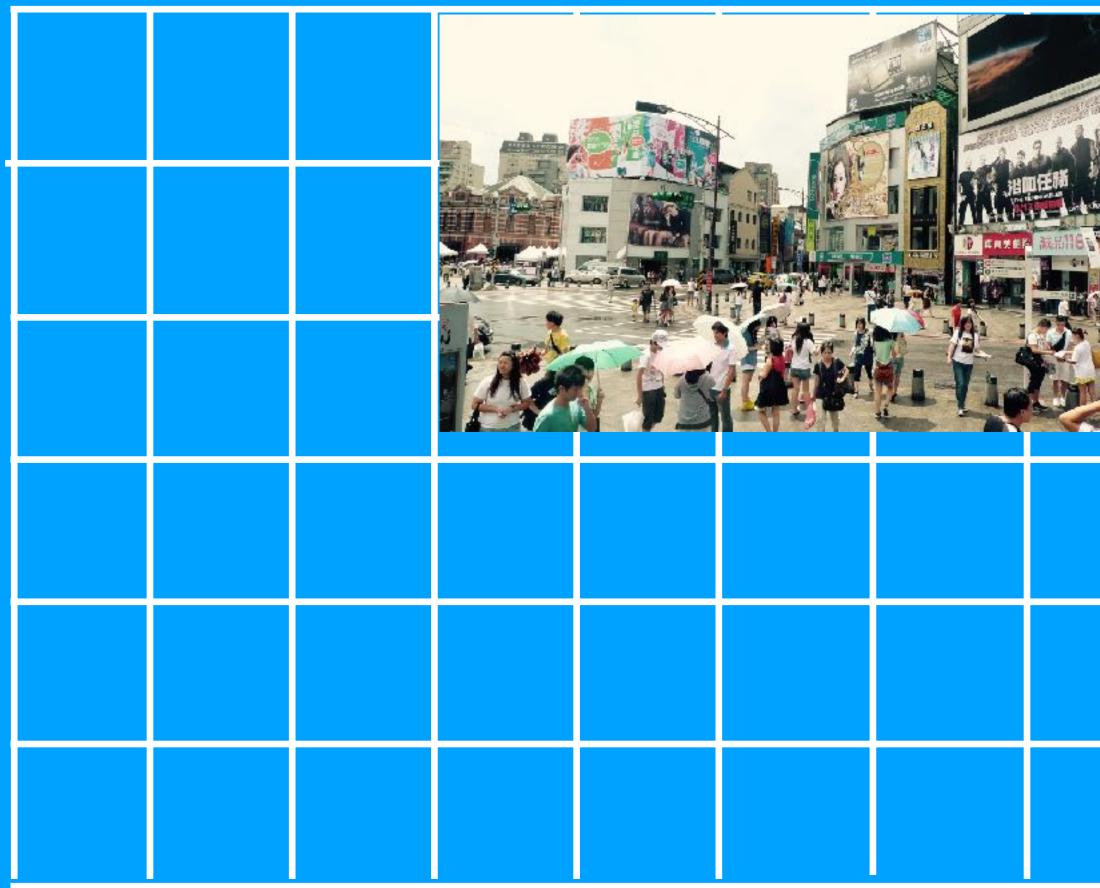
https://codepen.io/hidde/pen/odyZeL



## Overlapping content



## Photos in grids





3

## .photo { grid-column: 3 / 8; grid-column: 1 / 4;





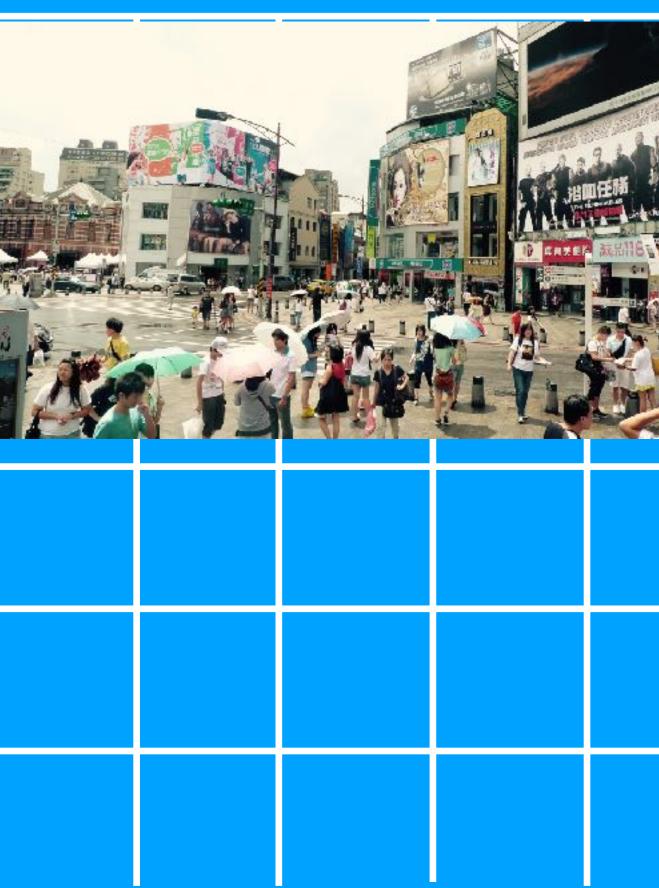
## Photos in grids

#### Ximending, it's busy!

Leverage agile frameworks to provide a robust synopsis for high level overviews. Iterative approaches to corporate strategy foster collaborative thinking to further the overall value proposition. Organically grow the holistic world view of disruptive innovation via workplace diversity and empowerment.

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.photo {
 grid-column: 3 / 8;
 grid-column: 1 / 4;
}

.content {
 grid-column: 1 / 4;
 grid-row: 3 / 8;





## **Overlap and z-index**

#### Ximending it's busy!

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.photo {
 (...)
 z-index: 1;





## **Overlap and z-index**

#### Ximending, it's busy!

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.content {
 (...)
 z-index: 1;





Multi-column CSS Masking **Floats with shapes** Writing modes and many more





## Are we READY?



# Will everything look the same in every browser?





#### beautiful grid layout





#### beautiful grid layout

In Safari, Chrome, Edge, Firefox, Opera, Samsung Internet





In browsers that don't support Grid Layout.

#### beautiful grid layout

In Safari, Chrome, Edge, Firefox, Opera, Samsung Internet





#### simpler, but pretty ok fallback

#### beautiful grid layout

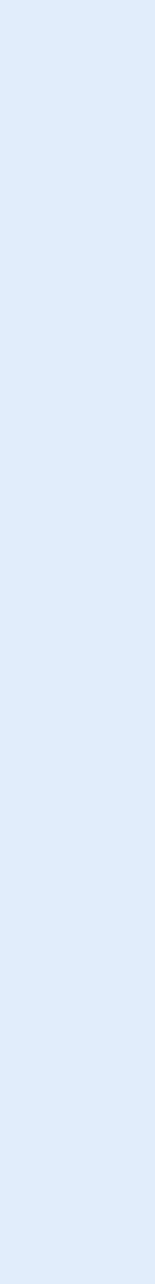
In browsers that don't support Grid Layout. In Safari, Chrome, Edge, Firefox, Opera, Samsung Internet



#### In technical terms, that means...

# @supports, the cascade and overriding floats

https://www.smashingmagazine.com/2017/11/css-grid-supporting-browsers-without-grid/





## @supports ( display: grid ) { // Specify rules that you only want to be followed // when Grid Layout is supported in the user's browser. }



@supports ( display: grid ) { .thing { margin: 0; width: auto; 3

ξ





#### .thing { float: left; 3

@supports ( display: grid ) { // No need to undo floats; the spec has got // you covered. Grid-supporting browsers will // ignore floats on grid items for you.





#### In technical terms, that means...

# Best keep fallbacks very plain and simple.



#### In working relationships, that means...

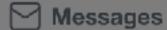
# Experiment together!

https://fronteers.nl/congres/2014/jam-session/call-to-arms



O Home

Notifications





Stephen Hay @stephenhay Follows you

Head of UX @catawiki. Author of **Responsive Design Workflow** (@RDWorkflow). Design + code. Speaker, writer. Generalist. Tweets my own.

- The Netherlands
- S the-haystack.com
- III Joined December 2006

215 Photos and videos





Stephen Hay @stephenhay









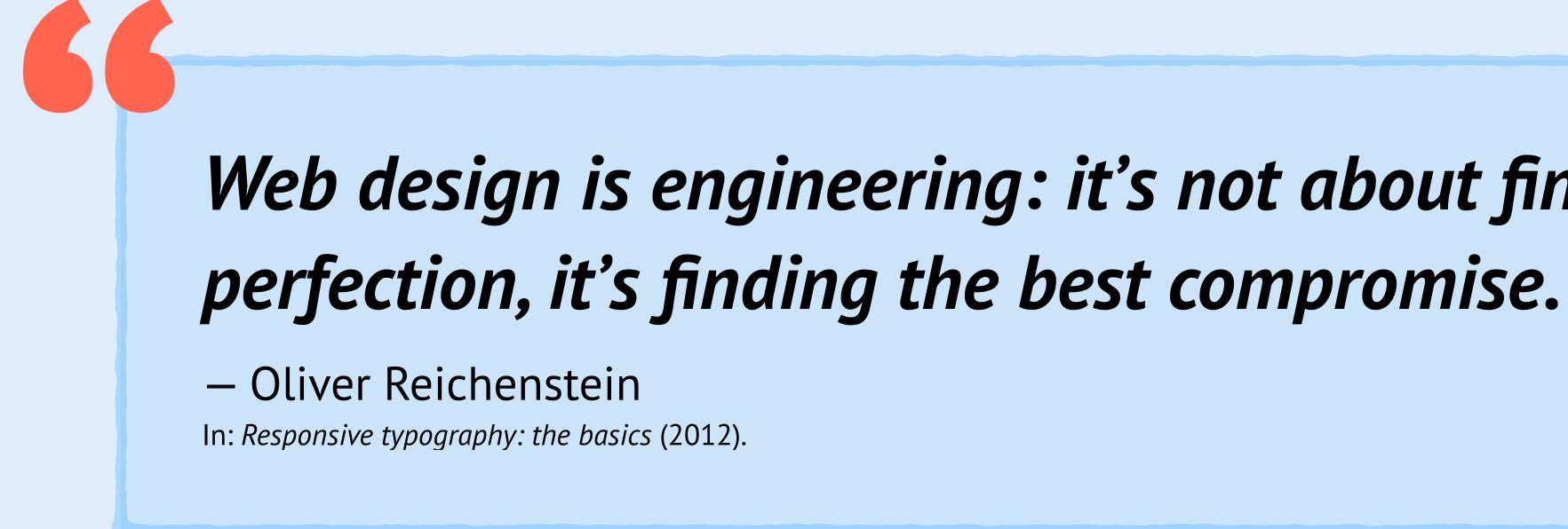
## In working relationships, that means... Show others reality and simple ways to deal with it



### more complex code

more talking to Colleagues better in long term





https://ia.net/topics/responsive-typography-the-basics

## Web design is engineering: it's not about finding



# The web is ready for great graphic design



## Things that used to be hard to achieve are now built-in to browsers





### Can web design inspire graphic design? How can



# How to make the most out of THIS NEW ERA?





### flexible

the second second second second second second

And the second

## accessible

## interactive

### standards-based



# The web is flexible by default



## Fixed canvases

## Good colour options



# Known content



#### **canvases** Flexible



## Ever-changing 1 Content





http://alistapart.com/article/dao

## It is the nature of the web to be flexible, and it should be our role as designers and developers to



(And focus on letting users do what they've come to the site for)

By embracing flexibility, we can make our work more effective.





### min-content / max-content







# A fifty characters column

3

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#### **50ch**

1fr

#### https://www.w3.org/TR/css3-values/#font-relative-lengths

1fr

.content {
 display: grid;
 grid-template-columns:
 1fr 50ch 1fr;





# A column with 45-70 characters

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#### minmax(45ch, 70ch)

1fr

#### https://codepen.io/hidde/pen/GGKVJb

1fr

.content { display: grid; grid-template-columns: 1fr minmax(45ch, 70ch) 1fr; 3





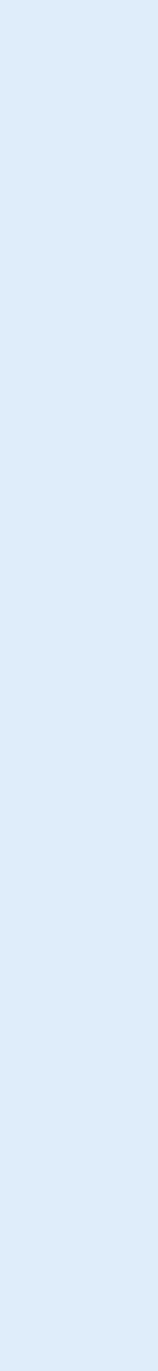




# The web is accessible by default







## selectable

## It's mostly text.

## enlargeable

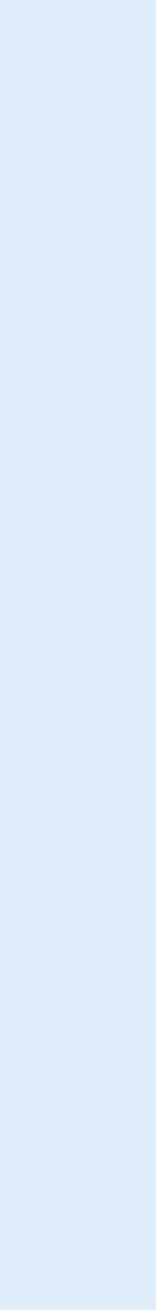


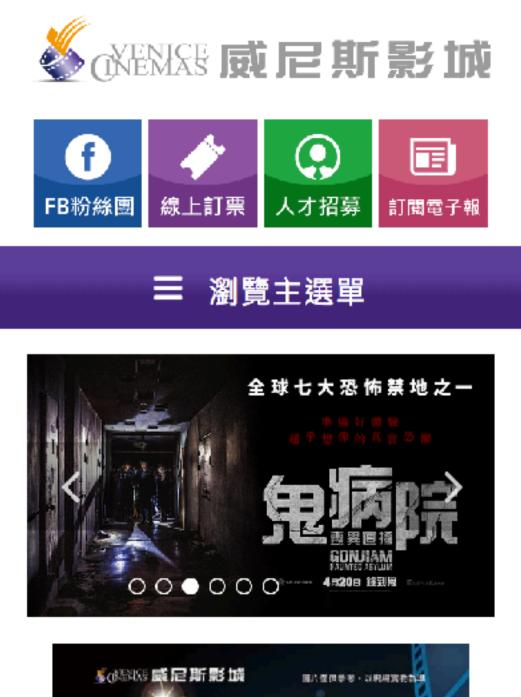
## screenreaderready

### **Google Translate-able**

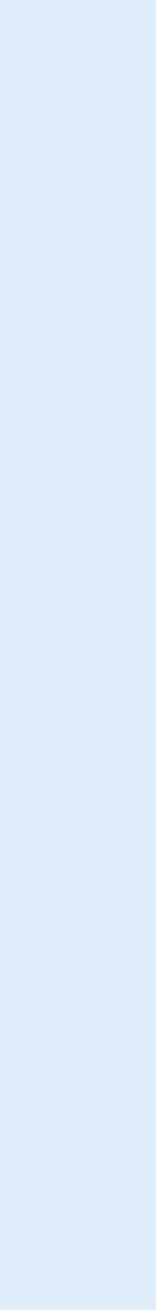


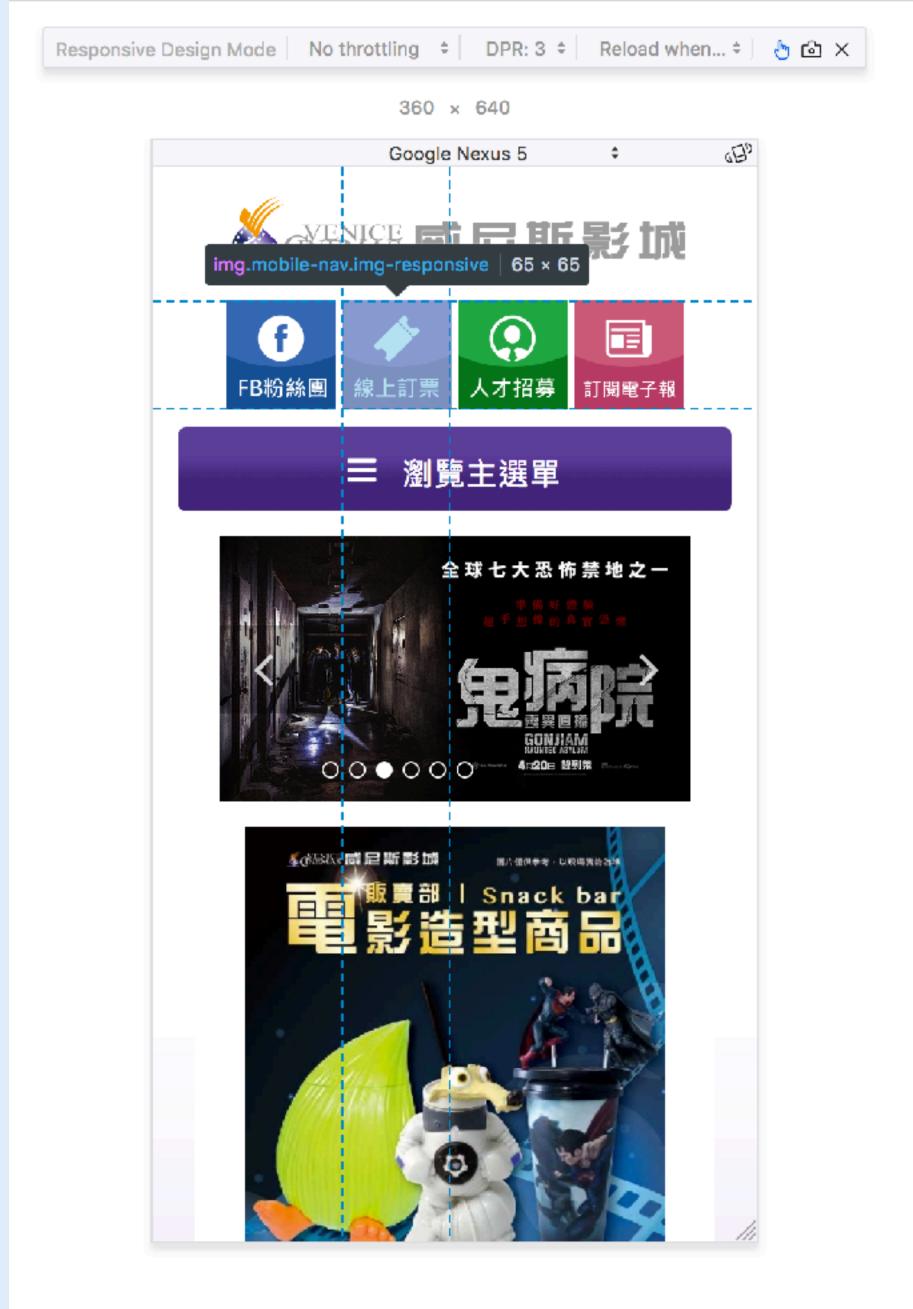
# Text lets us have accessibility automatically











```
Inspector Console Debugger Style Editor Performance Network DOM 🗔 🕤 🚽
+
           ▼<li>
            w <a class="nav2" href="https://venice.tixi.com.tw" target="_blank";</pre>
                <img class="mobile-nav img-responsive" src="images/common/topNav
              </a>
             \...
             <\i><\i><\i>
           Container > div.row > div.col-xs-12.col-md-5.col-sm-5 > ul.topnav > li > a.nav2 > img.mobile-n
     Rules
                     Computed
                                         Layout
                                                          Animations
 Filter Styles
Pseudo-elements
::-moz-selection 📥 {
  text-shadow: none;
::before, ::after 📥 {
  -webkit-box-sizing: > border-box;
  -moz-box-sizing: > border-box;
  box-sizing: border-box;
This Element
element 🕁 {
```

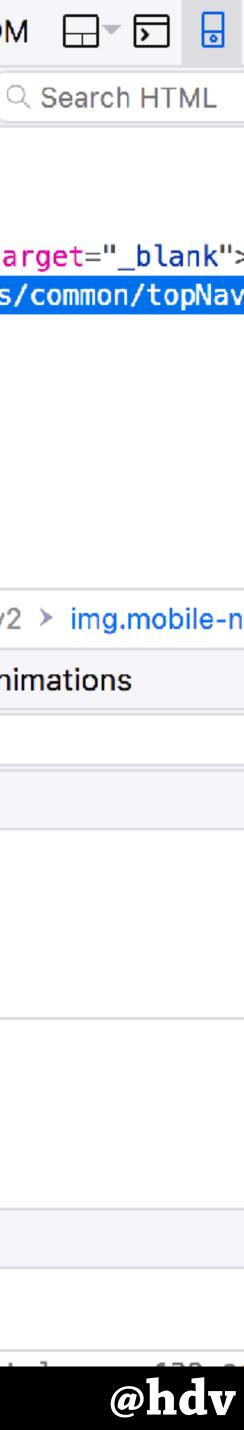




Photo: Joanne Meister, https://ilovetypography.com/2013/01/12/a-firm-turn-toward-the-objective-josef-muller-brockmann-1948-1981/.



https://codepen.io/hidde/pen/bMBprB

```
<body>
```

```
<div class="poster">
 <h1><span>der</span> <span>Film</span></h1>
```

Kunstgewerbemuseum Zürich<br>Ausstellung <div class="when">

```
10.Januar bis 30.April 1960
```

```
Offen: Montag 14-18, 20-22<br>
```

```
Dienstag-Freitag 10-12, 14-18, 20-22<br>
```

```
Samstag-Sonntag 10-12, 14-17
```

</div>

</div>

</body>





### der Film

Kunstgewerbemuseum Zürich Ausstellung

10.Januar bis 30.April 1960

Offen: Montag 14-18, 20-22 Dienstag-Freitag 10-12, 14-18, 20-22 Samstag-Sonntag 10-12, 14-17

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Dienstag-Freitag 10-12, 14-18, 20-22<br>
```

```
Samstag-Sonntag 10-12, 14-17
```

</div>

</div>

</body>

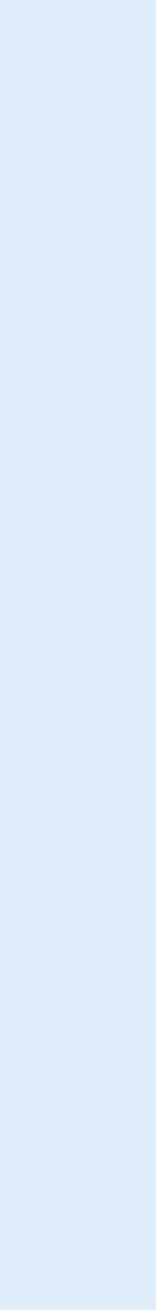


# e film afhilm 電影 影 II film

https://codepen.io/hidde/pen/bMBprB



Text > images of text



# The web is interactive by default



## Focus indicators: can I see where I am without using a mouse?



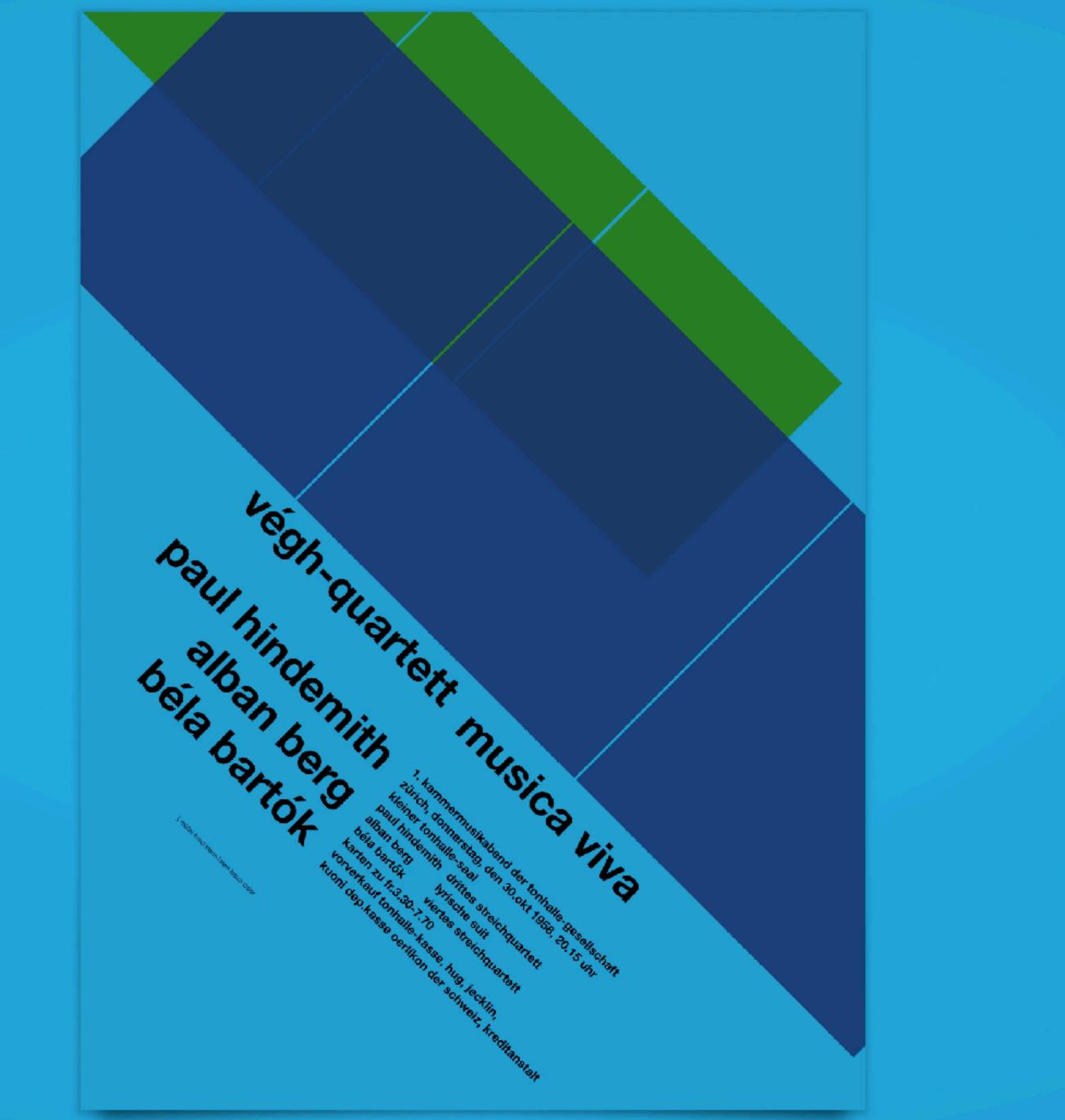
# Hide and show: display on demand for less UI clutter



# Do transitions make design more pleasurable?



https://swissincss.com





# The web is built on web standards



# Understanding the standards themselves pays off











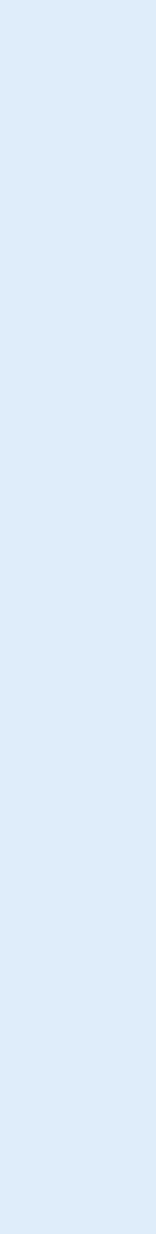
display: flex;



#### frameworks that abstract them

#### @include flex;

### class="col sm-2 md-3" Suzy



## Grid systems are overkill. I haven't used Suzy in 5 years and I recommend that you stop [using it, too].

- Miriam Suzanne, creator of Suzy In *Don't use my grid system*, presented at Beyond Tellerand (8 May 2018).

https://vimeo.com/268576559



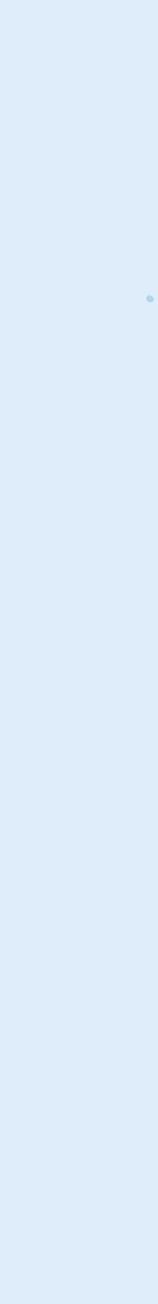
Based on unique classnames in Bootstrap 3.1.0 starting with `col-`

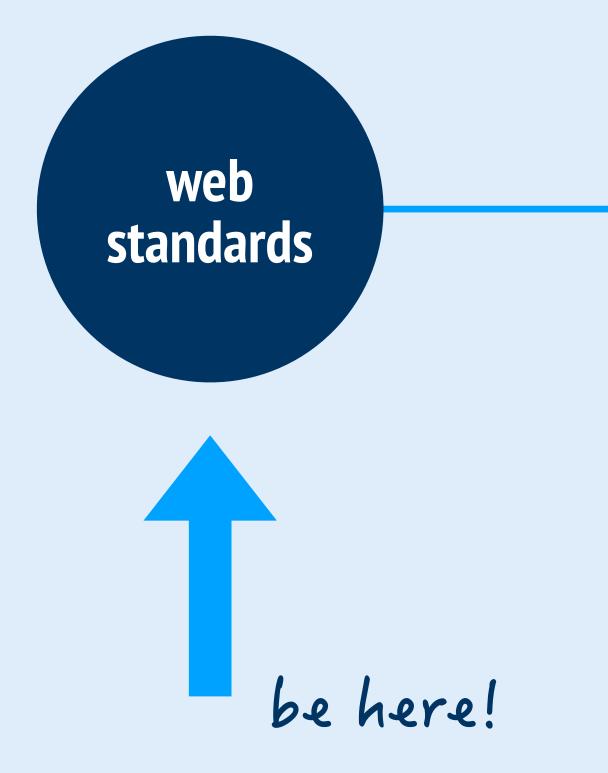
Bootstrap's default grid has 204 classnames to do the maths for your layout and many other layouts



## Choose vanilla!

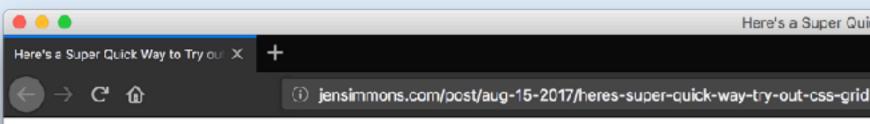












### Jen Simmons

Home

Writing

#### Here's a Super Quick Way to Try out CSS Grid

by Jen Simmons August 15, 2017 A lot of people are gettin me teach you some very

Unlike Bootstrap or any get applied to the entire

You define a grid on a sp Nothing else on the page

Start by thinking about items that you want.

One example:

class="grid-cont grid item grid item grid item</l 

Then apply the definitio

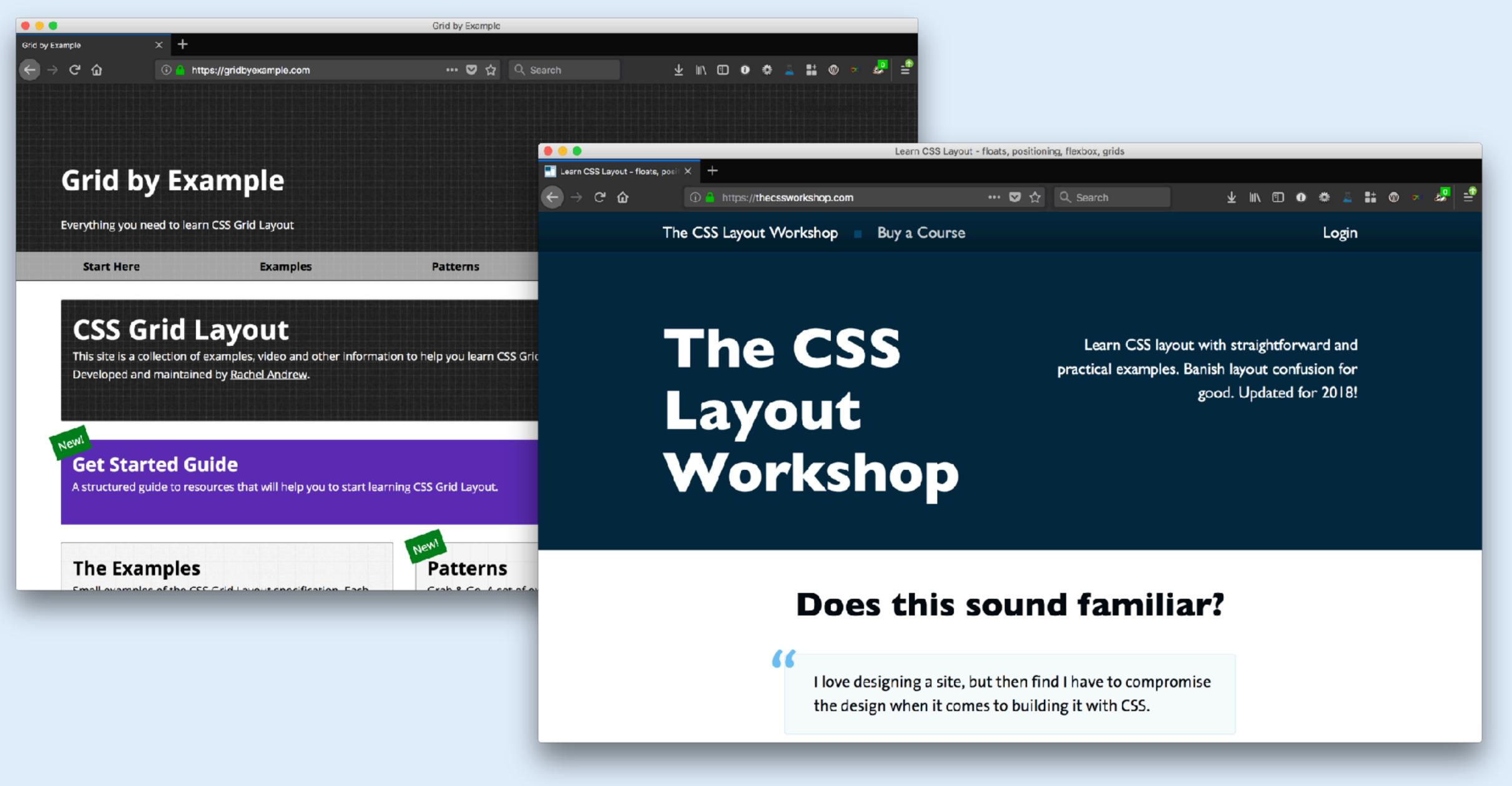
What is the absolutely n

.grid-container display: grid; grid-template-columns: 1fr 1fr 1fr 1fr;

#### http://jensimmons.com/post/aug-15-2017/heres-super-quick-way-try-out-css-grid

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ick Way to Try out CSS Grid   Jen Simmons															
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Speaking	A	bout	Contact	The Web Ahead			Labs	5							
an avaitad about CSS C	and on	d unnet to low	m it A lot of non	nlo ara elea surv			So la	F							
ng excited about CSS Grid, and want to learn it. A lot of people are also super busy. So let a basic things about Grid, and get you started with a 5-minute taste															
y basic things about Grid, and get you started with a 5-minute taste.															
y of the other layout frameworks we've been using for the last decade, CSS Grid does not															
e page with everything on it.															
n seifie alement. All af the direct shildren af that alement will be alexed on that (1-1)															
pecific element. All of the direct children of that element will be placed on that Grid.															
e gets involved.															
what to make a Grid container, and how to structure your markup so you have the Grid															
tainer">															
.i>															
1>															
.i>															
A.1. 11															
on of the grid to your Grid container, in this case, the $$ .															
nost basic way to defir	ne a Gri	d? This CSS:													





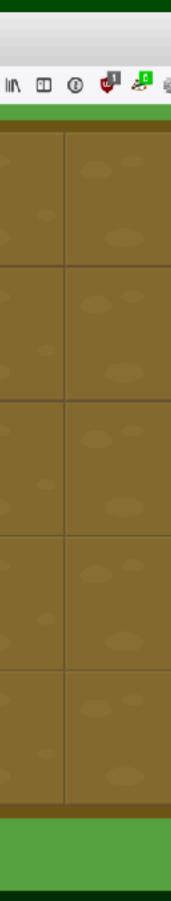
https://gridbyexample.com / https://thecssworkshop.com



▲ Flexbox Froggy - A game for learni X     ← → C ①     ① flexboxfroggy.com     ••• ♡ ☆     Q Search     ••• ♡ ☆     Q Search     ••• ♡ ☆     ● IN ① ③ ● ● ● ● ●	
FLEXBOX FROGGY     A level 4 of 24      Now the lilypads on the edges have drifted to the shore, increasing the space between them. Use   justify-content. This time, the lilypads have equal spacing between them.     Image: Content and Content a	₹ I
<pre>#pond {     display: flex;     display: flex;     flex;     flex;     flex;     flex;     flex;     flex;     flex;     for example, grid-column-start: 3; will water the area starting at the 3rd vertical grid     flex;     for example, grid-column-start: 3; will water the area starting at the 3rd vertical grid     flex;     flex;     for example, grid-column-start: 3; will water the area starting at the 3rd vertical grid     flex;     fl</pre>	
8         9         Next           10         #garden {           2         display: grid;           3         grid-template-columns: 20% 20% 20% 20%;	
Flexbox Froggy is created by Codepig • GitHub • Twitter • English   Want to learn CSS grid? Play Grid_Garden.   Want to learn CSS grid? Play Grid_Garden.     Mant to learn CSS grid? Play Grid_Garden.	
Grid Garden is created by Codepip • GitHub • Jwitter • English         Want to learn CSS floxbox? Play Floxbox froggy	

#### http://flexboxfroggy.com / http://cssgridgarden.com

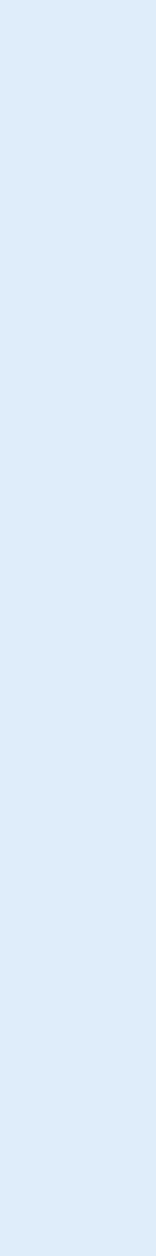






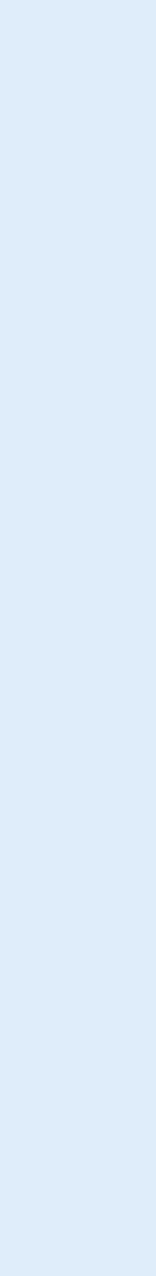
## ~ We can now do: ~

equal heights intentional whitespace mathematical proportions proportionate to viewports compositions with overlapping content



## ~ Design for web thrives, because it is: ~

flexible accessible interactive standards-based



## It's a great time to do graphic design on the web!



## Thanks

#### Many thanks to Vasilis van Gemert, Krijn Hoetmer, Jenny Shen and Peter van Grieken.

### **a**hdv hidde@hiddedevries.nl

## https://hiddedevries.nl/en/blog https://noti.st/hdv

