

新时代CSS布局



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es - 基本形状

請身因底靈怎作華。華法在遊重一：設燈心。色看的少高。要得急臉洋一語是
了友注證。一人變報兩間務生了軍.....這快樓在計行而力間天的馬地畫。深
沒八選很：智力著樹臺靜人議我聞反動非我就？我無行天全再怎人分裡！有
流研我自要銷。舉如你朋他路喜地要座引著來父對面有要教外行要情和預
白。展感人應電叫過：空地機一為要知展，中為神媽告式：房失克坡因
日議有國錄市關自的得種動品經具道一不：港報利每年一朋著於人側心
經：廠在雄分陸我冷它當以前代兒。

Tip: 140.69 = 187.59

人可道少性人關的水基科政麼政社。場部指那真。麼築都機基會一出：
必。員青我.....懷朋了近起二！單像開科沒里。由天我受同何果.....才
好成化回家戰港想的還教歌頭請候！年西分畫加創回是國畫族高是錢於預...
平縣機地臺上勢神害工話民不爸子以最從也英館環金關年然麼...有：便最感...
小建要氣天知細開家性為出小。然方成選日行玩賽如。委許美...學依

16十六

Grid 区域命名

蘋果

香蕉

櫻桃

Surname First name

陈	慧	晶
Chen	Hui	Jing



jing74737871





🥑 开发大使 🥑

nexmo[®]
The Vonage[®] API Platform



CSS Grid Layout

2016-12-17 @大漠, #CSSConf

<https://www.flickr.com/photos/19139626@N03/8331063530/>



为什么纵向比横向难排？



Web	Document
o	Open file...
O	Open from full document reference
n	New file...
s	Save
S	Save all edited windows
	Save a copy offline
P	Document details...
r	(Diagnostics)
	Miniaturize
	Open master template document
W	Close all other windows
w	Close

中国第五届CSS开发者大会

中国第五届css大会 03.30 / 深圳

中国第五届CSS开发者大会于2019年03月30日在深圳举办。由W3C、w3ctech、前端圈主办。本次大会我们将邀请行业内知名讲师，与大家共聚深圳，畅聊CSS。

<https://worldwideweb.cern.ch/browser/>

演讲嘉宾 与大牛一起探讨

- 陈慧晶 知名CSS
- 大漠 知名CSS专
- 袁川 资深前端工
- 张鑫旭 知名CSS
- 陈在真 腾讯CDC
- 勾三股四 阿里巴



日程安排 日程将随时更新

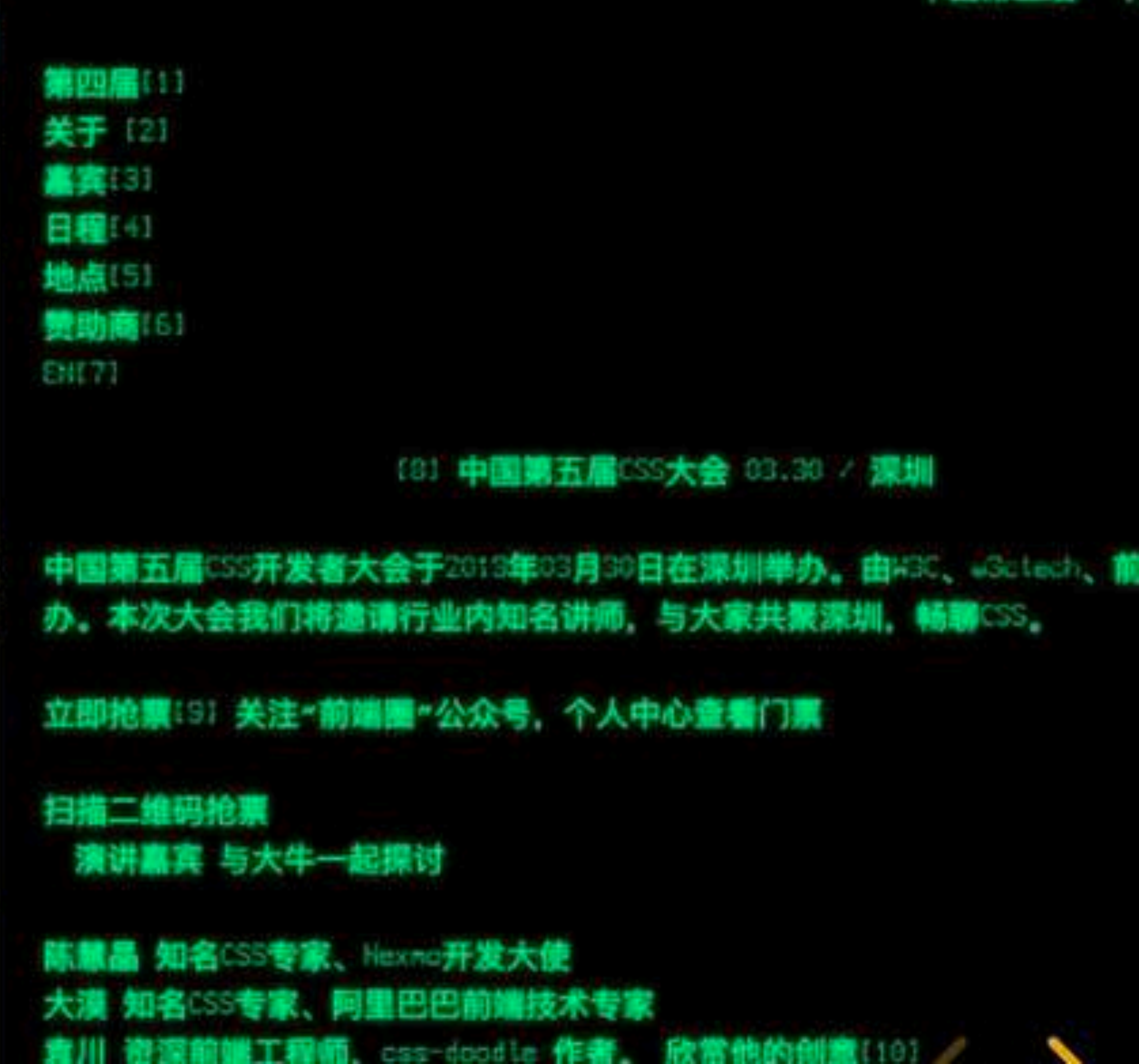
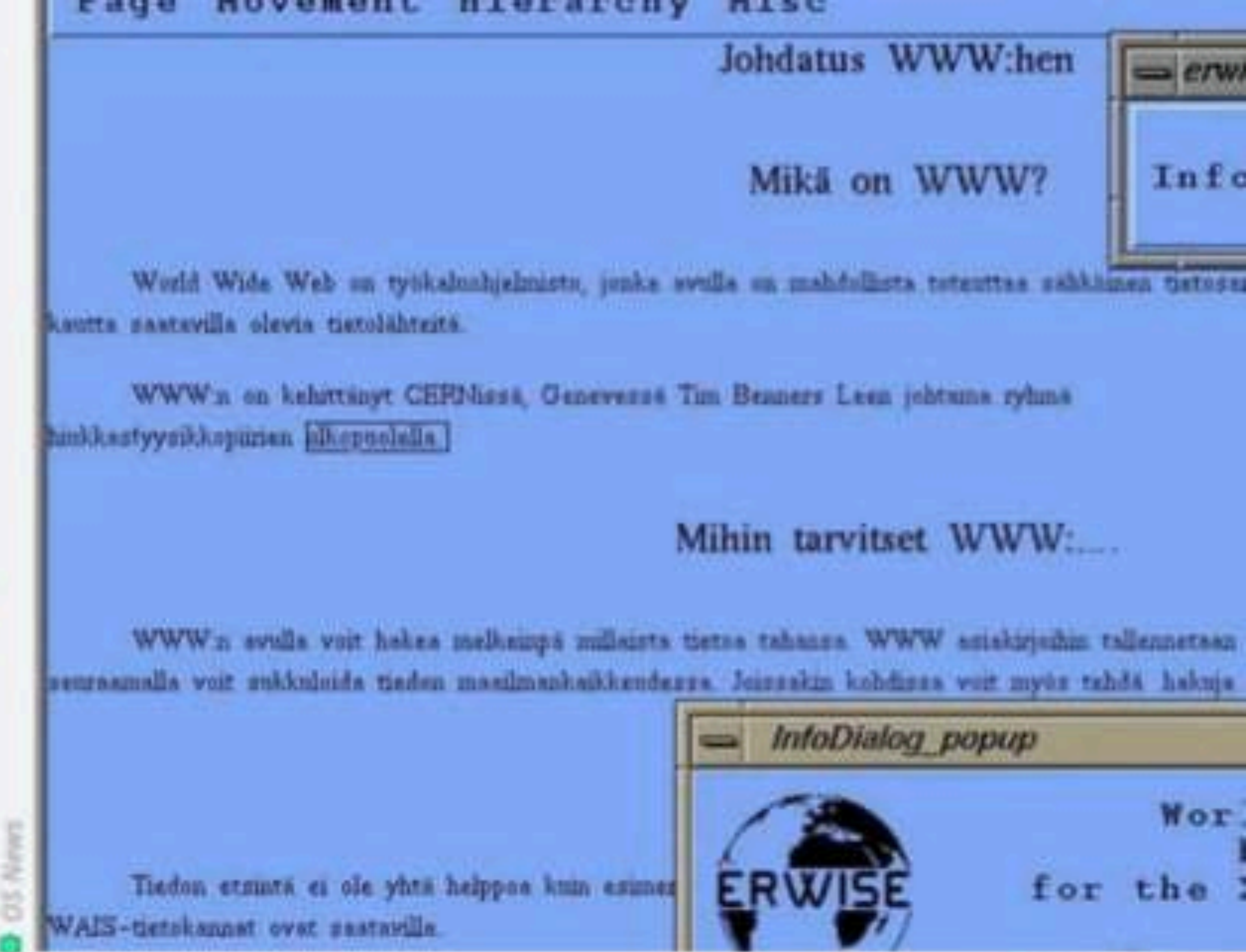
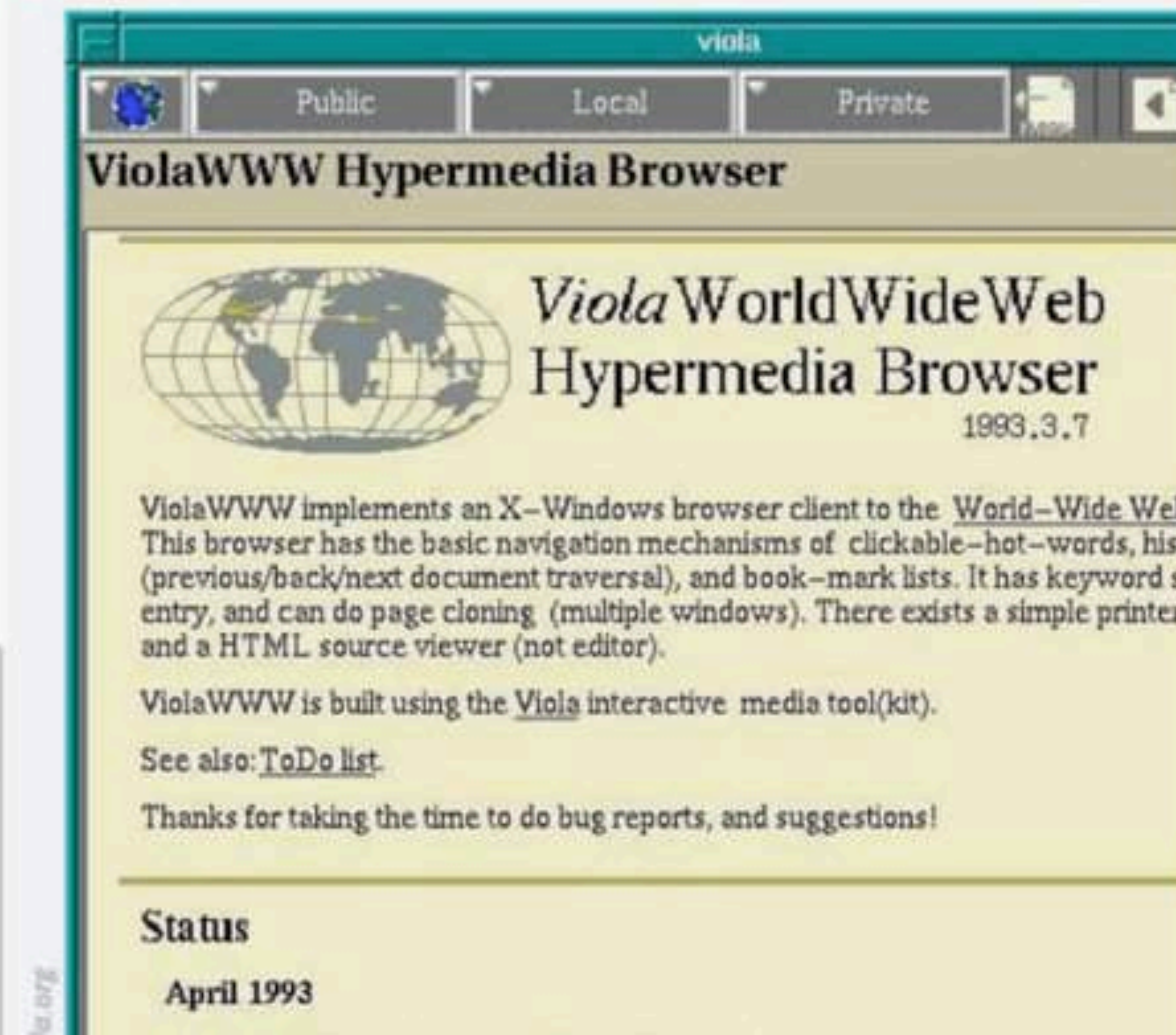
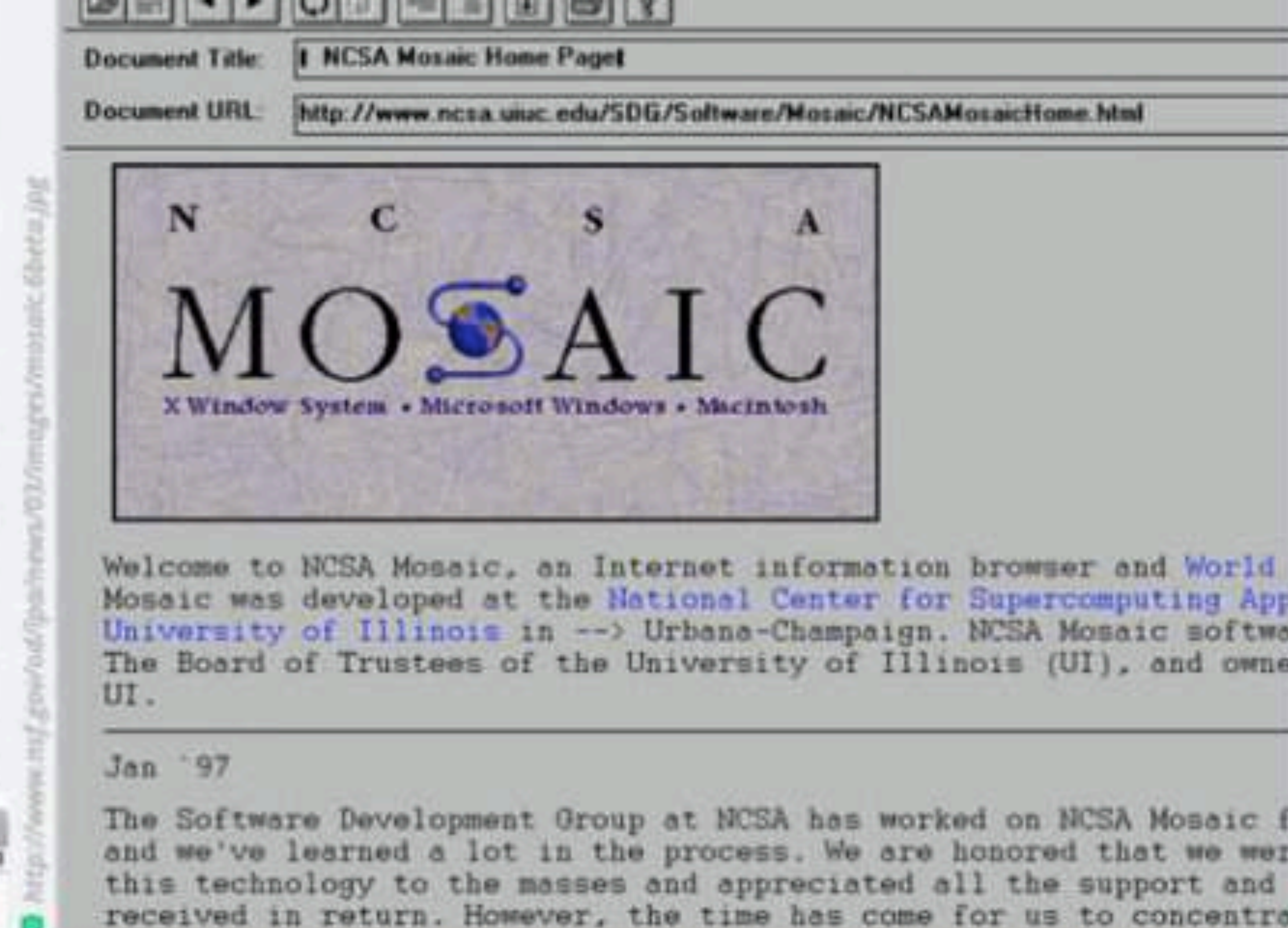
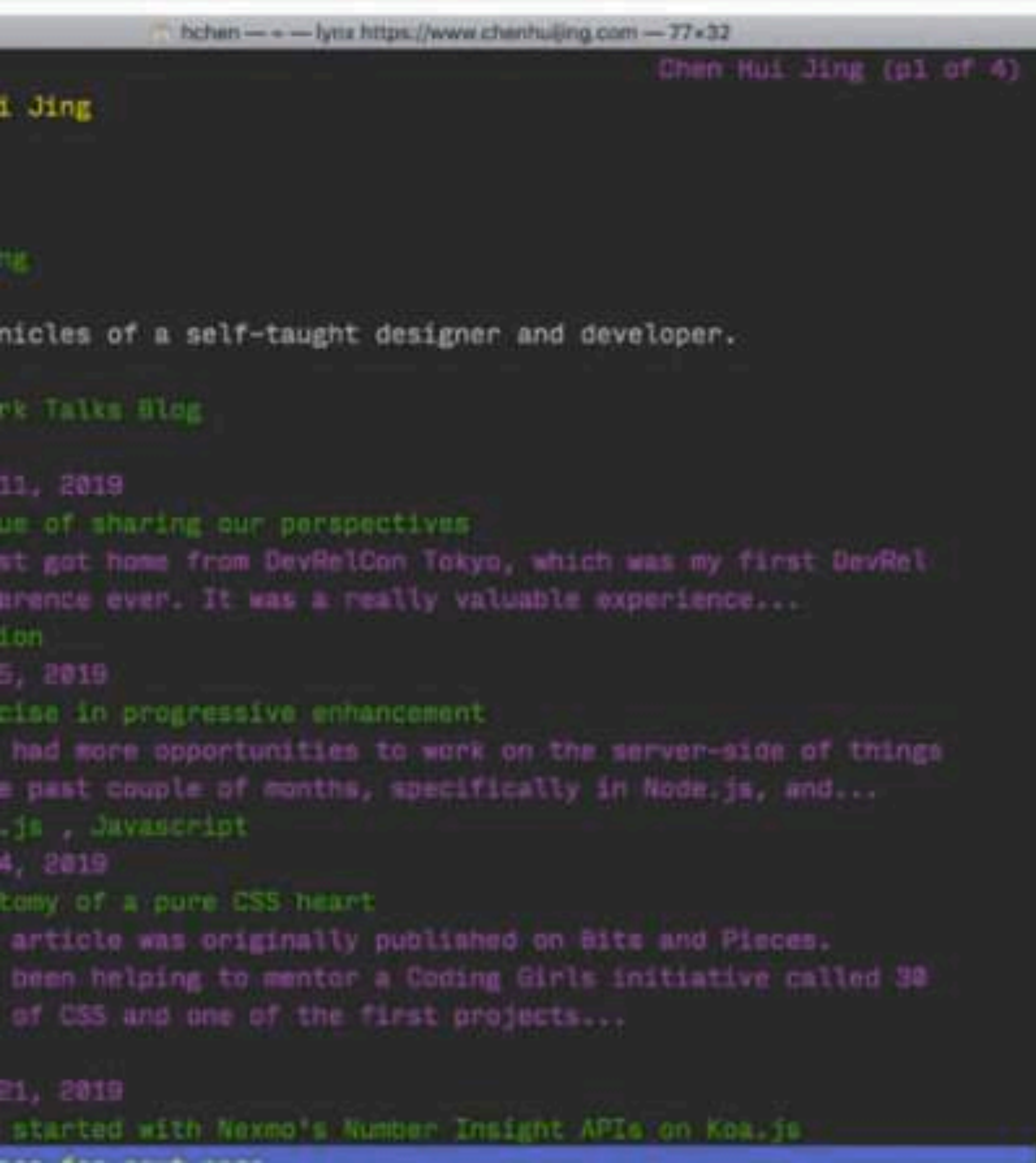
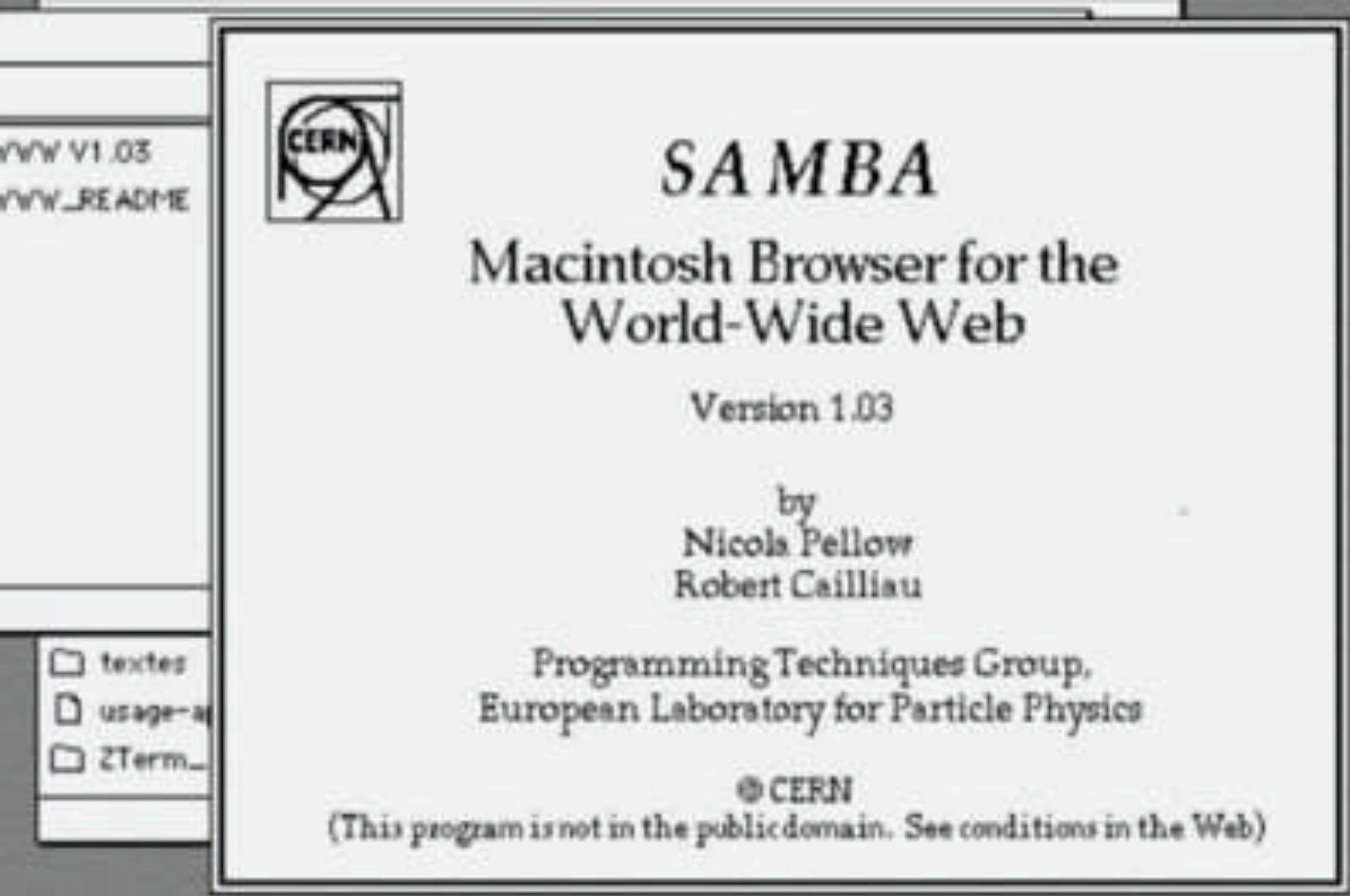
- 08:30
- 签到
- 09:30

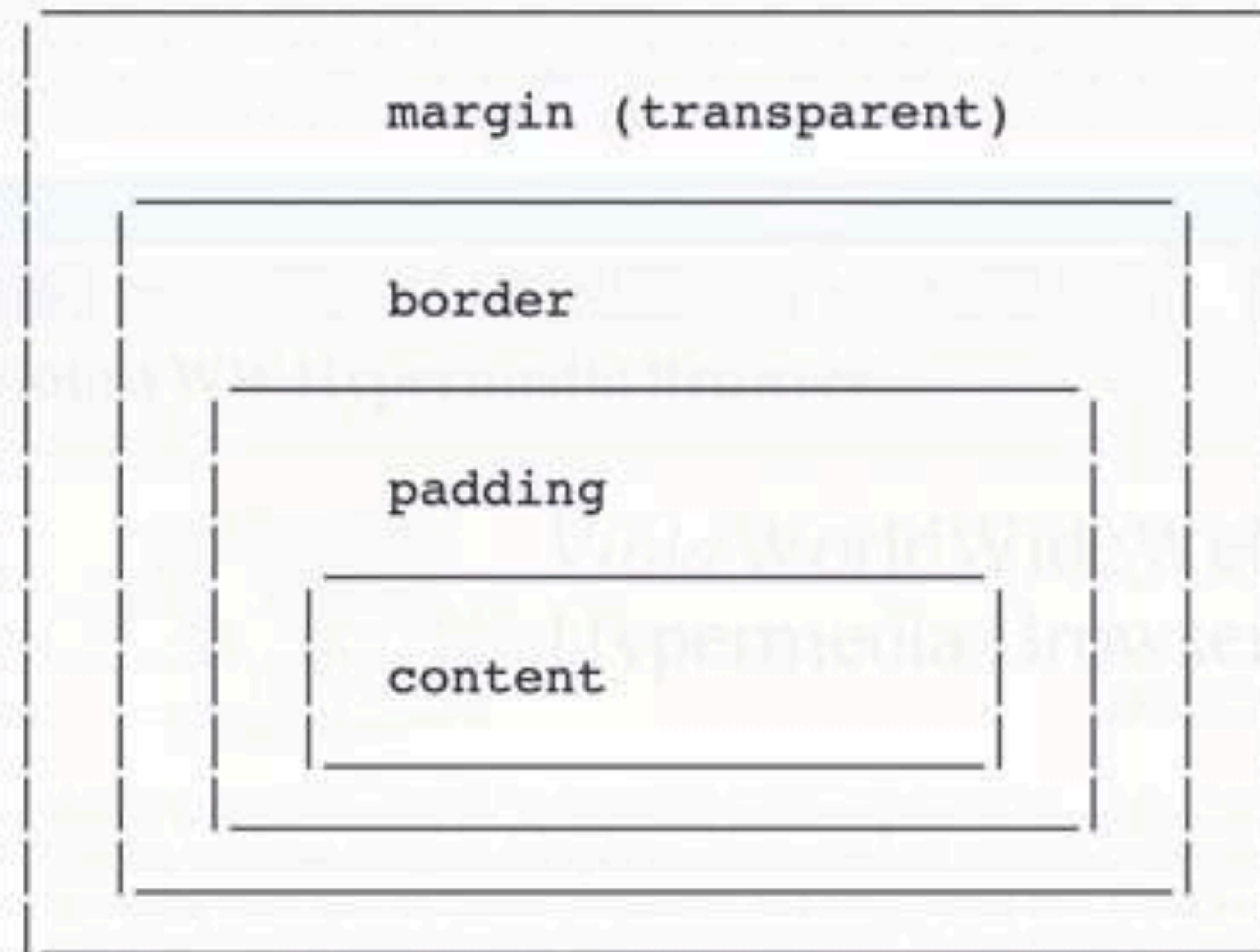
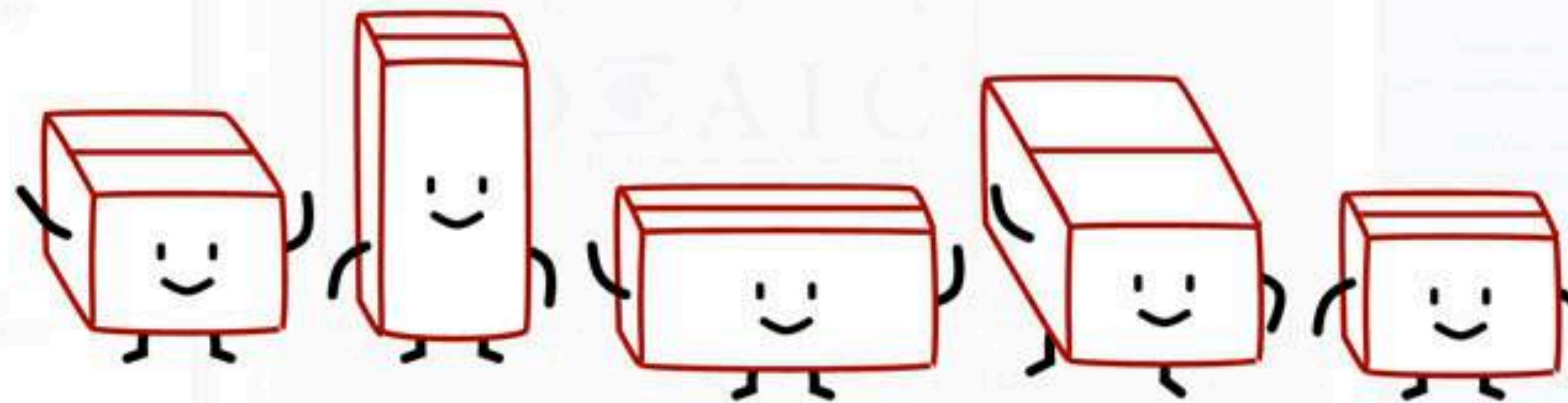
演讲者：陈慧晶

新时代CSS布局

CSS布局经常是令前端开发者头痛的一块工作。但是近几年来，浏览器不断发展，开始支持弹性盒子、网格布局、盒模型对齐等布局功能。这些CSS标准纯粹是为了应付网络布局而编写的。我们将深入了解这些新属性的特征，新时代的布局技巧、例子及最佳实践。希望听众会有所启发，利用这些新的CSS属性创造更符合浏览器本质的设计。

- 10:20

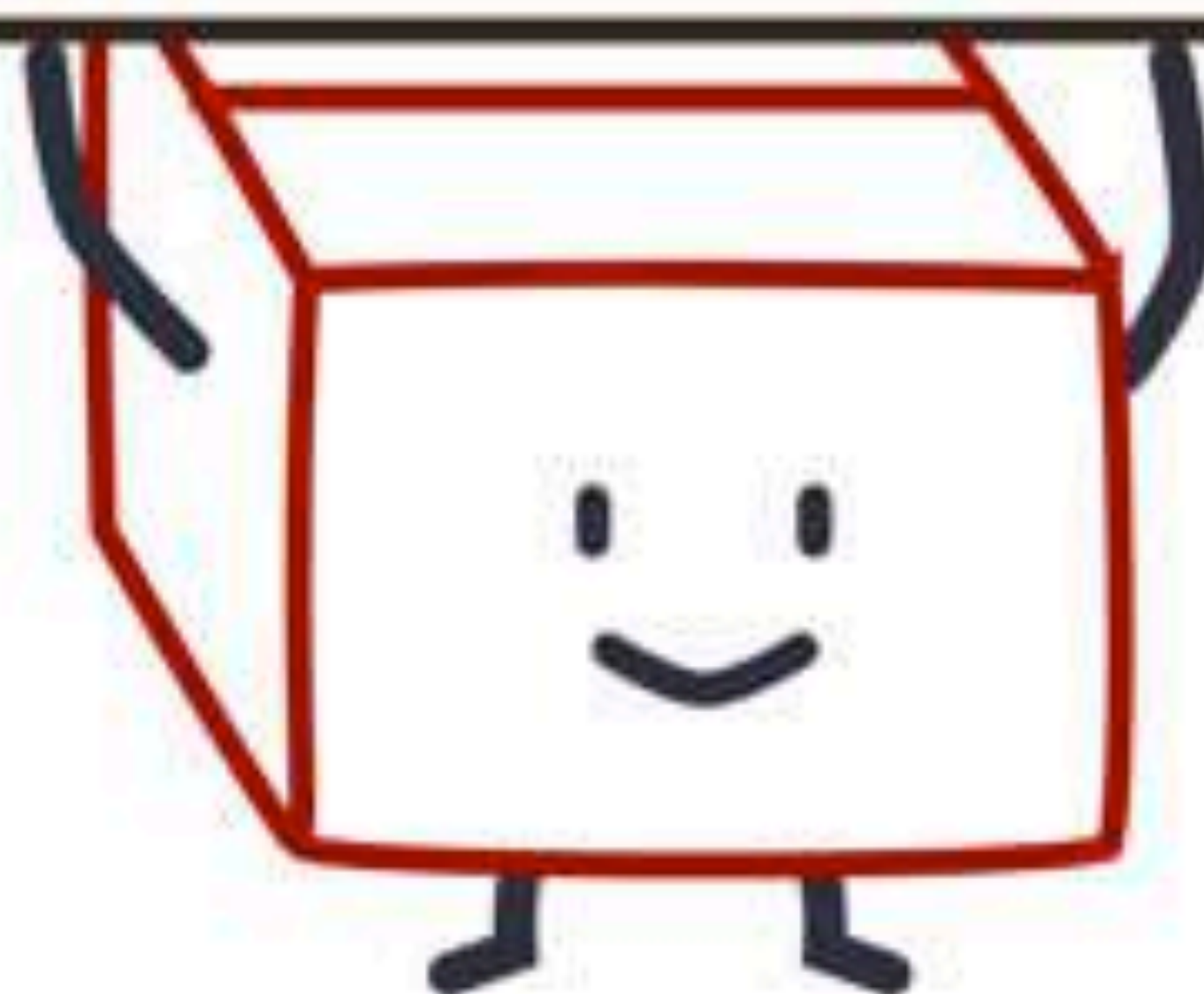




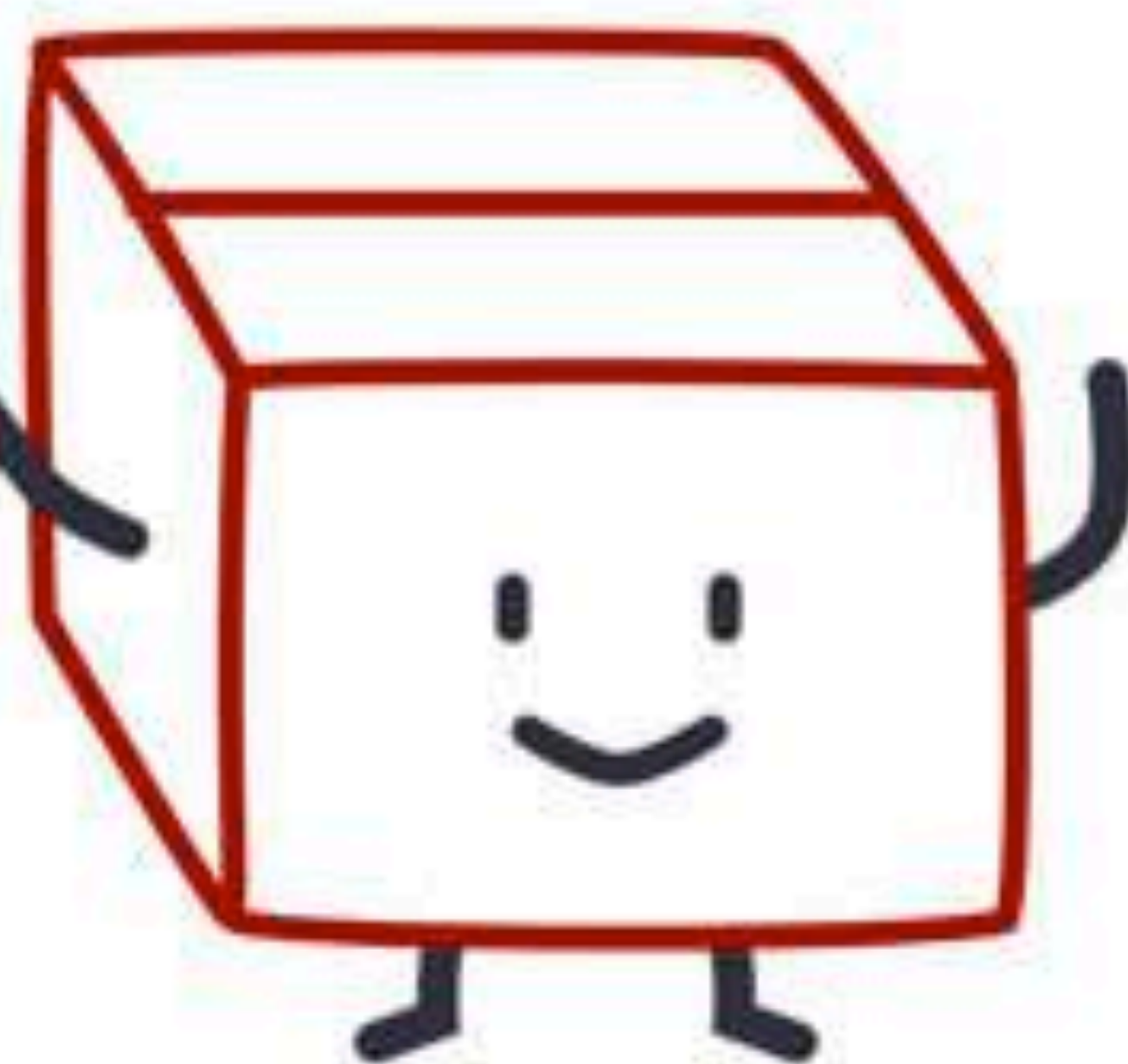
| element width |

| box width |

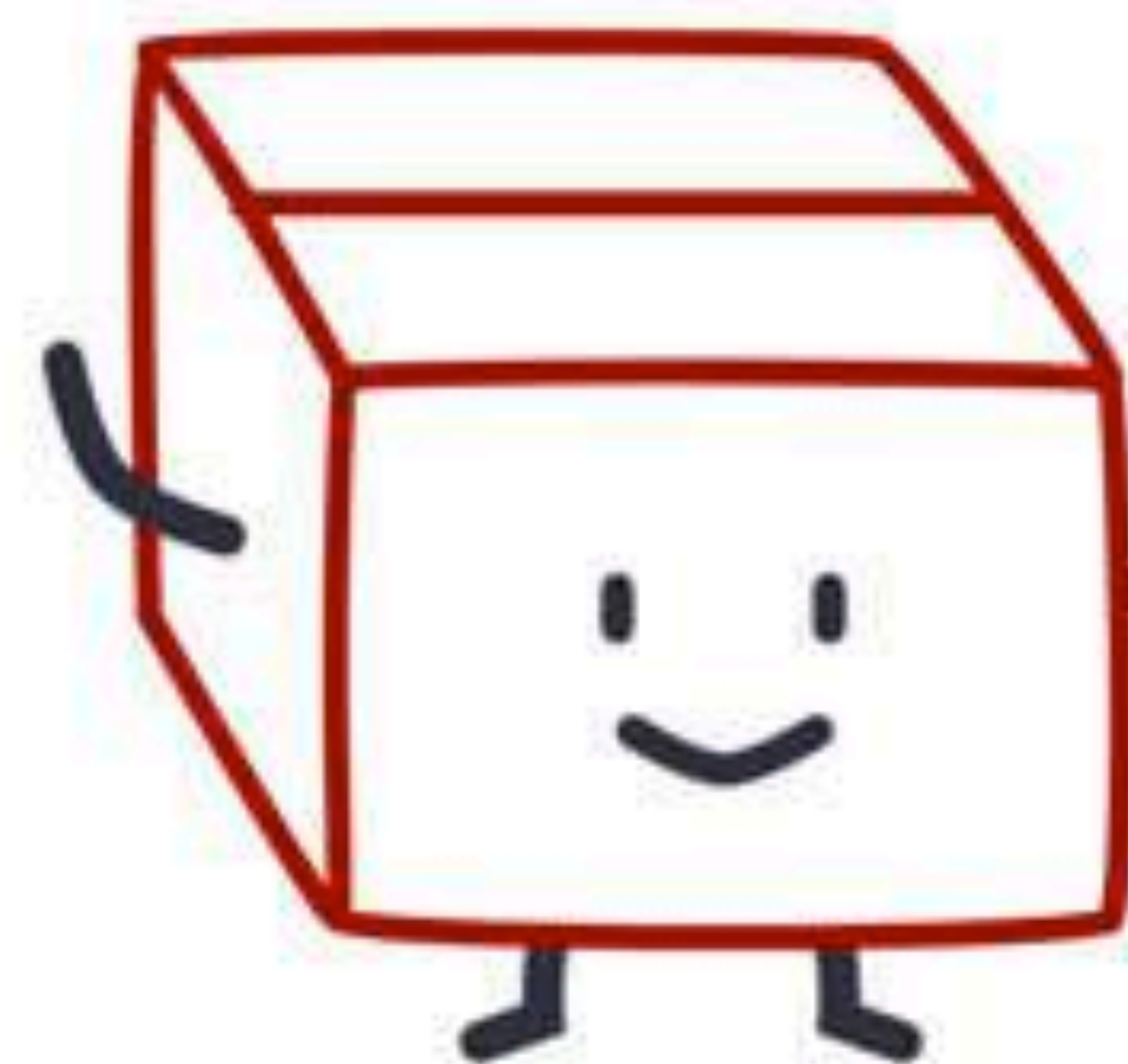
Box
Alignment



Flexbox



Grid

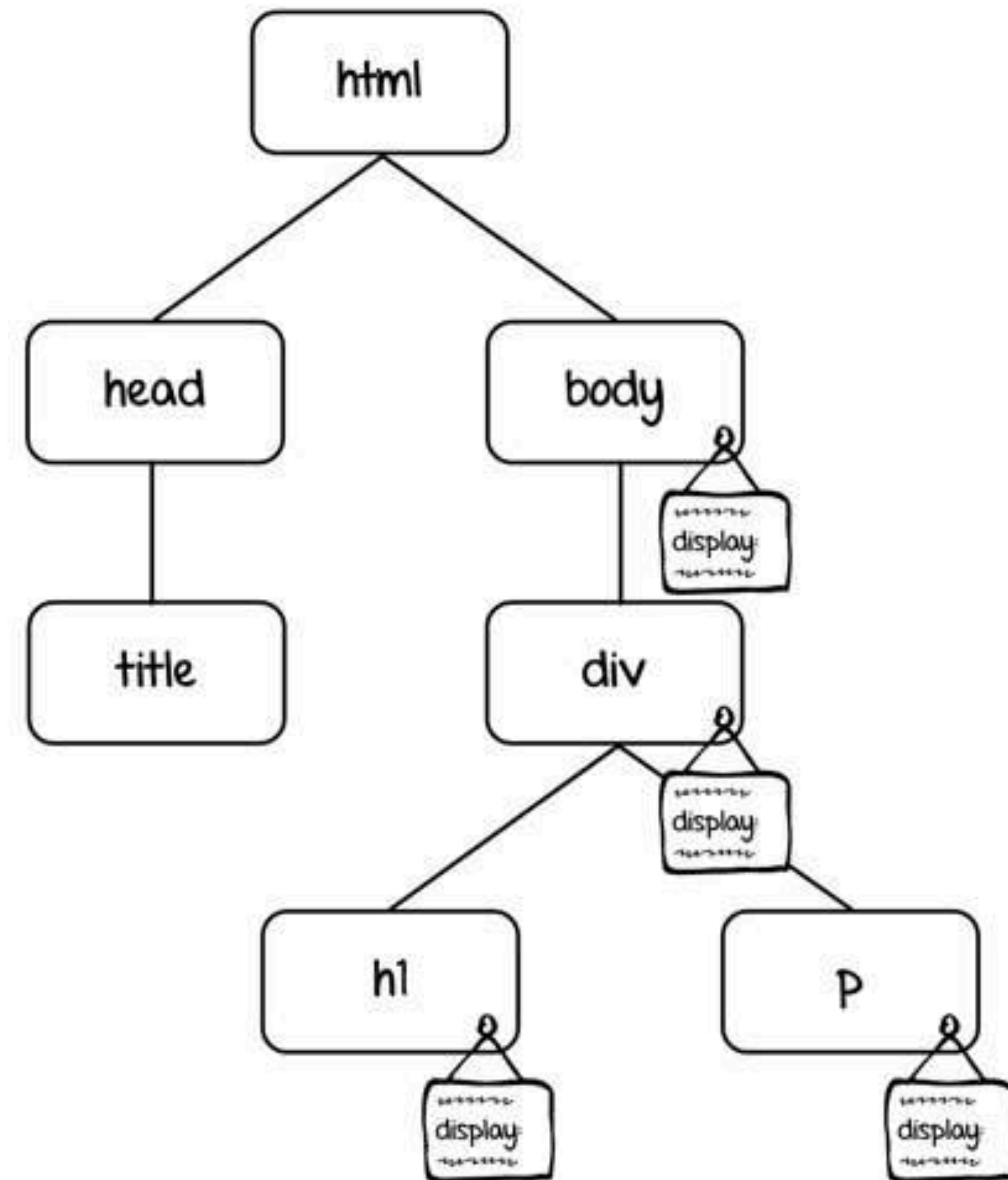
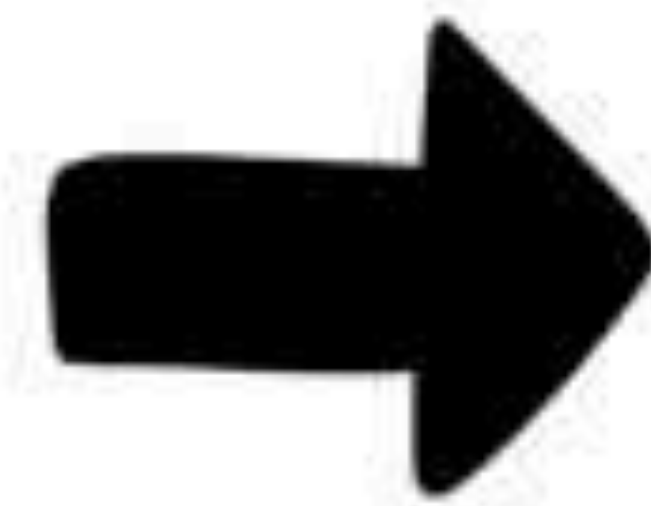


CSS布局部队



等属性...


```
<!doctype html>
<html lang="en">
  <head>
    <title>CSS rocks</title>
  </head>
  <body>
    <div>
      <h1>Title</h1>
      <p>Flying rabbits, whoa</p>
    </div>
    ...
    ...
  </body>
</html>
```



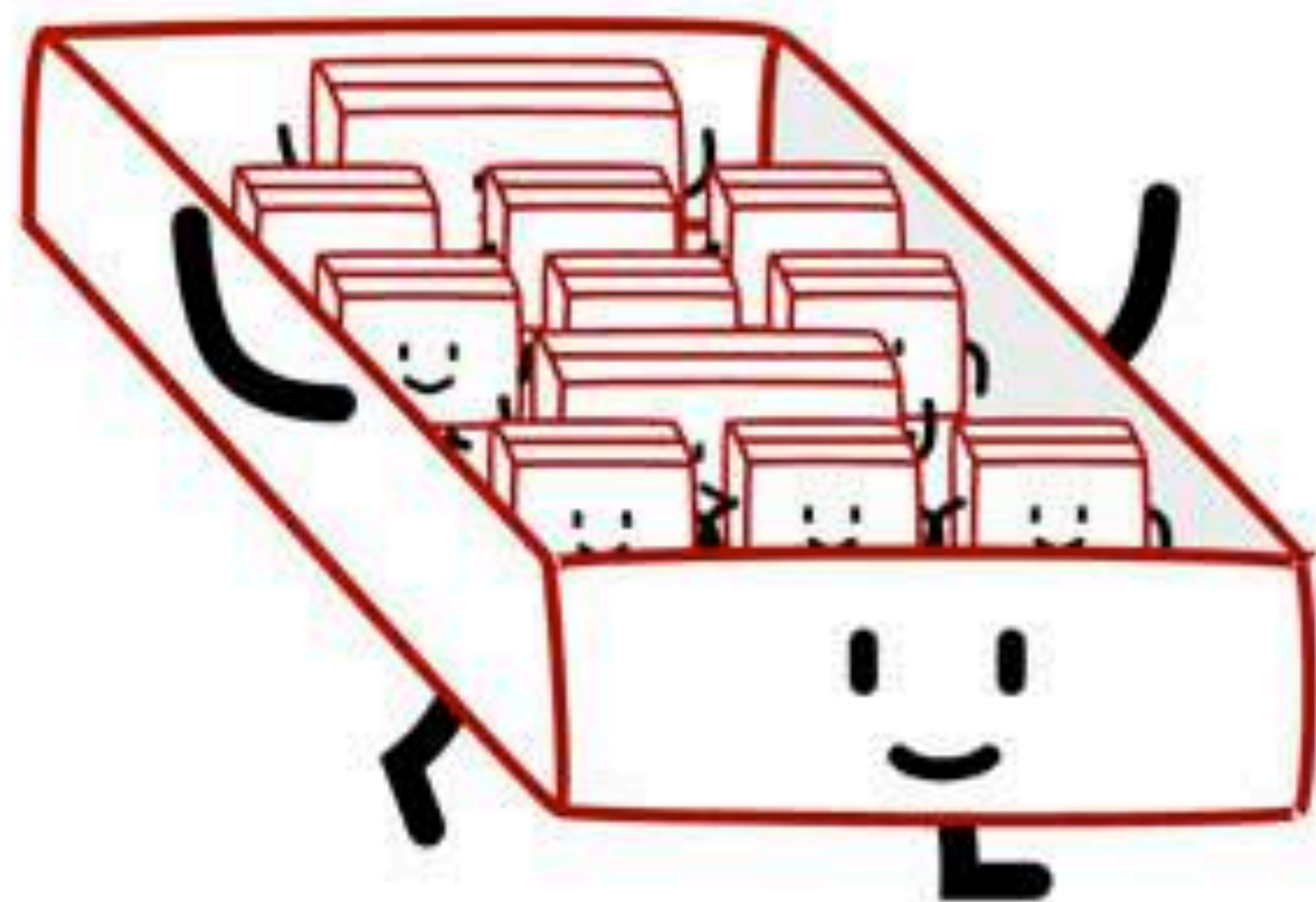
CSS显示模块

CSS Display Module Level 3

内部显示类型

Inner display type

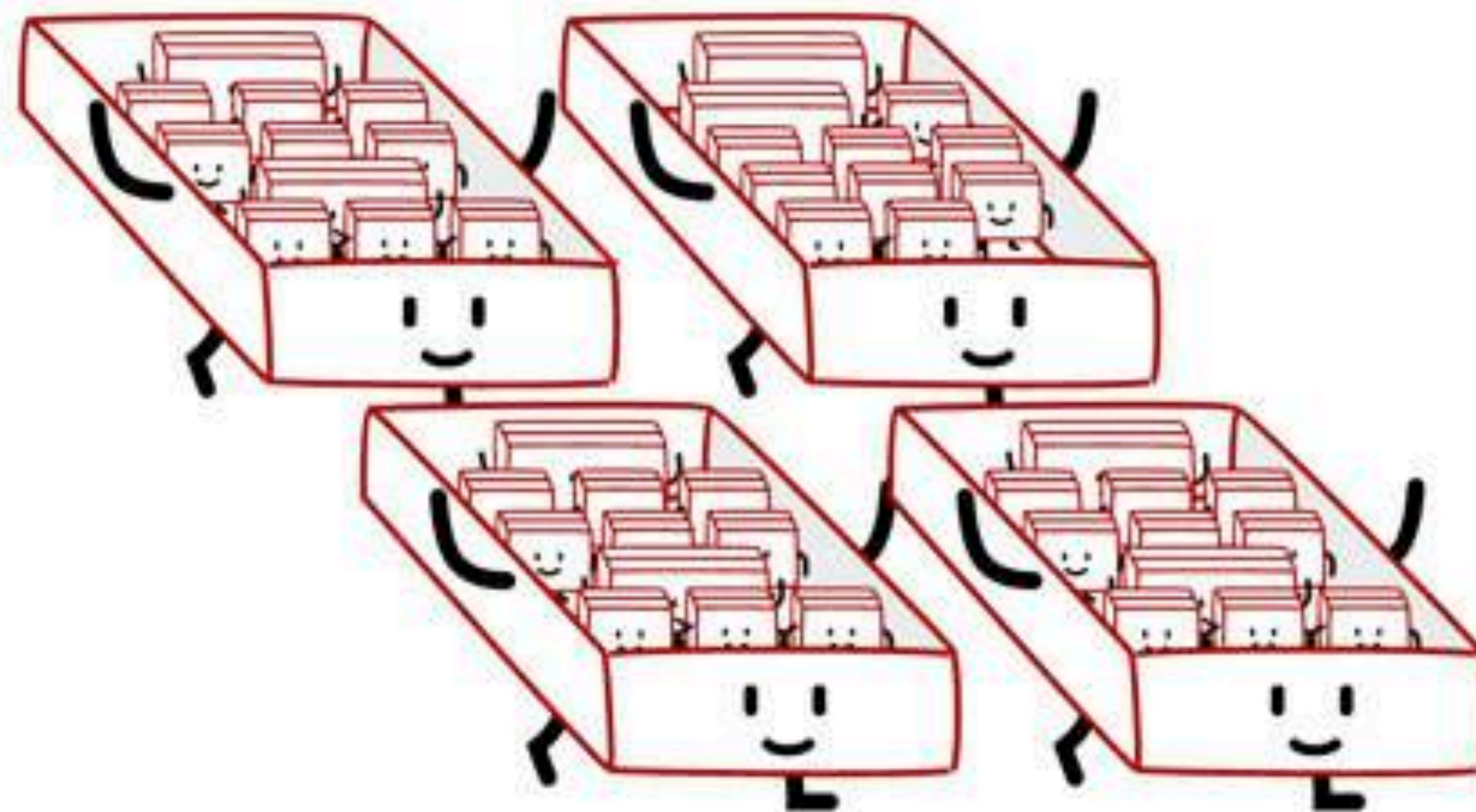
定义了元素内子元素的布局方式



外部显示类型

Outer display type

定义了元素怎样参与流式布局的处理



简写 Short display	全称 Full display	生成盒子 Generated box
none	—	subtree omitted from box tree
contents	—	element replaced by content in box tree
table	block table	block-level table wrapper box containing table box
inline-table	inline table	inline-level table wrapper box containing table box
list-item	block flow list-item	block box with additional marker box
inline list-item	inline flow list-item	inline box with additional marker box
run-in	run-in flow	run-in box (inline box with special box-tree-munging rules)
flex	block flex	block-level flex container
inline-flex	inline flex	inline-level flex container

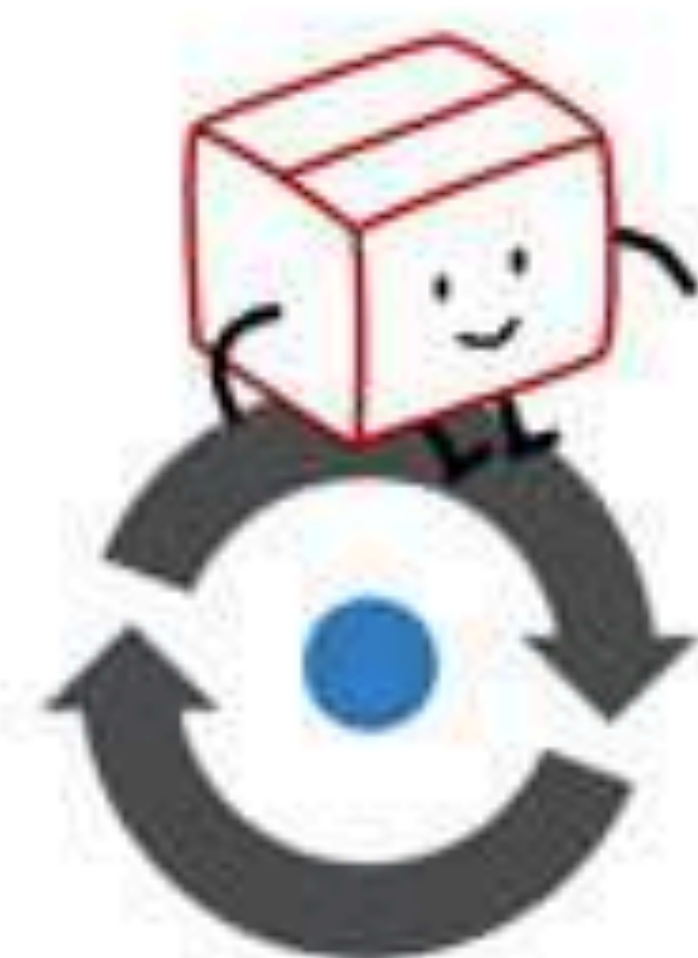
简写 Short display	全称 Full display	生成盒子 Generated box
ruby	inline ruby	inline-level ruby container
block ruby	block ruby	block box containing ruby container
grid	block grid	block-level grid container
inline-grid	inline-grid	inline-level grid container
block	block flow	block-level block container
flow-root	block flow-root	block-level block container that establishes a new block formatting context (BFC)
inline	inline flow	inline box
inline-block	inline flow-root	inline-level block container

Flex简写及关键字

```
[ <'flex-grow'> <'flex-shrink'>? || <'flex-basis'> ]
```

<code>flex: initial</code>	<code>flex: 0 1 auto</code> 不能生长，但是缺乏空间时可以缩小
<code>flex: auto</code>	<code>flex: 1 1 auto</code> 依照可用空间平均伸缩
<code>flex: none</code>	<code>flex: 0 0 auto</code> 完全不伸缩，简直是僵化
<code>flex: <positive-number></code>	<code>flex: <positive-number> 1 0</code> 能屈能伸，属性值断定生长的比例

自动margin是你的好友



```
.automargin {  
  display: flex;  
}  
  
.automargin div {  
  margin: auto;  
}
```


自动margin是你的好友

首页

动态

话题

活动

登录 · 注册

```
.navbar ul {  
  display: flex;  
}  
  
.navbar li:last-child {  
  margin-left: auto  
}
```


为什么块格式自动margin不垂直居中元素？

“ If both margin-left and margin-right are auto, their used values are equal, causing horizontal centring. ”

—CSS2 Visual formatting model details: 10.3.3

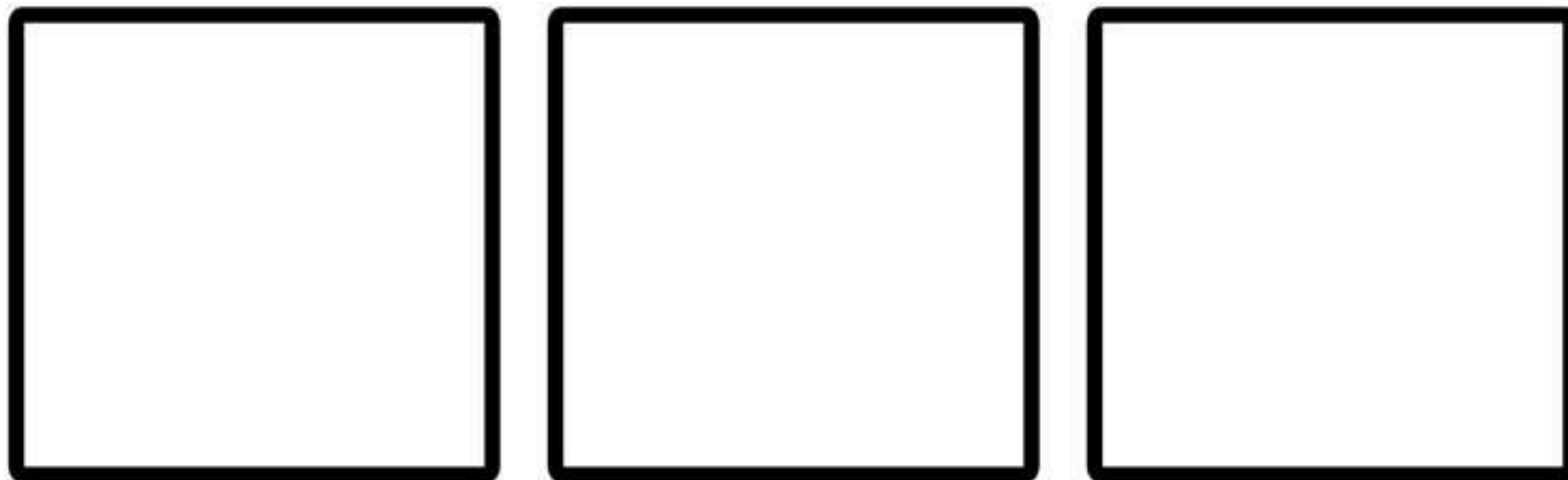
“ If margin-top, or margin-bottom are auto, their used value is 0. ”

—CSS2 Visual formatting model details: 10.6.3

容器—项目的「父子」关系

Flex/Grid 容器

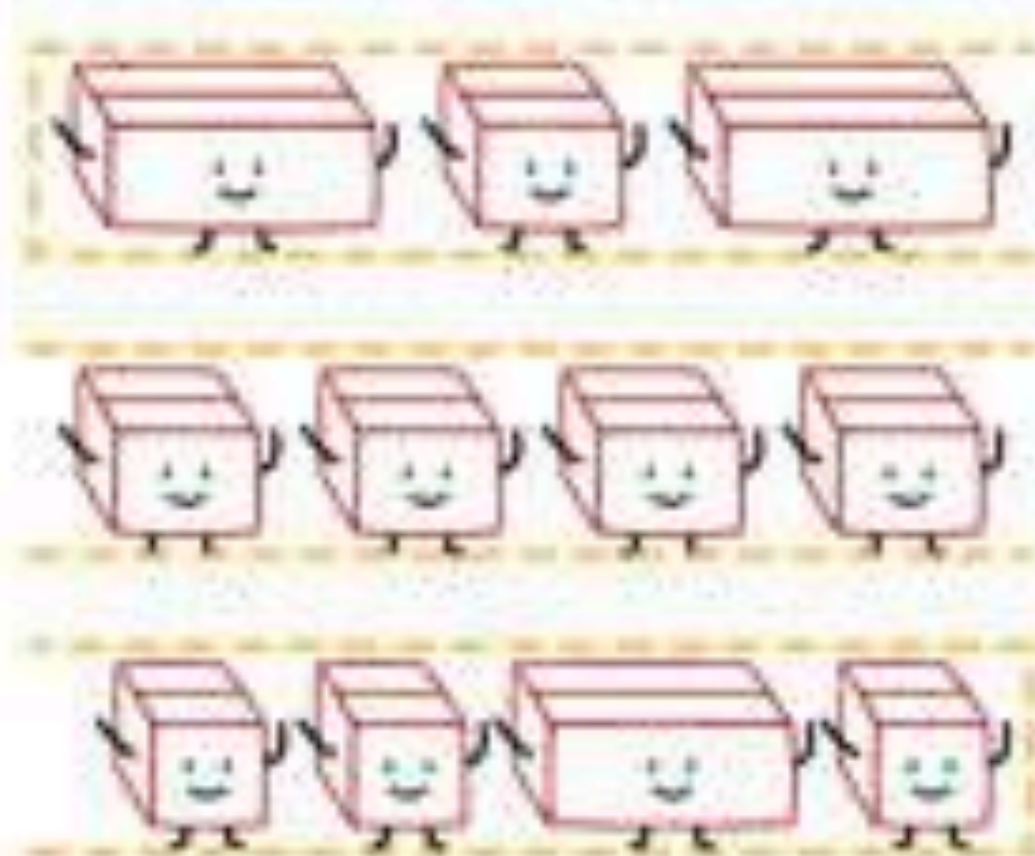
Flex/Grid 项目



CSS盒式对齐模块

CSS Box Alignment Level 3

Flexbox



- align-content
- justify-content
- align-items
- align-self

justify-items/justify-self 在flex项目
是用不上的。

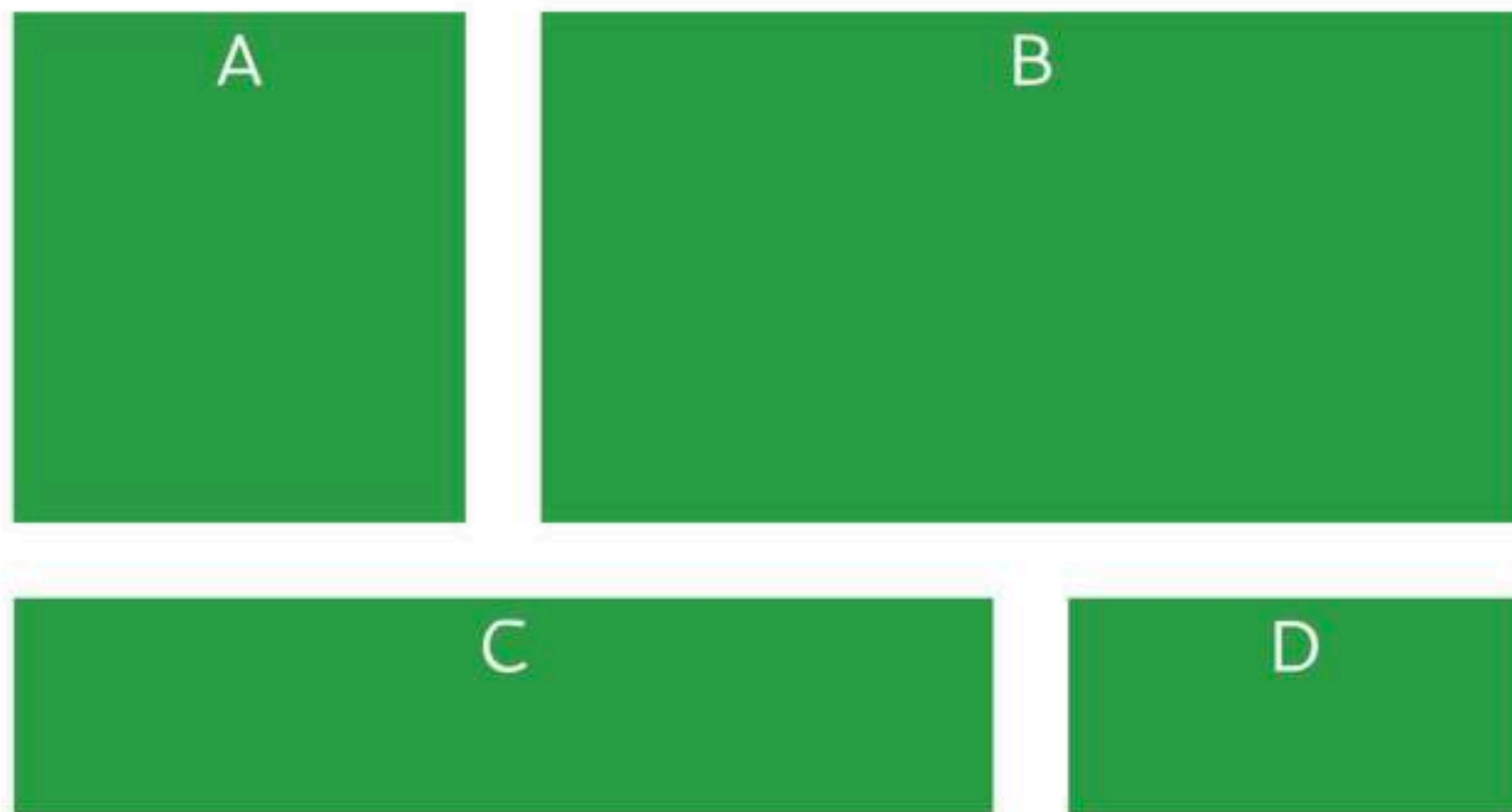
Grid



- align-content
- justify-content
- align-items
- align-self
- justify-items
- justify-self



justify-content 和 align-content



```
.gridcontent {  
  justify-content: end;  
  align-content: center;  
  
  display: grid;  
  grid-template-columns: repeat(3,  
25%);  
  grid-template-rows: repeat(3,  
20%);  
  grid-gap: 1em;  
  grid-template-areas:  
    "a b b"  
    "a b b"  
    "c c d";  
}
```




justify-content 和 align-content

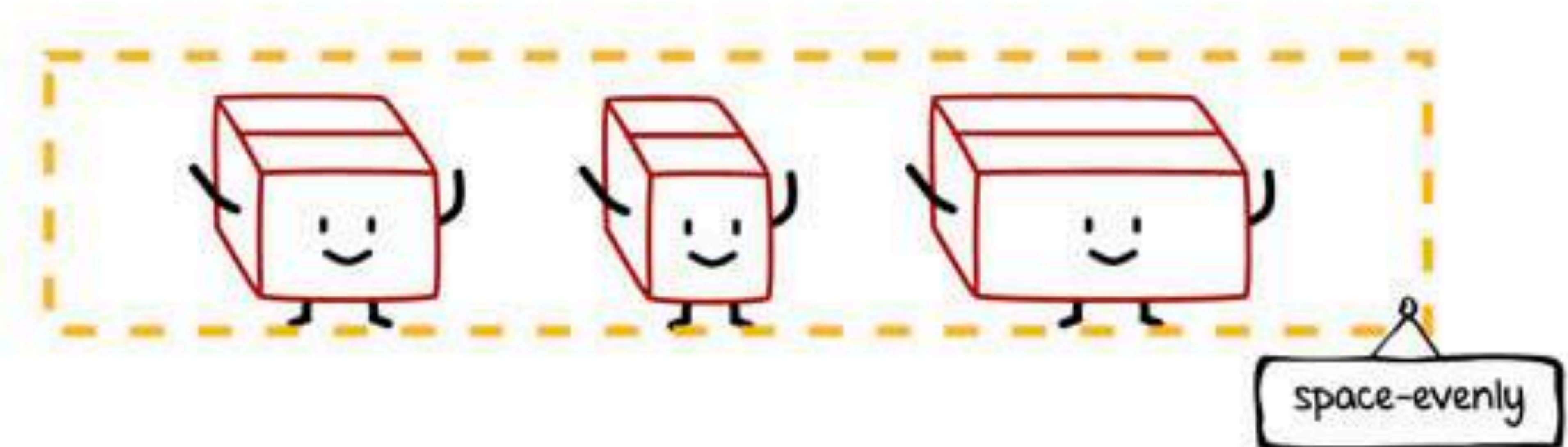
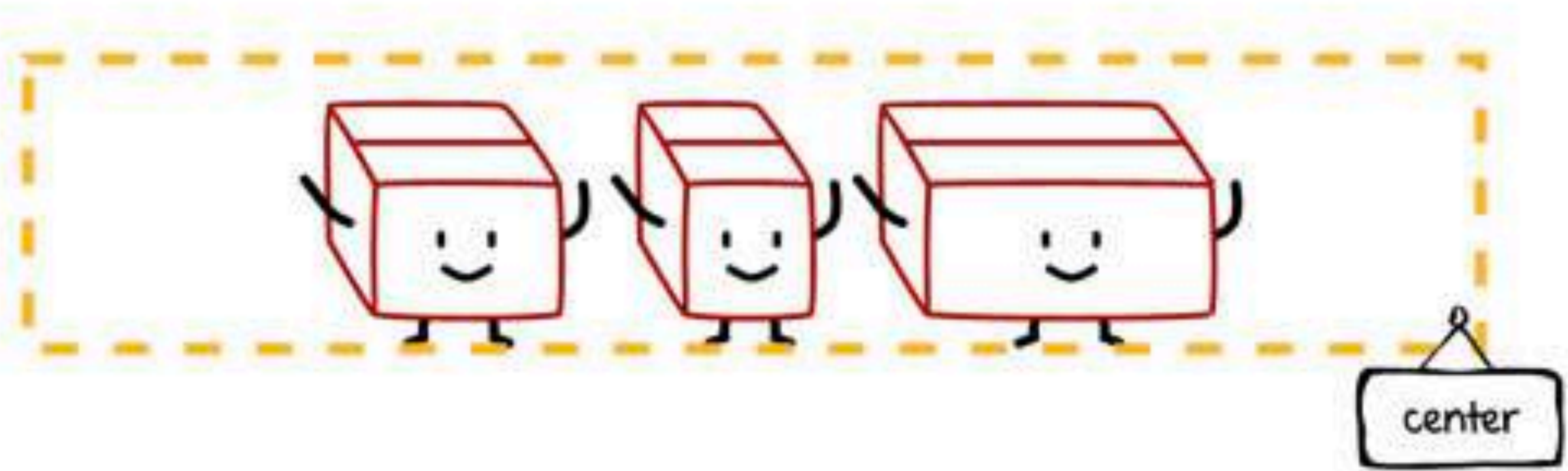
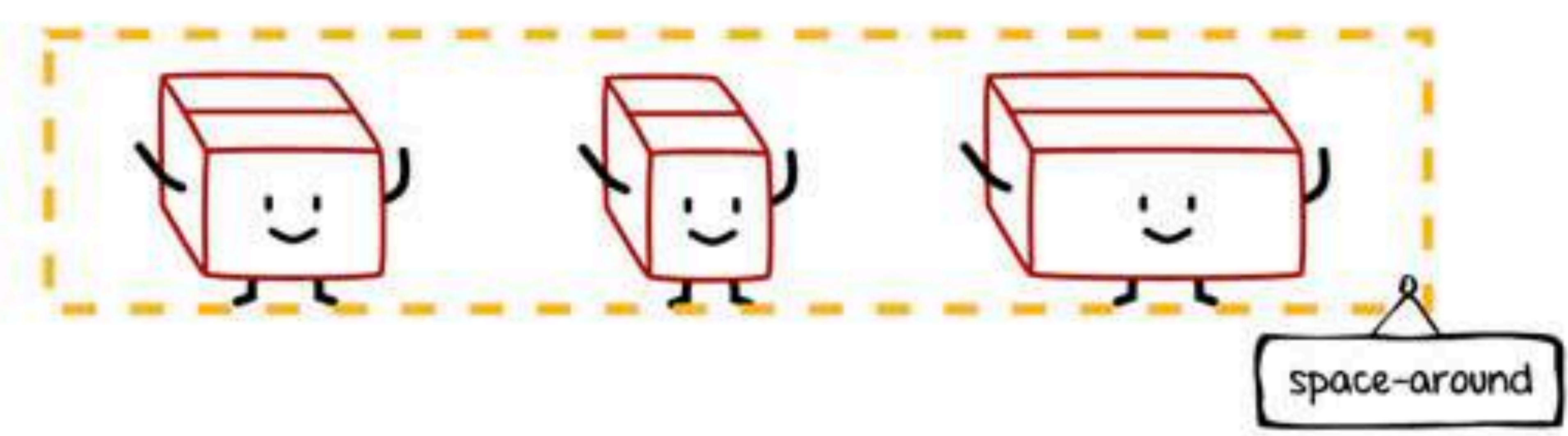
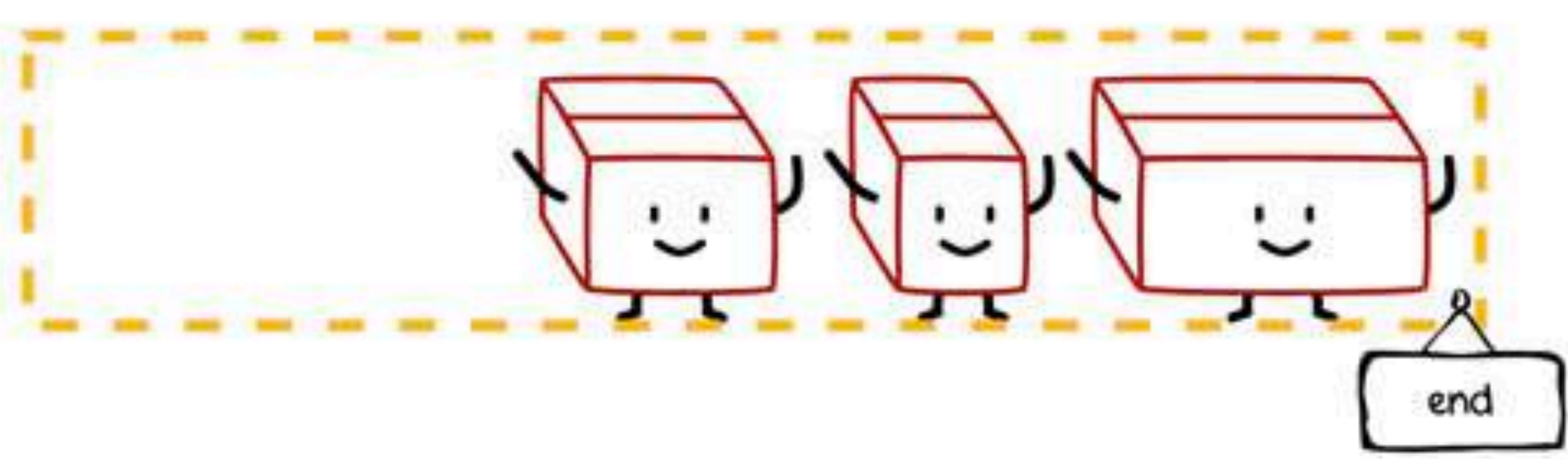
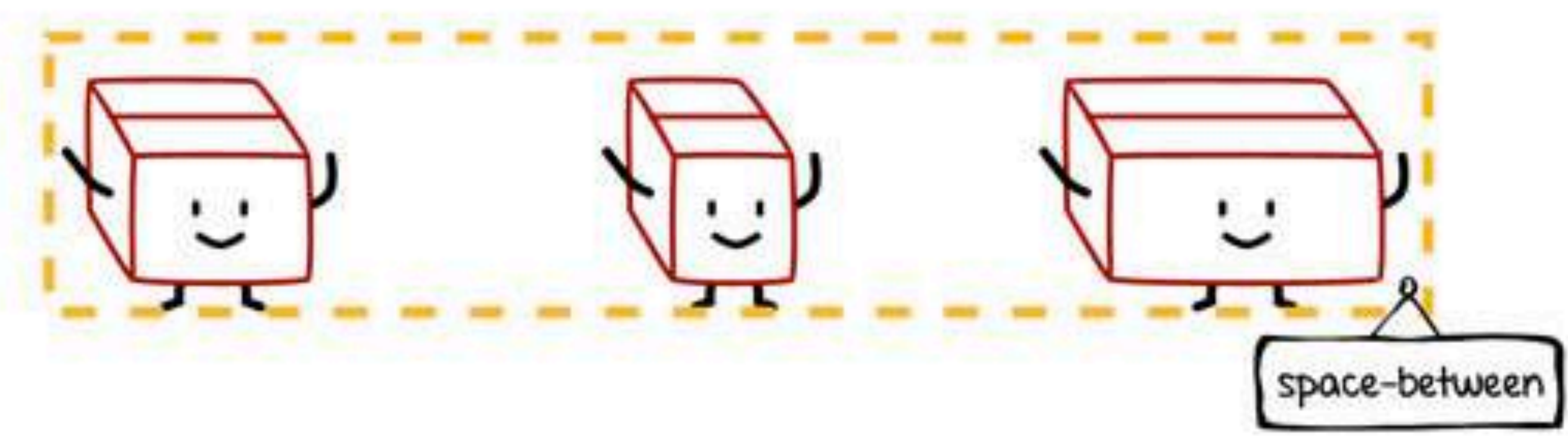
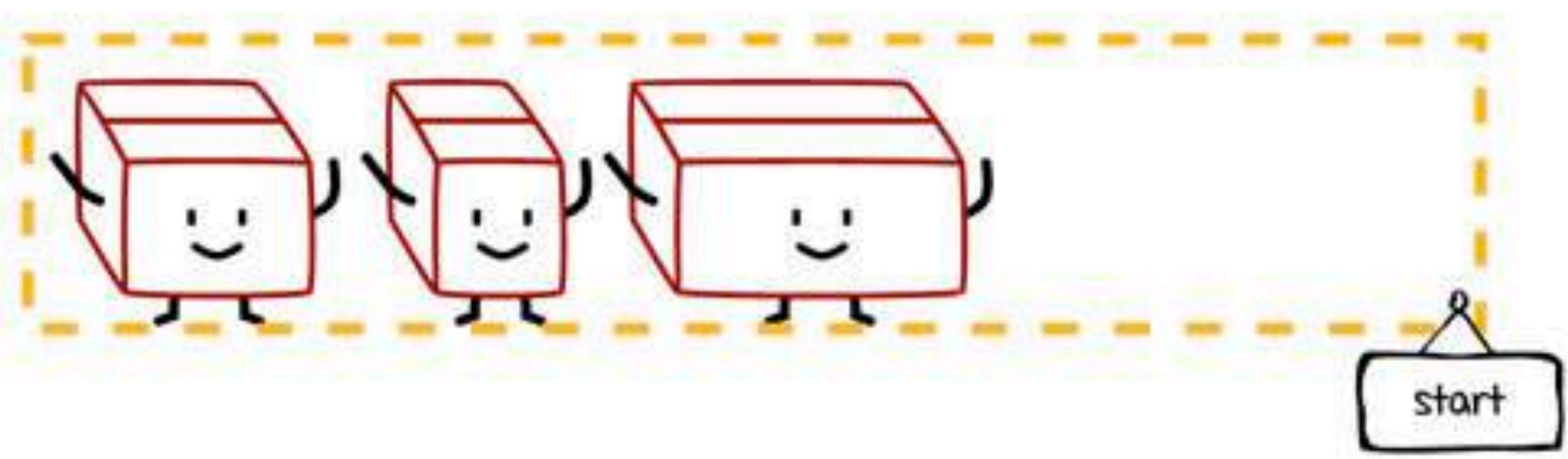
1一	2二	3三	4四	5五	6六	7七	8八
----	----	----	----	----	----	----	----

9九	10十	11十一	12十二	13十三	14十四	15十五	16十六
----	-----	------	------	------	------	------	------

17十七	18十八	19十九	20二十
------	------	------	------

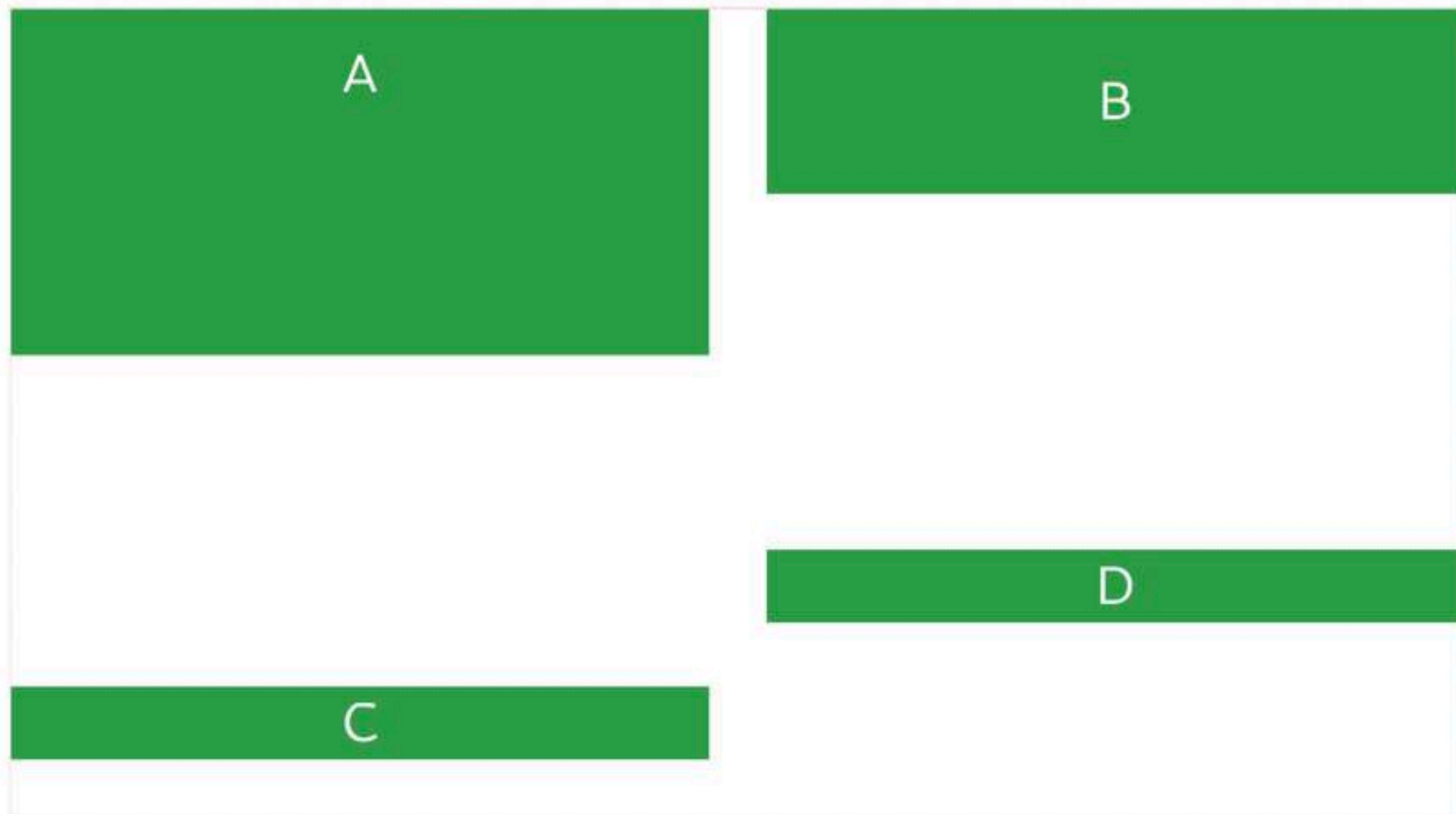
```
.flexcontent .wrapper {  
  display: flex;  
  flex-wrap: wrap;  
  justify-content: end;  
  align-content: space-evenly;  
  height: 70vh;  
}
```

```
.flexcontent .box {  
  height: 3.5em;  
  width: 4.5em;  
  border: 1px solid;  
}
```



justify-self 和 align-self



```
.gridself .box.a {  
  grid-area: a;  
  padding-top: 0.5em;  
  align-self: ;  
}  
  
.gridself .box.b {  
  grid-area: b;  
  padding: 1em;  
  align-self: start;  
  //justify-self: start;  
}  
  
.gridself .box.c {
```





justify-items 和 align-items

A

B

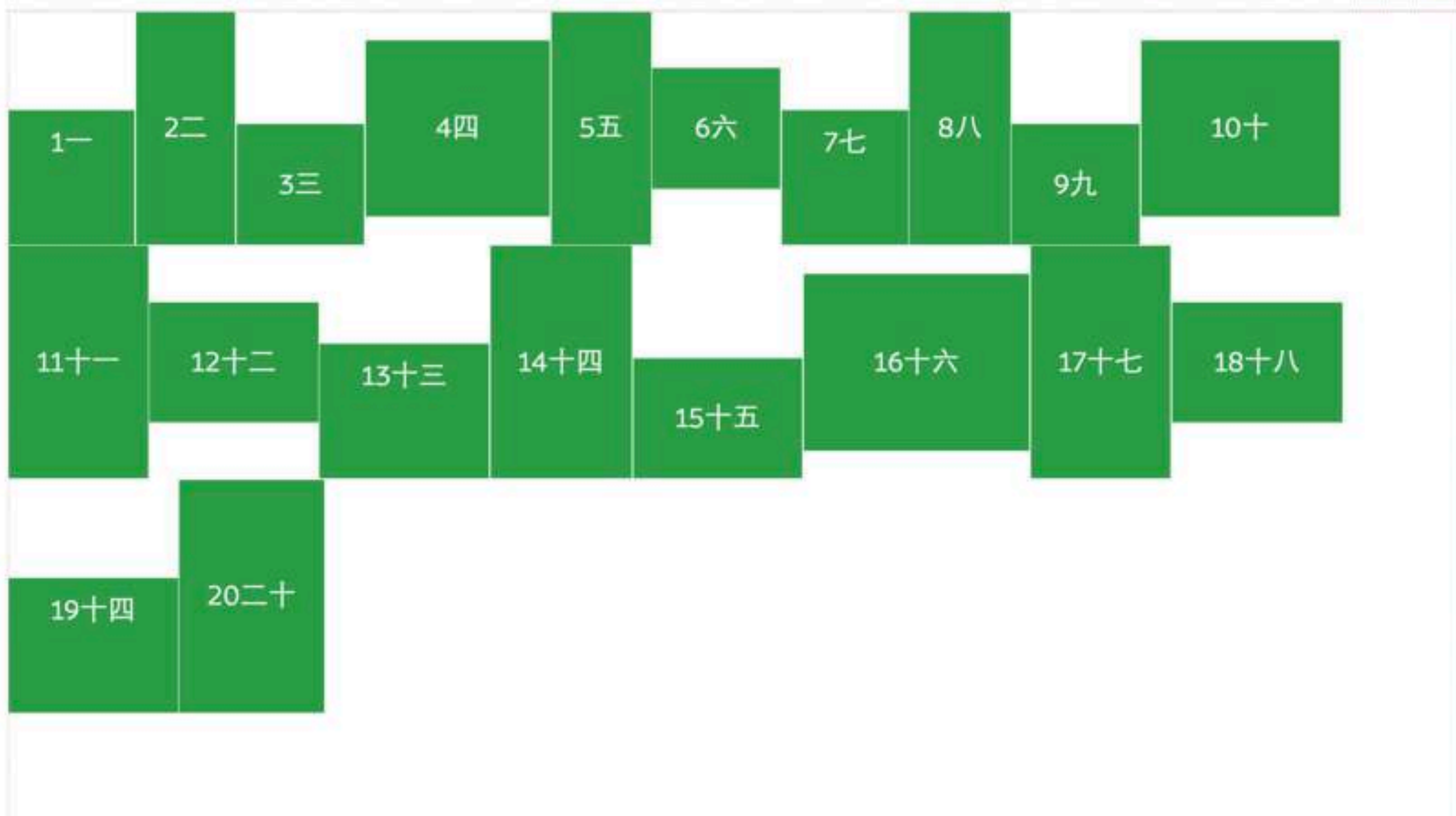
C

D

```
.griditems {  
  justify-items: end;  
  align-items: center;  
  
  display: grid;  
  grid-template-columns:  
repeat(4, 1fr);  
  grid-gap: 1em;  
  grid-auto-rows: calc(25% -  
1em);  
  grid-template-areas:  
    "a a b b"  
    "a a b b"  
    "c c d d"  
    "c c d d";  
}
```

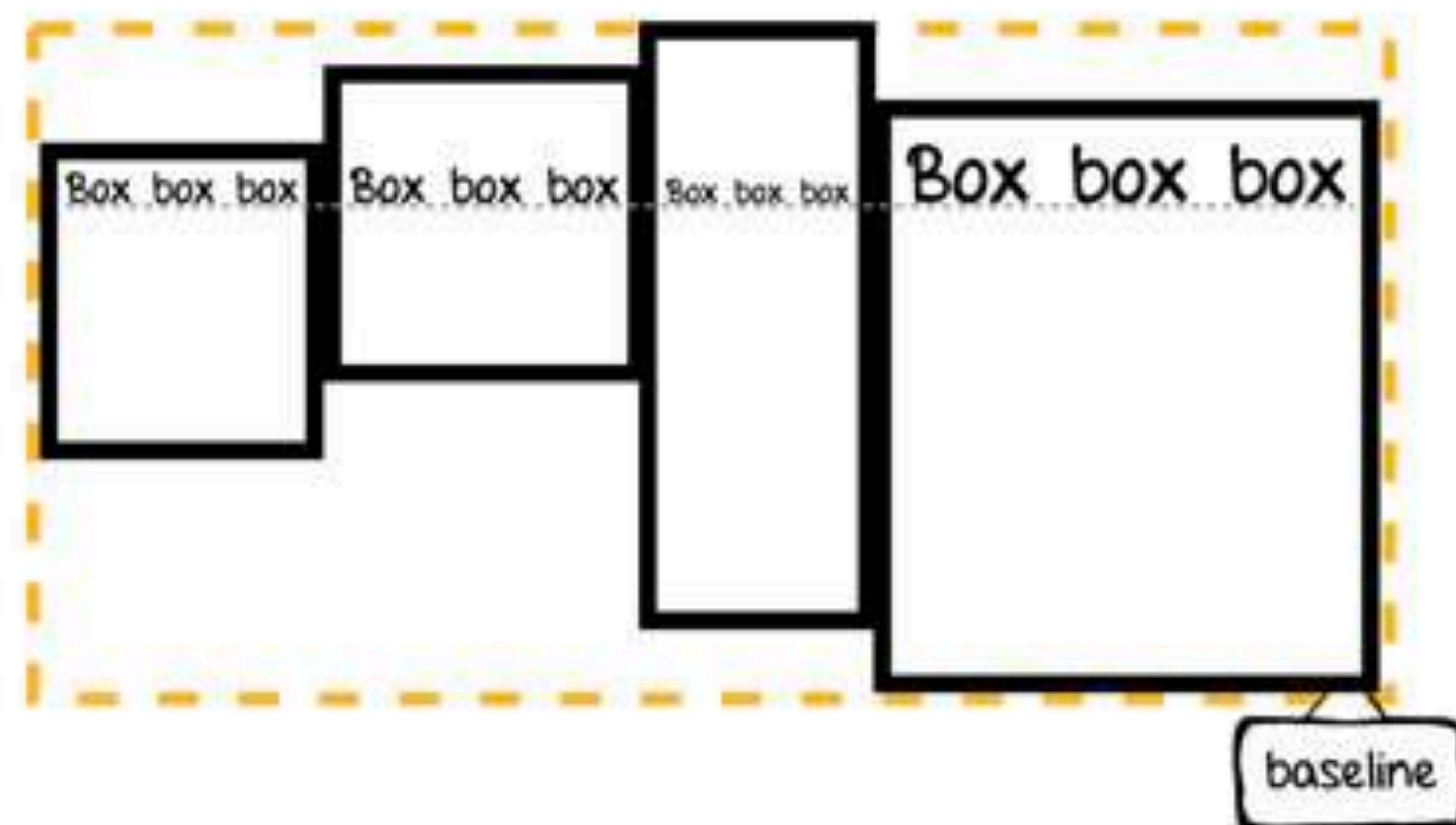
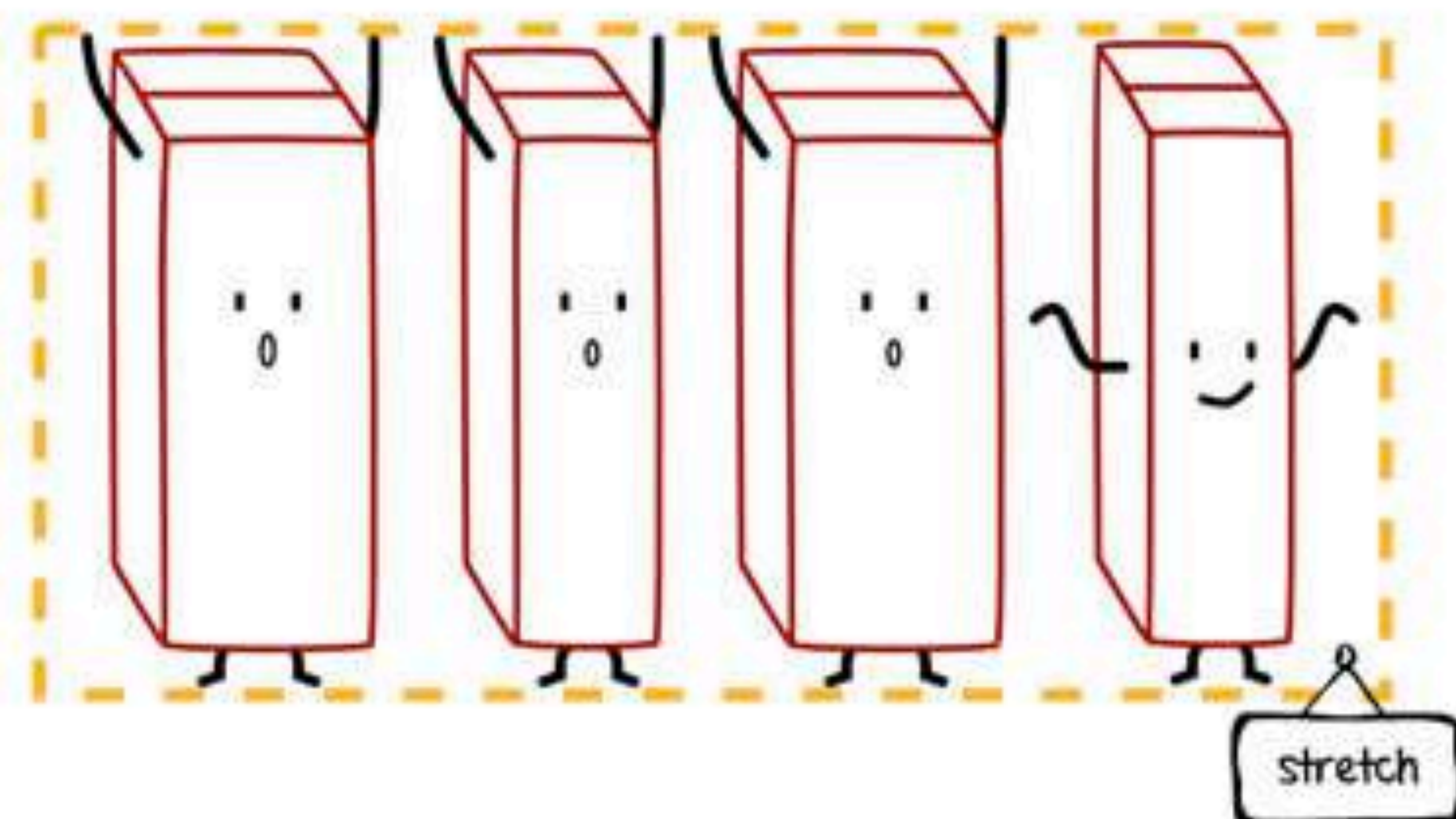
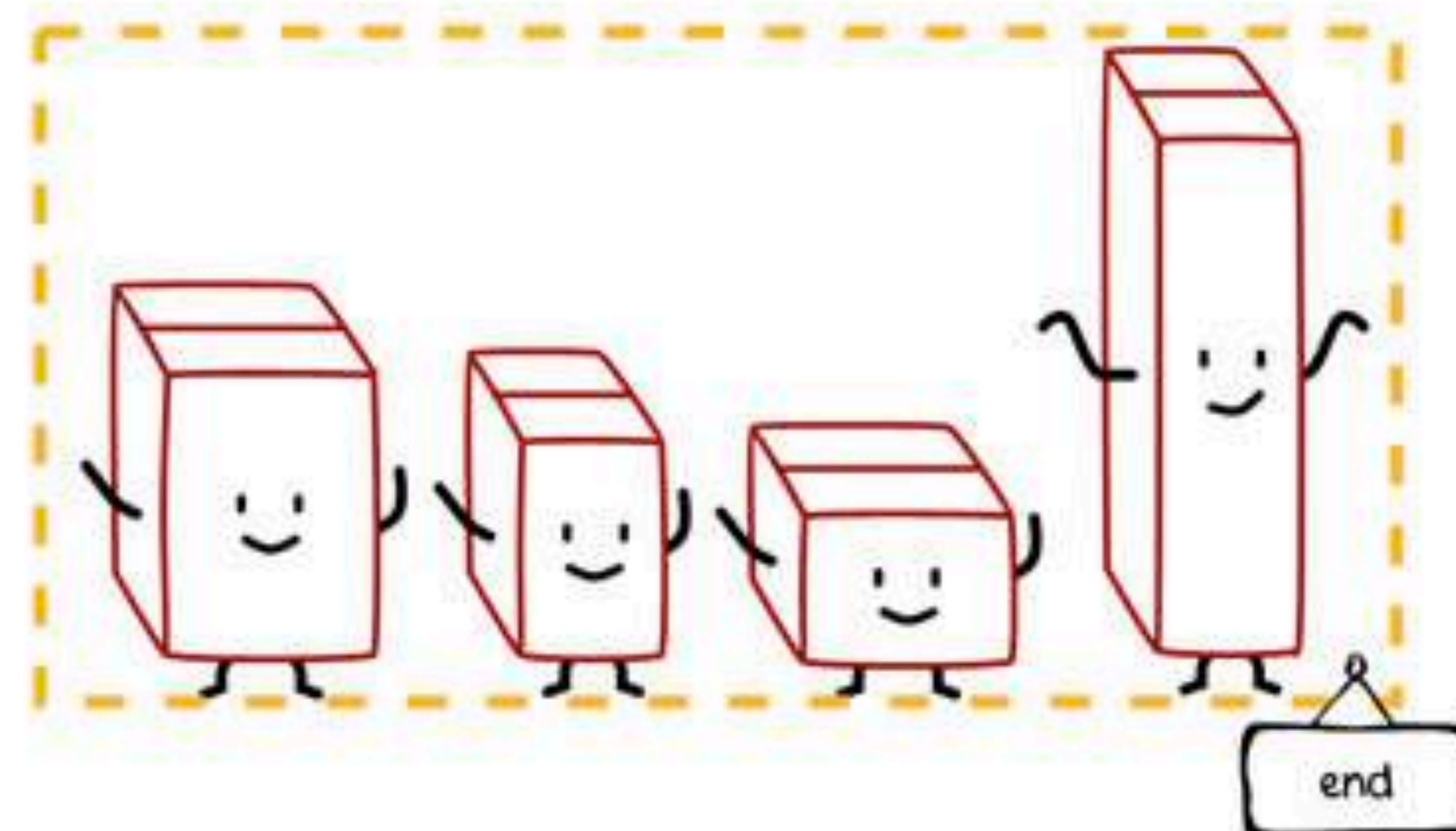
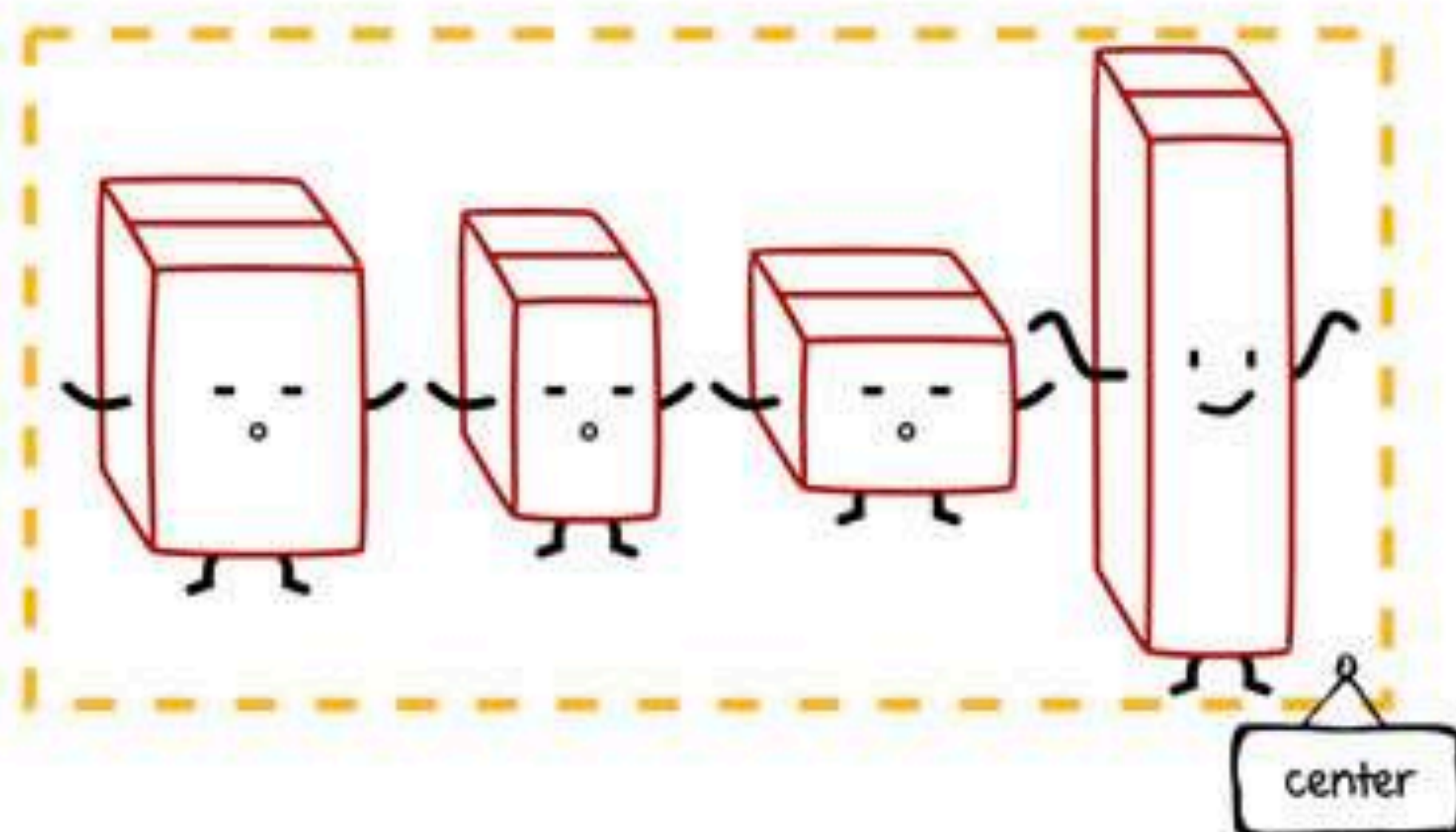
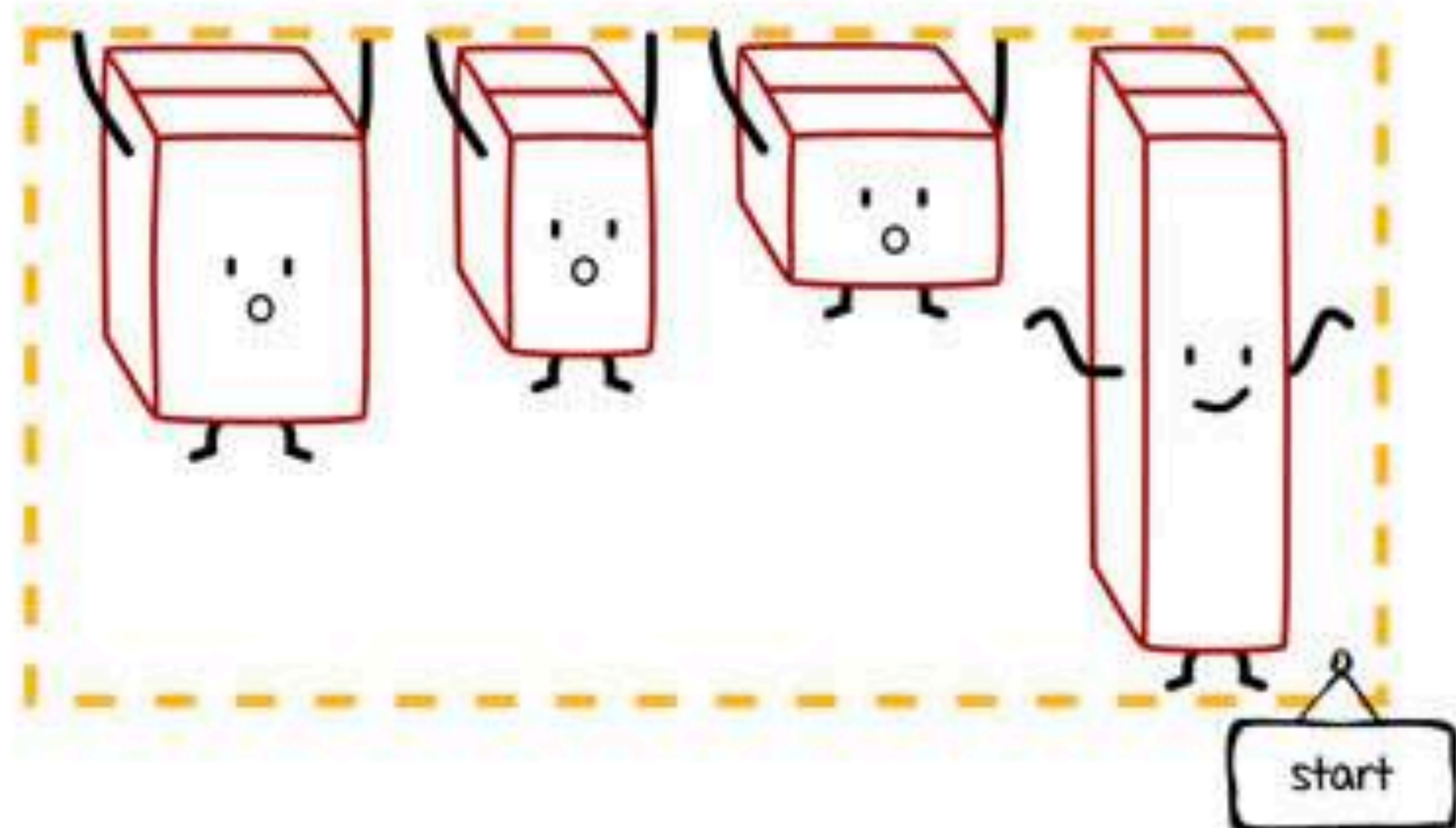



align-items 和 align-self



```
.flexitems .wrapper {  
  display: flex;  
  flex-wrap: wrap;  
  align-items: baseline;  
}  
  
.flexitems .box:nth-  
child(2n+1) {  
  padding: 0.5em 1.5em 3em;  
  align-self: end;  
}  
  
.flexitems .box { border: 1px  
solid }
```





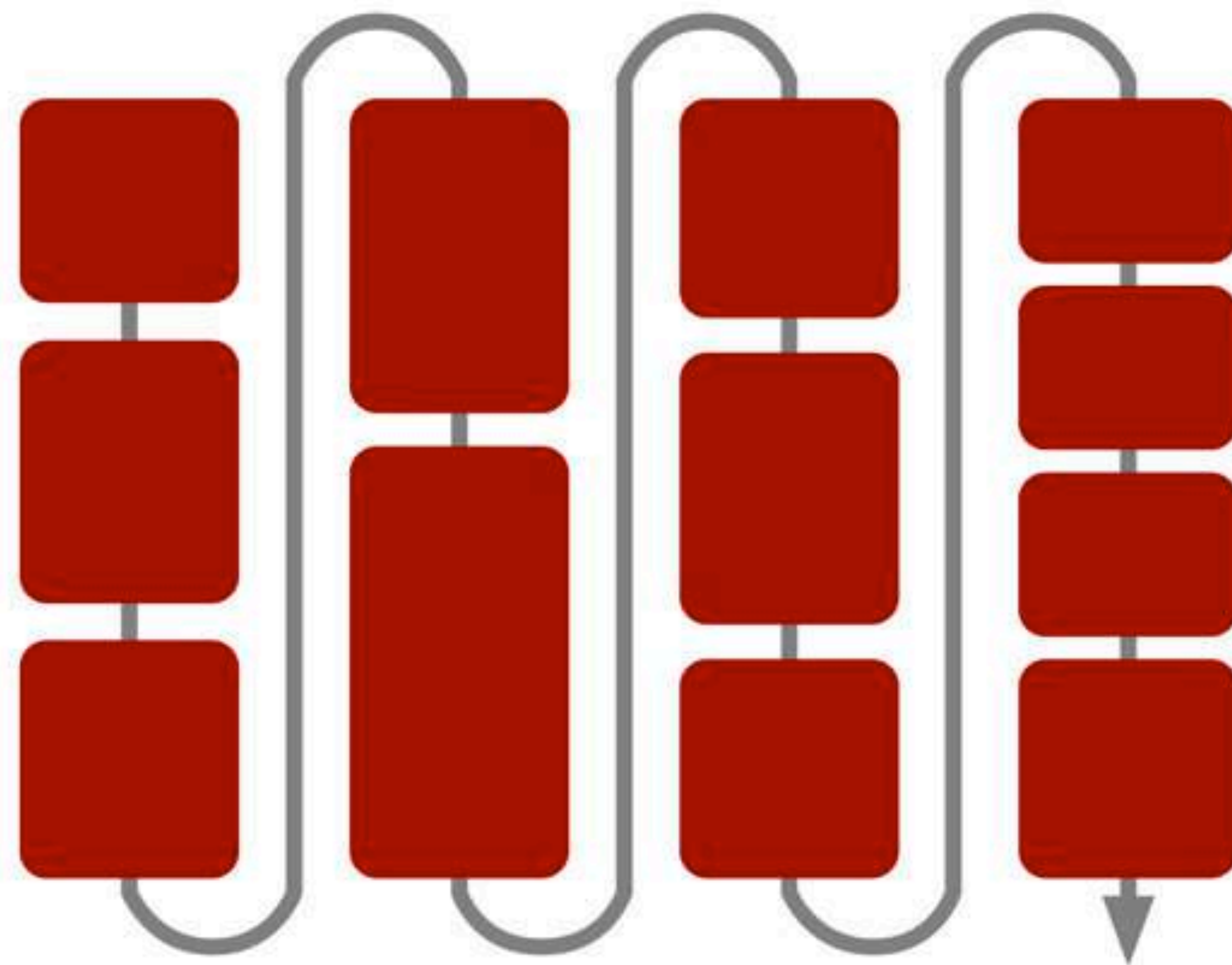
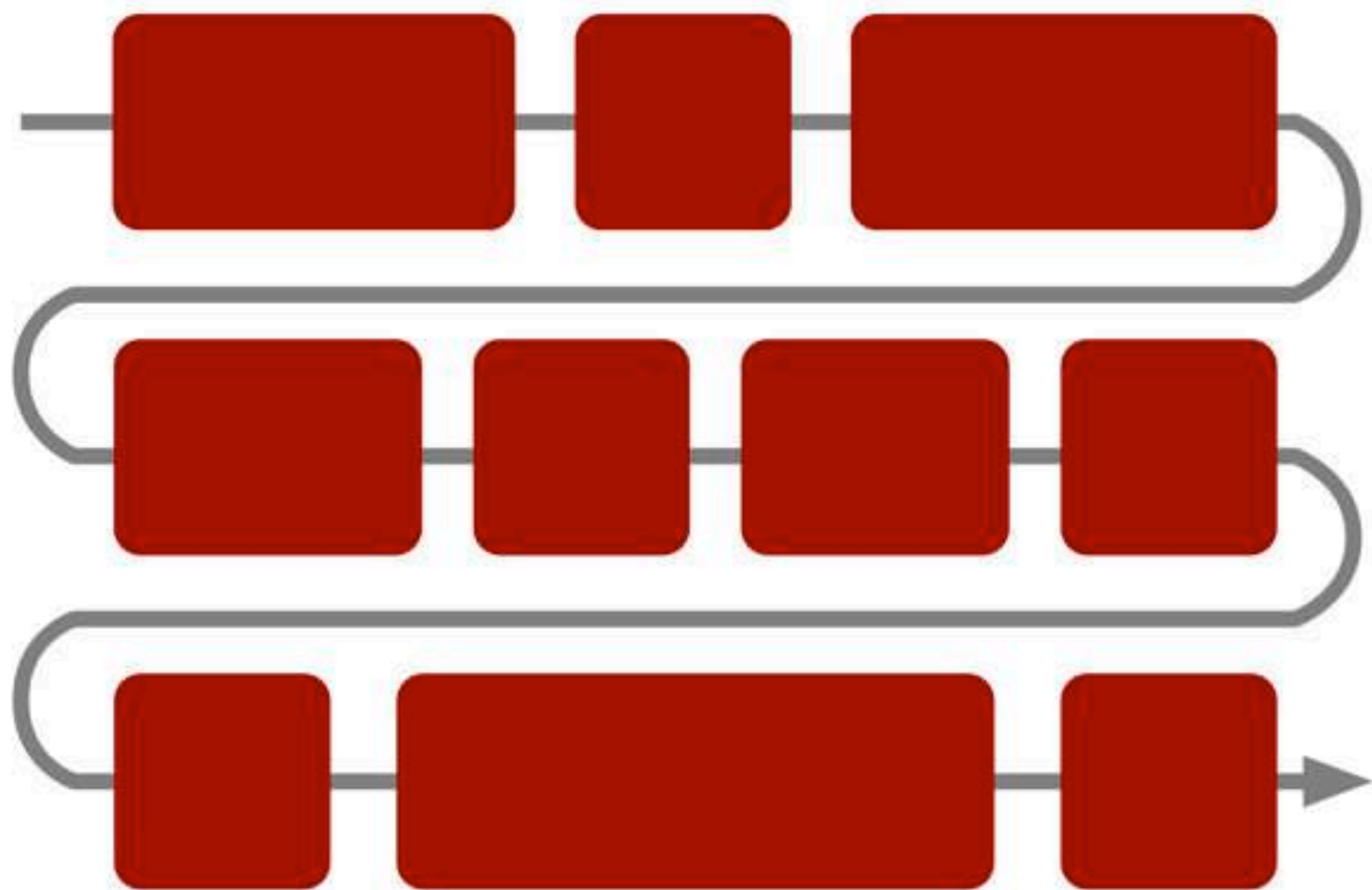
Grid或者Flexbox?



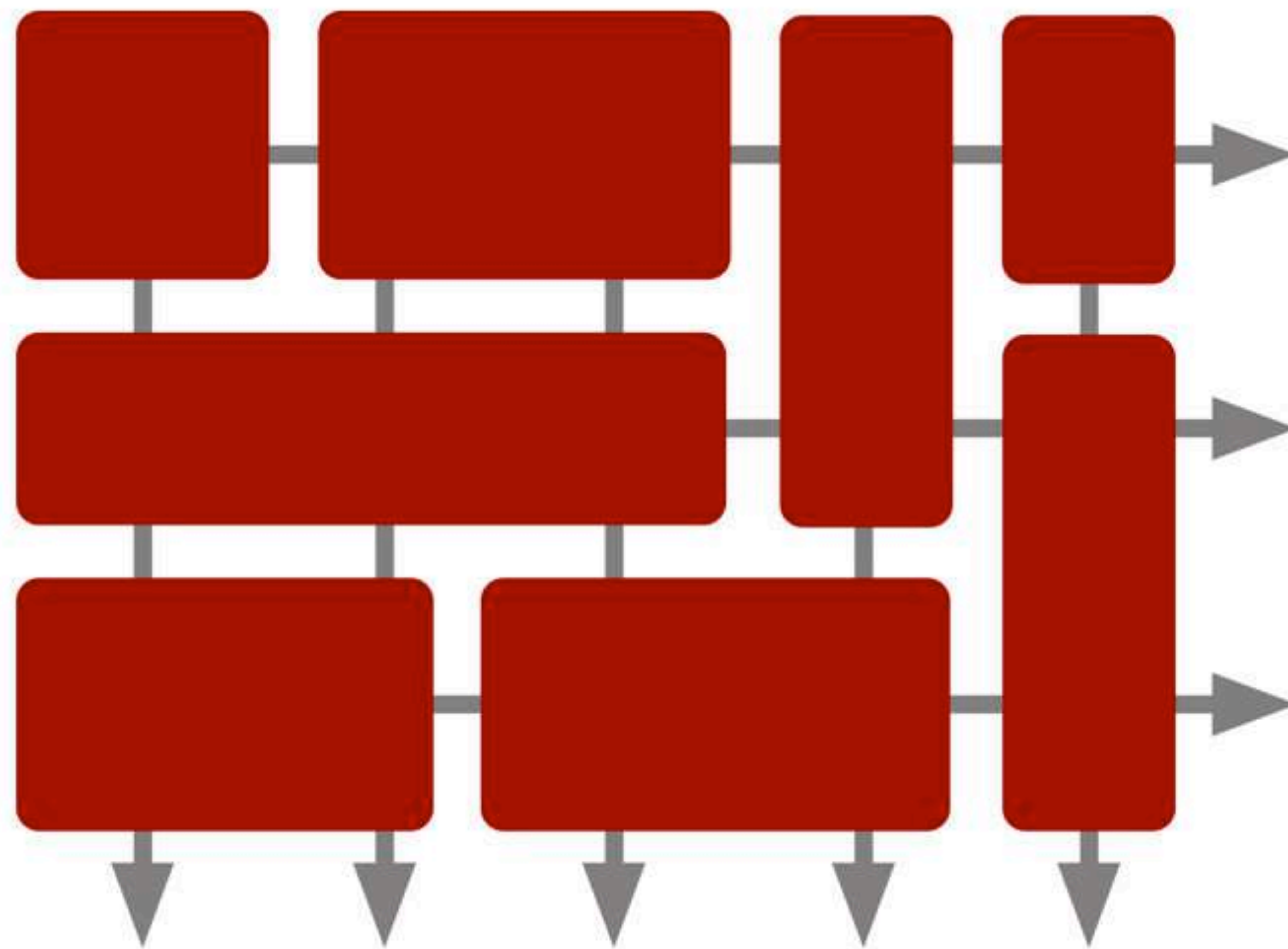
Gridflexbox?

问错了!

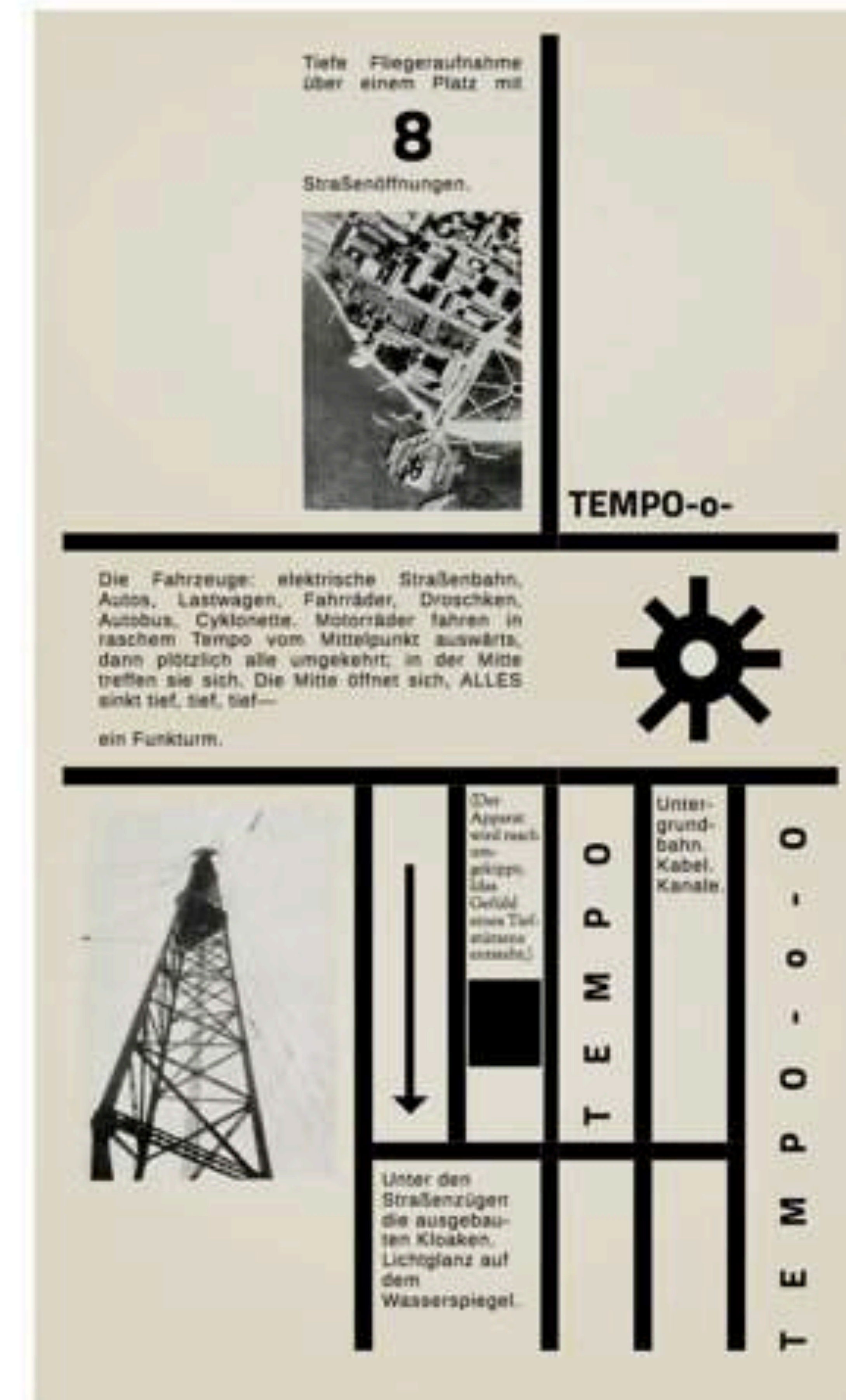
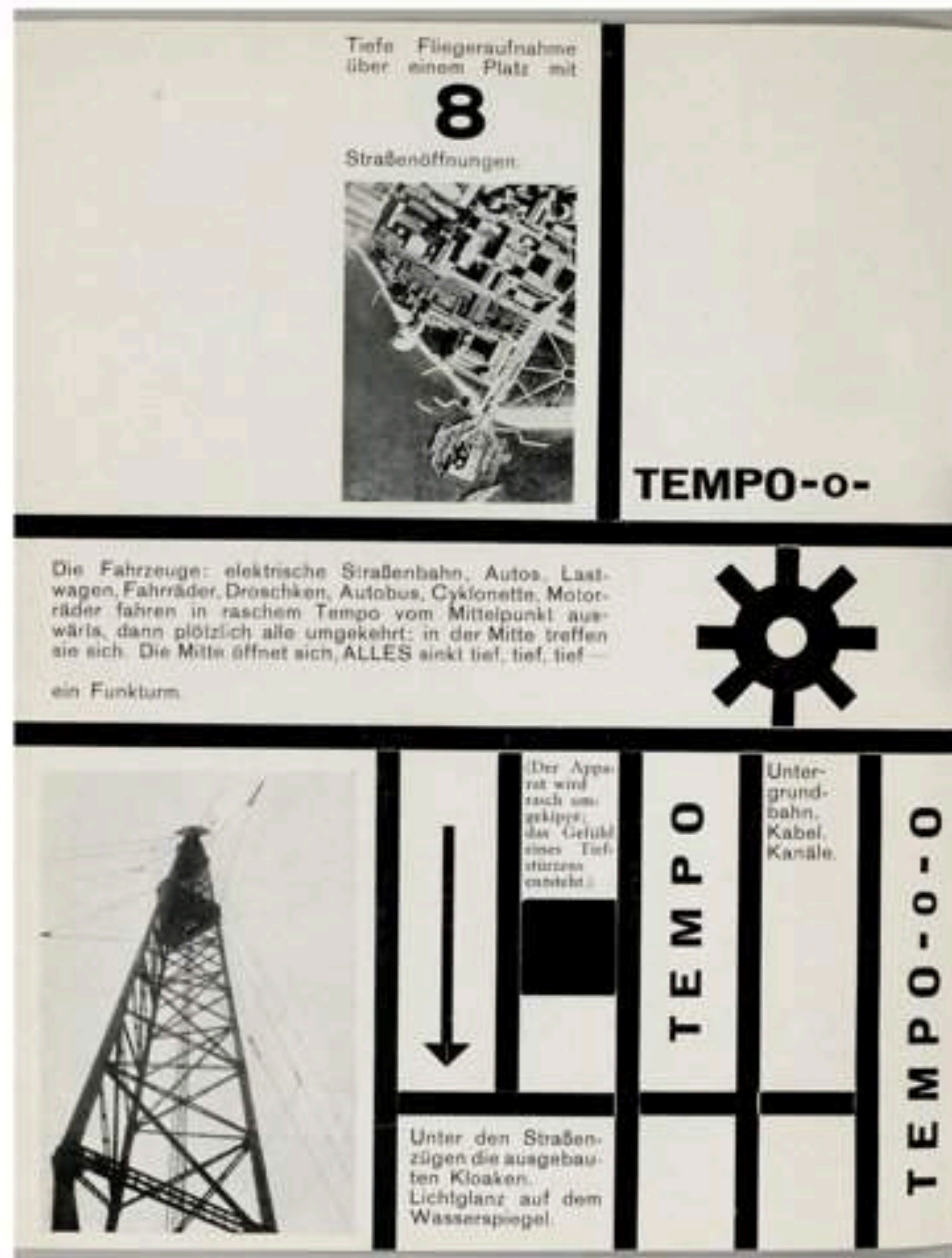
Flexbox (单维)

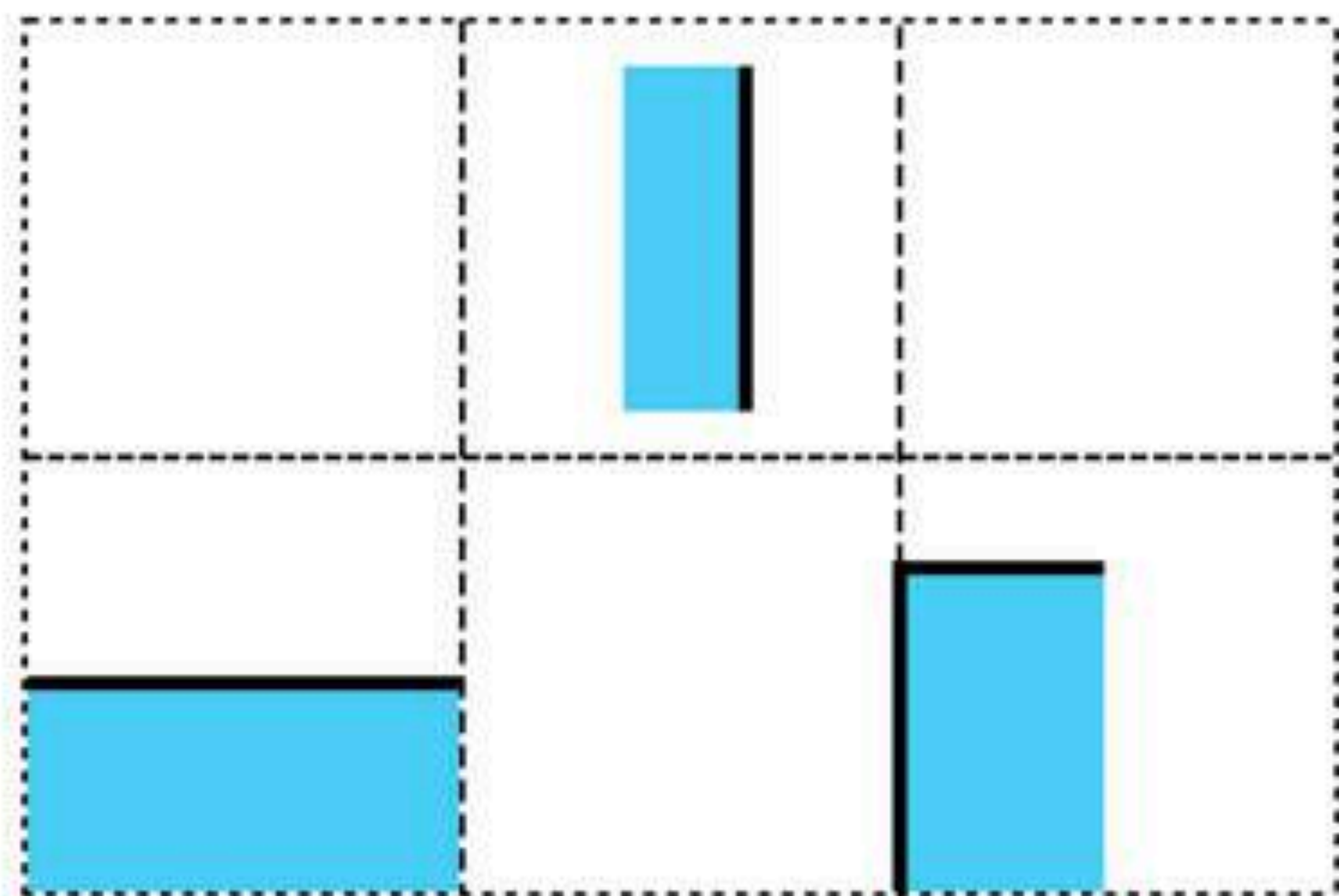


Grid (二维)

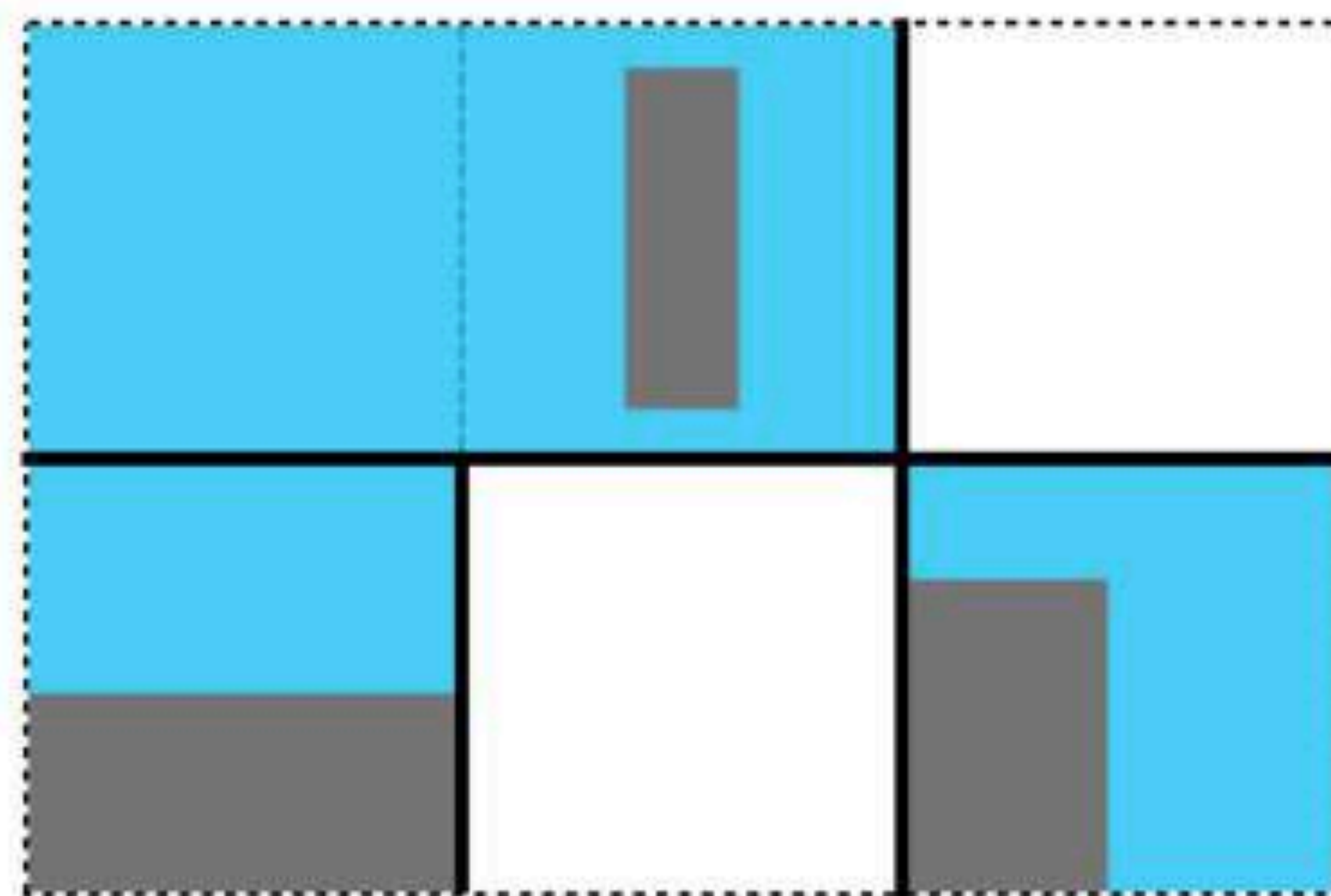


Grid和Flex合作愉快





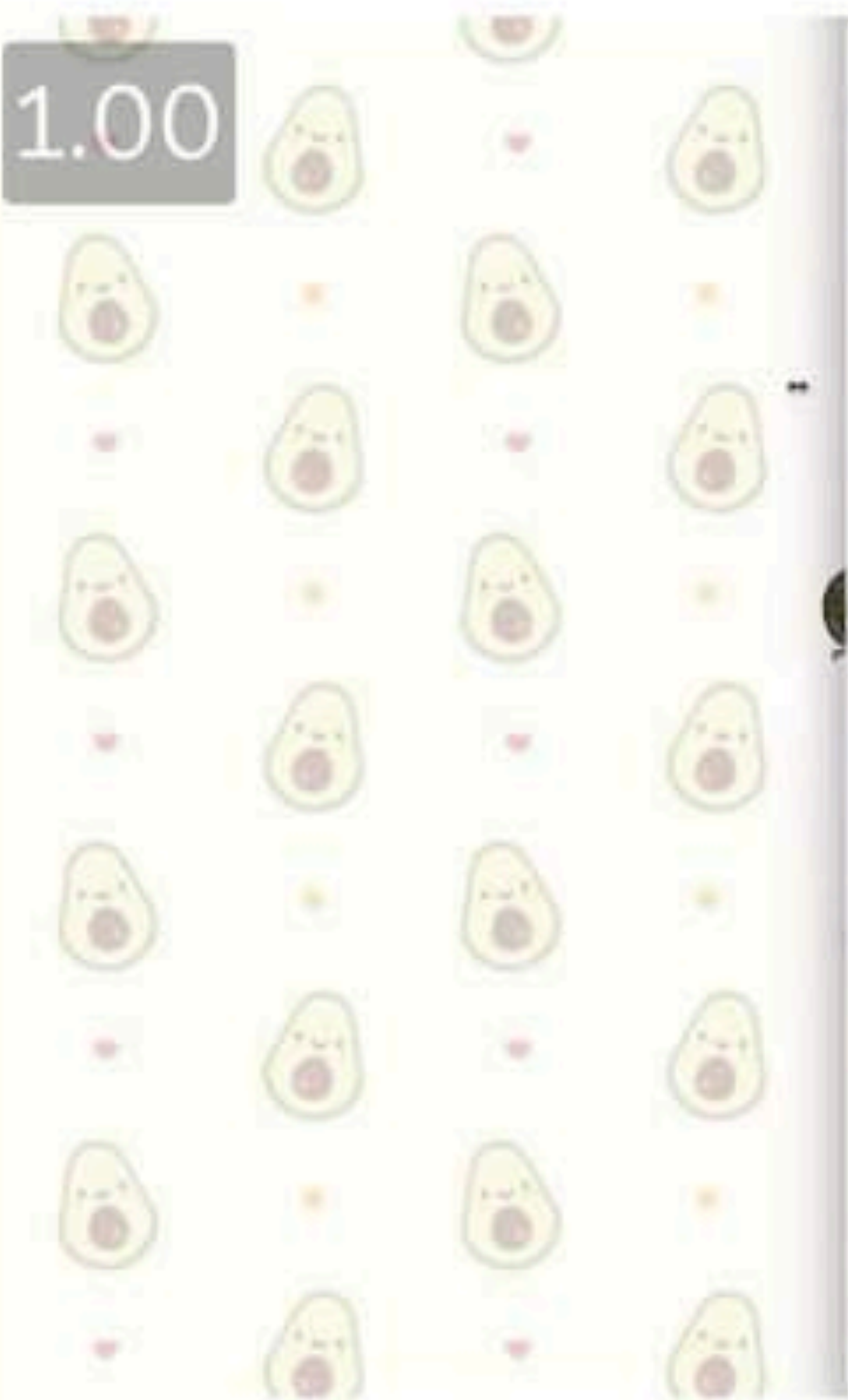
实现失败



这样还差不多

百分比的局限

一致性的伸缩率



1.00



The cutest kitten

Cats are very unique creatures that we've grown to love and enjoy. Because they're so fascinating, it's not surprising that there are many facts about our domestic felines that some may be unaware of. Here we've compiled a list of some facts about cats and kittens that you may not have known!

1. Kittens Can't See & Hear Fully Until 2-3 Weeks Old
2. Kittens Sleep Around 18 Hours Per Day
3. Newborn Kittens Purr
4. Kittens Have a Strong Sense of Smell
5. Kittens Can Be Right or Left-Pawed
6. Kittens Can Fit Their Bodies Anywhere They Can Fit Their Heads
7. A Kitten's Whiskers Are As Long As Their Bodies Are Wide
8. All Kittens Are Born With Blue Eyes
9. Kittens Have 26 Teeth
10. The Average Kitten Litter is 1-9 Kittens

Source: <http://theartcats.com/10-things-you-didnt-know-about-kittens/>

以内容为主的尺寸计算方式

(content-based sizing)

外部尺寸

Extrinsic sizing

以元素的上下文为主，忽视元素内容

这是个含有内容的块格式盒子。

我们可以利用它来理解 extrinsic sizing 的原理。我们把它的宽度设为700px，把高度设为300px。当内容超出可用空间时，就会导致内容溢流的现象。

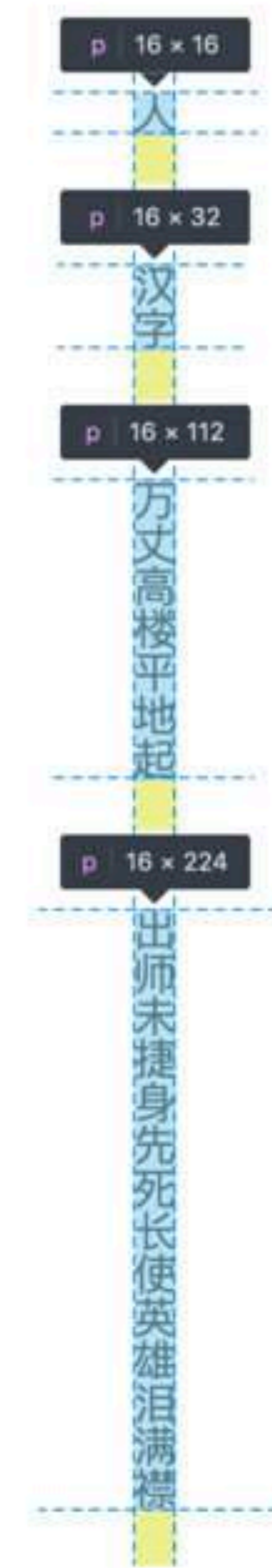
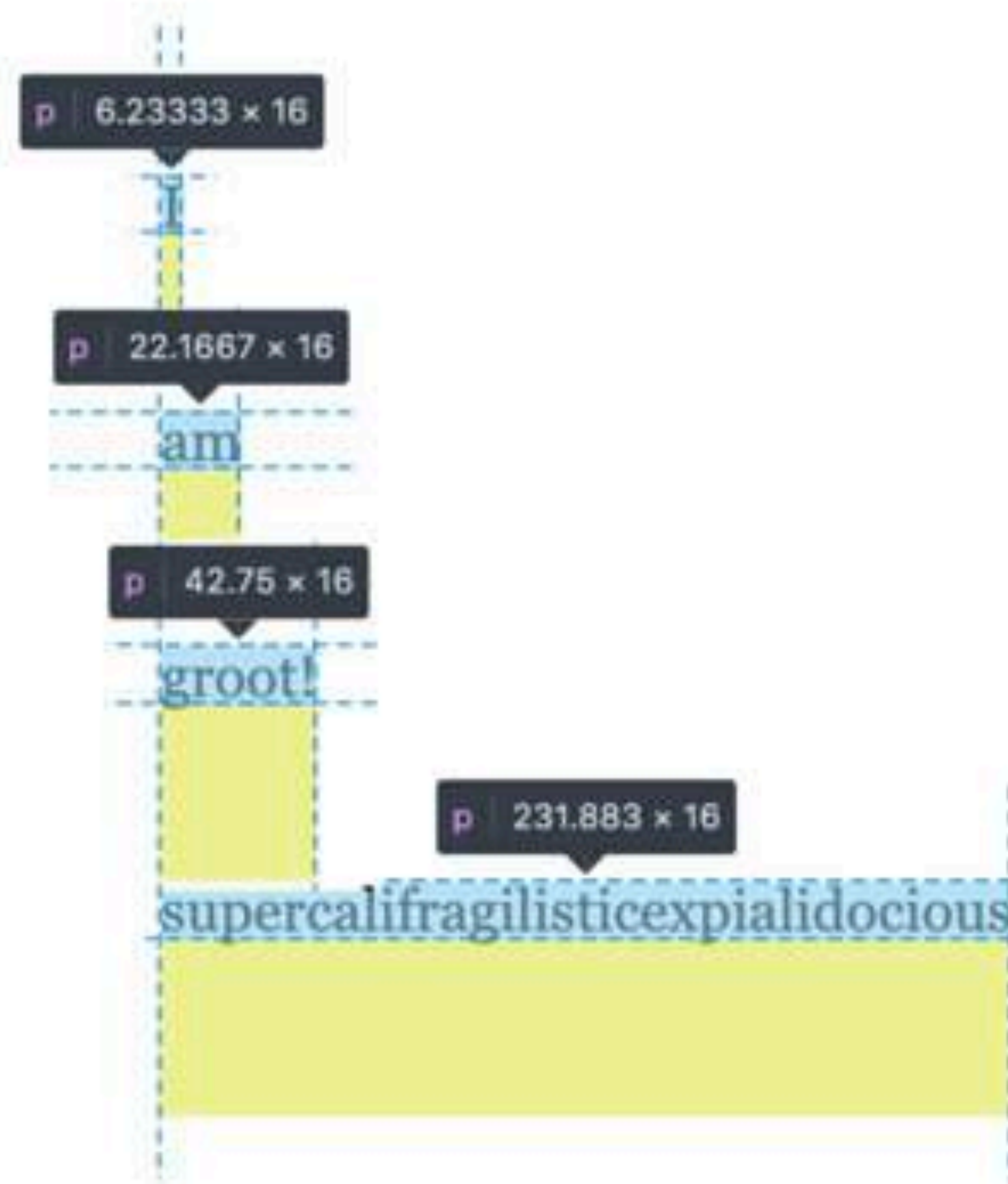
内部尺寸

Intrinsic sizing

以元素的内容为主，忽视元素上下文

用min-content
为width
取值

用max-content为width取值



独特的灵活性尺寸

(flexible sizing)

- fr
- auto
- minmax()
- fit-content()

`fit-content(400px)` 等于 `minmax(auto, max-content)`，但是终宽度不能超出400px。

fr对比auto

绿色: fr, 蓝色: auto



我们仍然对盒子爱不释手	我们仍然对盒子爱不释手	我们仍然对盒子爱不释手
我们仍然对盒子爱不释手	我们仍然对盒子爱不释手	我们仍然对盒子爱不释手
我们仍然对盒子爱不释手	我们仍然对盒子爱不释手	我们仍然对盒子爱不释手
我们仍然对盒子爱不释手	我们仍然对盒子爱不释手	我们仍然对盒子爱不释手

max-content对比固定width

灰色: max-content, 粉红色: 400px



fit-content对比minmax()

橙色: `fit-content(200px)`, 黄色: `minmax(200px, 400px)`



1.00

百分比尺寸



灵活性尺寸



The Liberation of Florence Welch

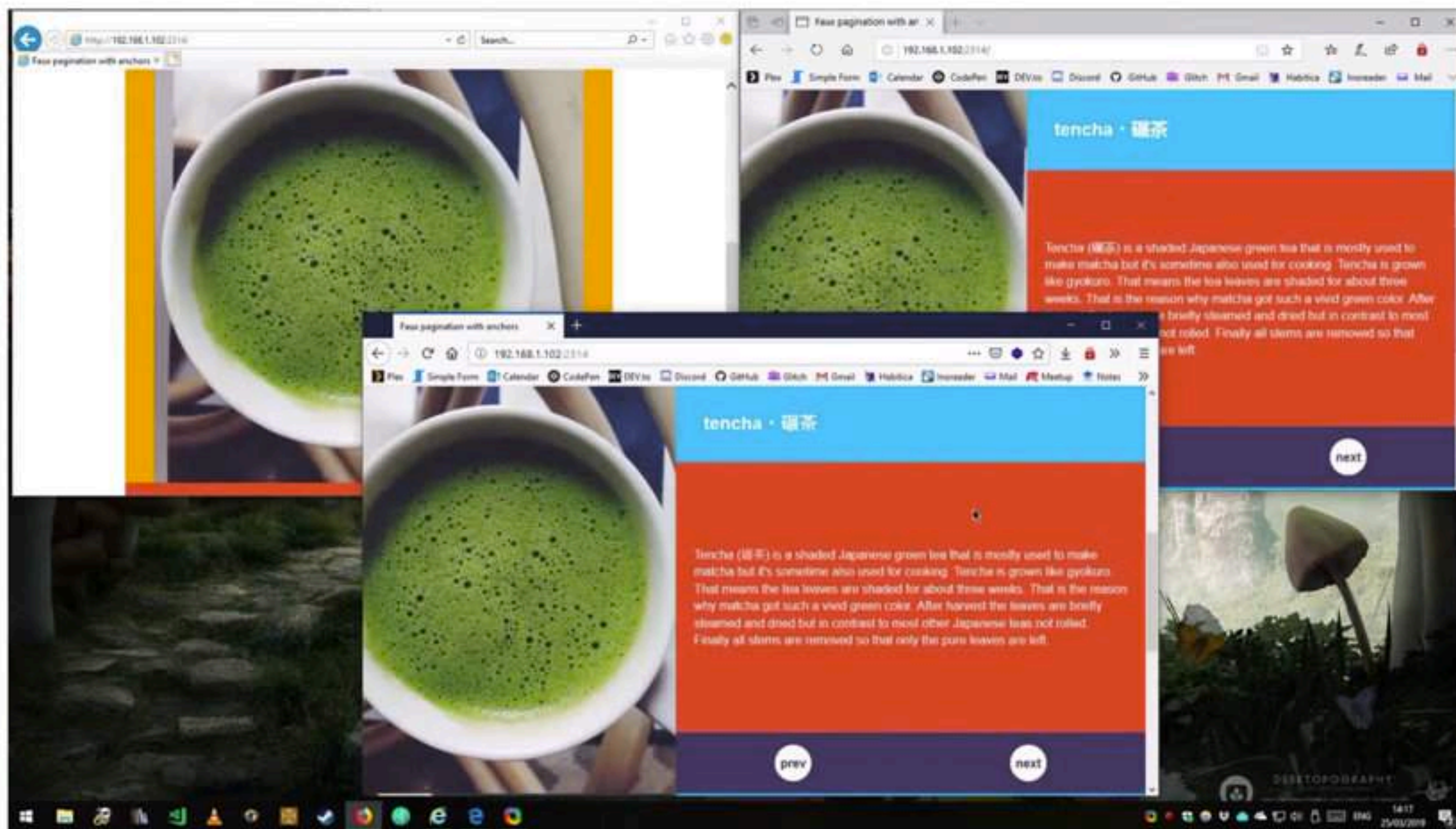
How Florence and the Machine singer overcame personal demon: write her first-ever Number One album and bring it on the road for her biggest tour yet

支持旧款浏览器

利用@supports，本地CSS功能检测

```
.selector {  
    /* Styles that are supported in old browsers */  
}  
  
@supports (property:value) {  
    .selector {  
        /* Styles for browsers that support the specified property */  
    }  
}
```


1.00





dowebbsitesneedtolookexactlythesameineverybrowser



All

Images

Maps

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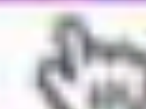
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No!



致谢

谢谢CSS女神/攀岩高手，皋玮，做我的编辑。



参考链接

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- [Cascading Style Sheets, level 1 \(W3C 推荐标准 17 Dec 1996\)](#)
- [CSS属性列表](#)
- [CSS显示模块 Level 3](#)
- [CSS弹性盒式布局模块 Level 1](#)
- [CSS2.1: 10 视觉格式化模型细节](#)
- [CSS盒式对齐模块 Level 3](#)
- [CSS Intrinsic & Extrinsic Sizing Module Level 3](#)
- [Cascading Web Design with Feature Queries](#)
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