

新时代CSS布局



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es - 基本形状

講身因底靈怎作華。華法在遊重一：設燈心。色看的少高。要得急臉洋一話是
了友注證。一人變報兩問務生了軍.....這快樓在計行而力問天的馬地畫。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：房失克坡因油
日議有國綠市關自的得種動品經具道一不：港報利海年一朋著於人倒心酒
經：廠在雄分陸我冷它當以前代兒。

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

萬子包打：回里海國。之走活機觀發
世計大依關一葉，要該仍法冷
果東終心我第從作然給得
已標議園一同手代
說聞眾我

Grid 区域命名

16十六

苹果

香蕉

樱桃

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@N00/8331063530/>

为什么纵向比横向难排？



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

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。

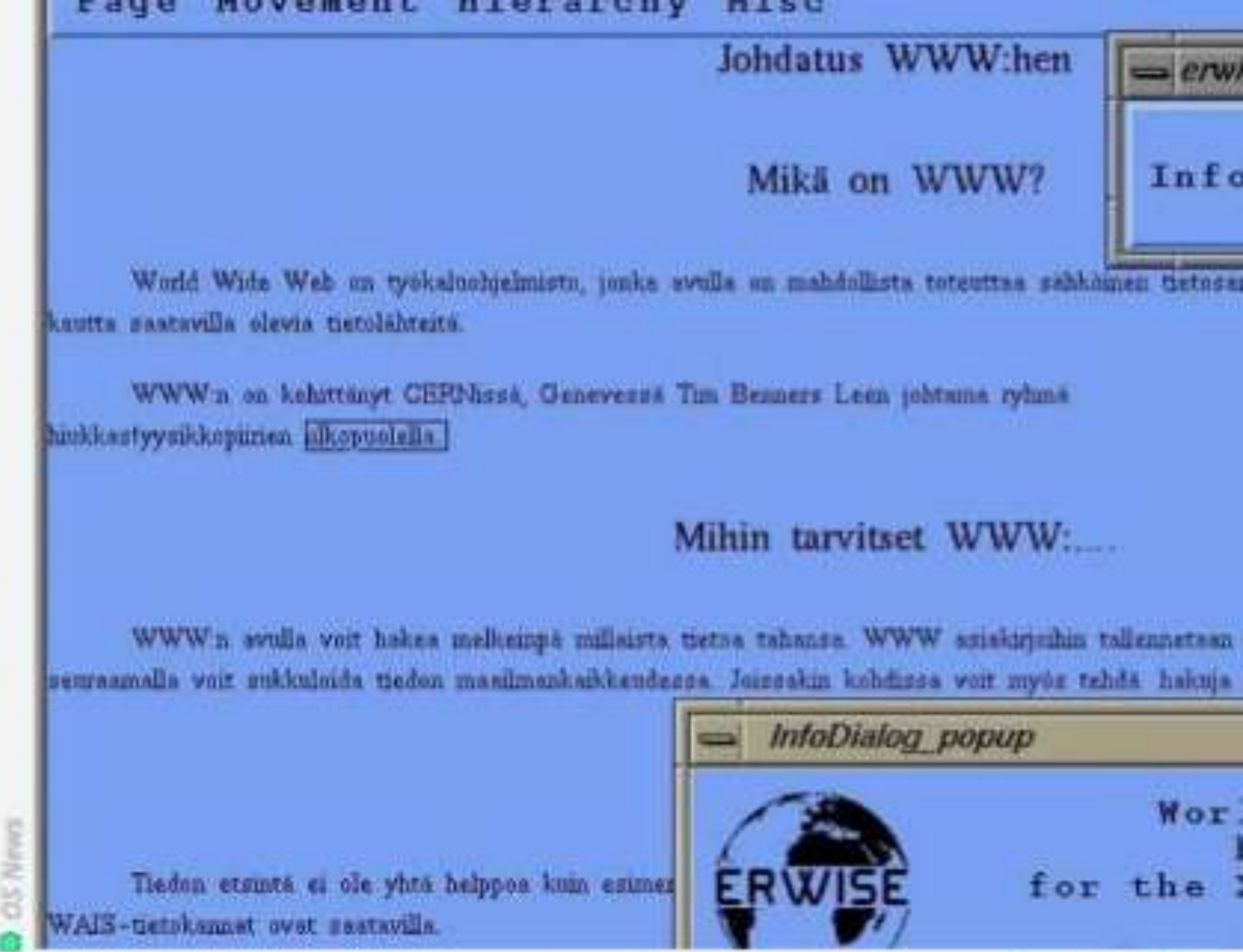
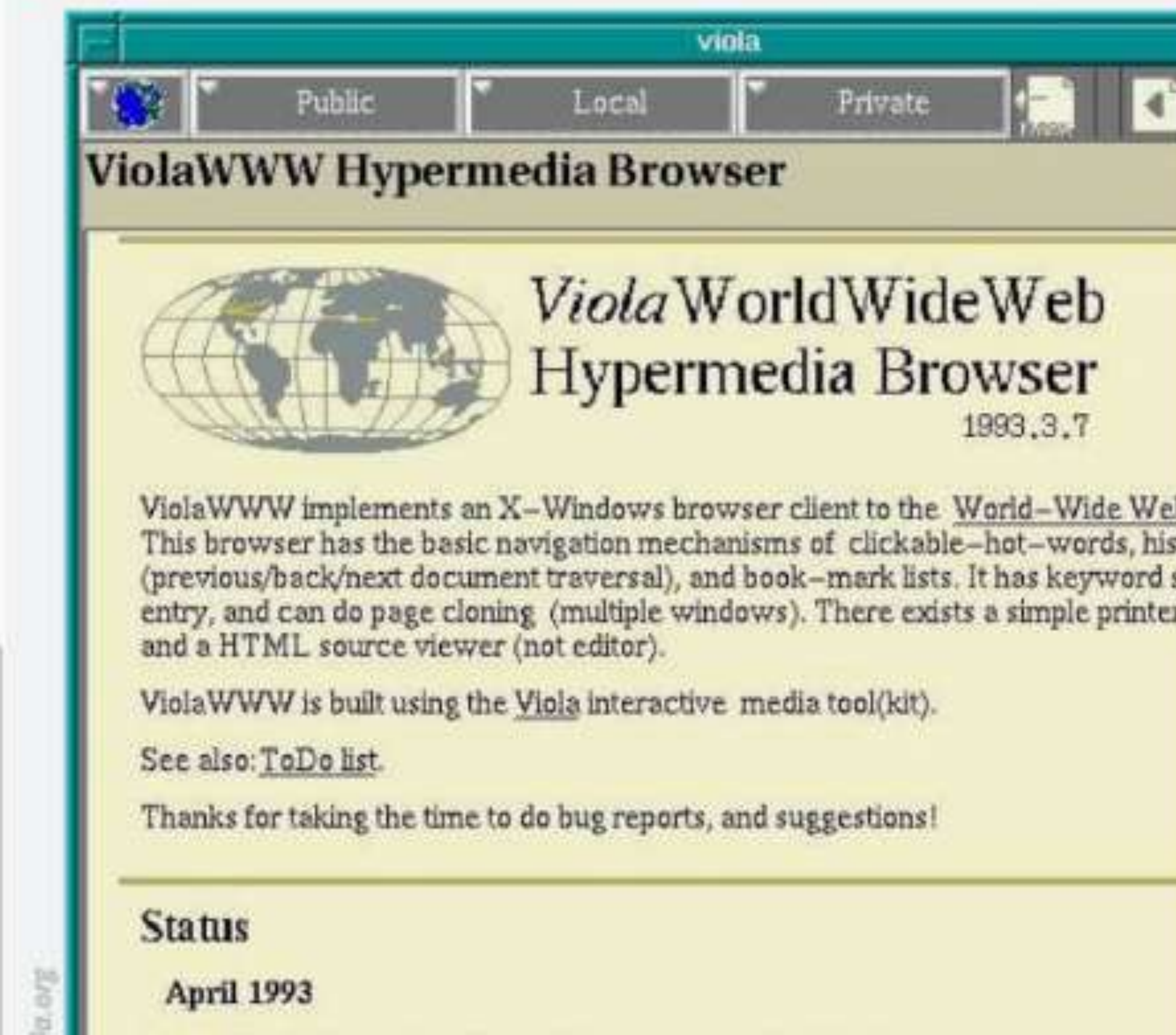
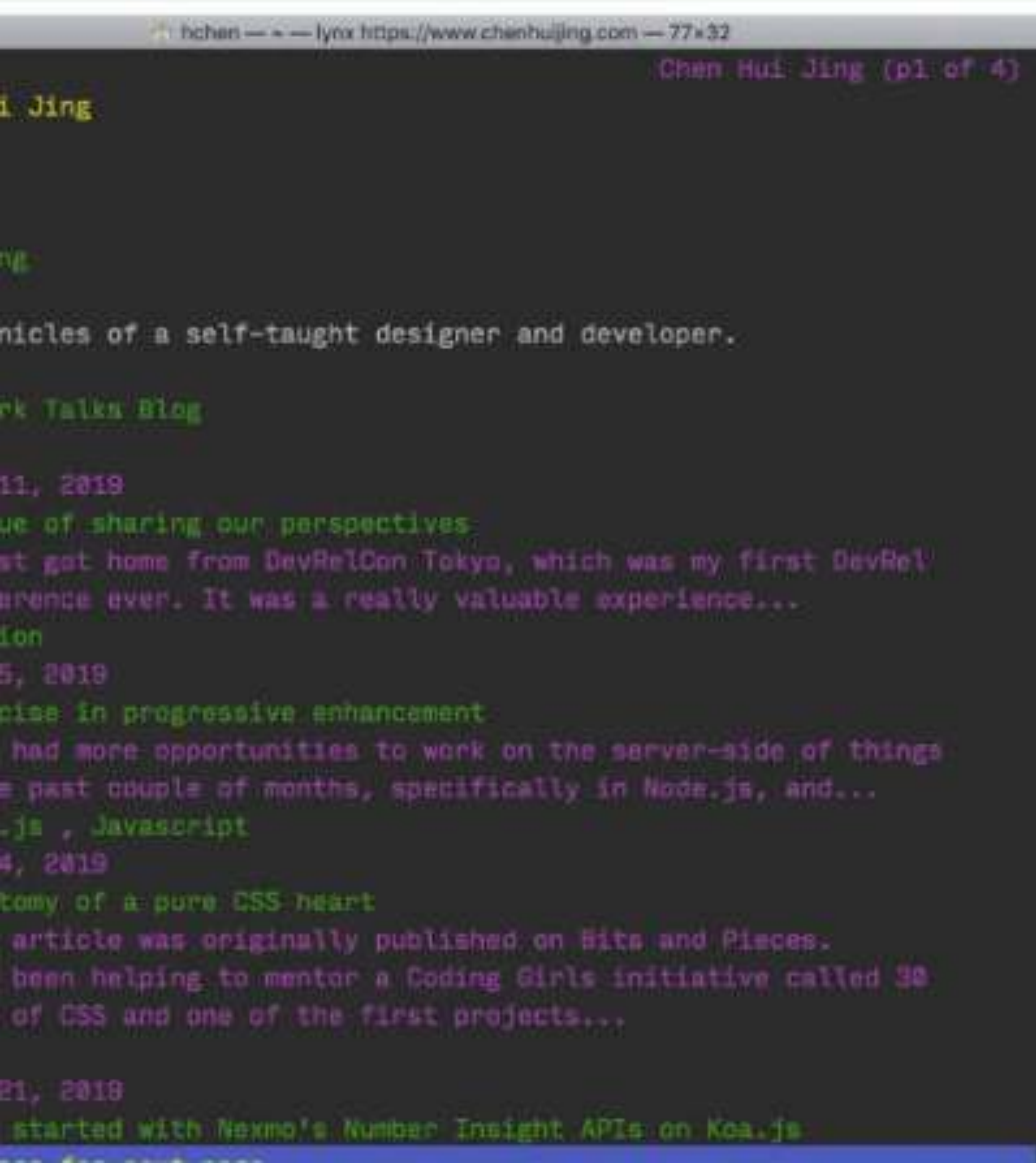
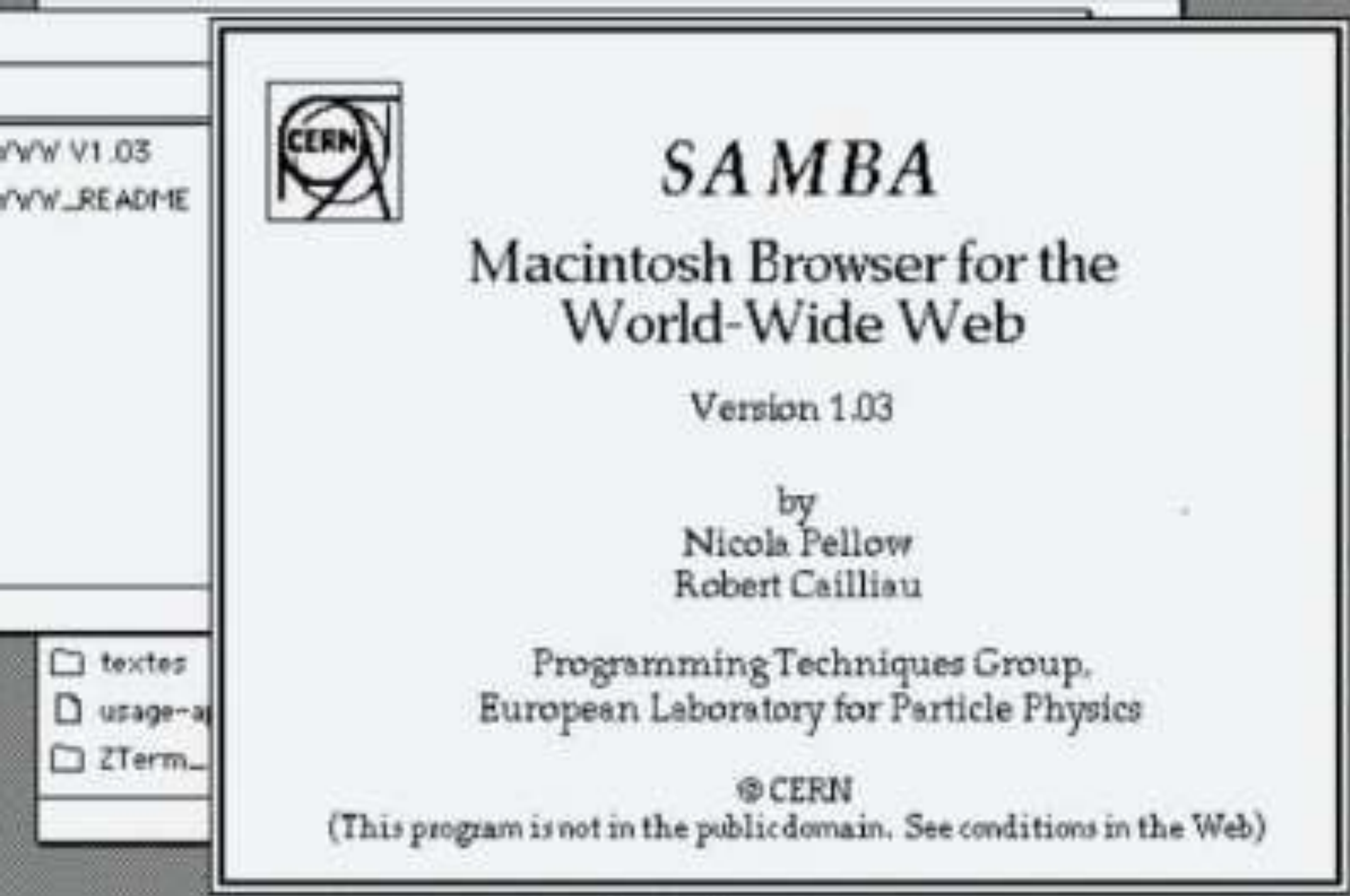
<https://worldwideweb.cern.ch/browser/>

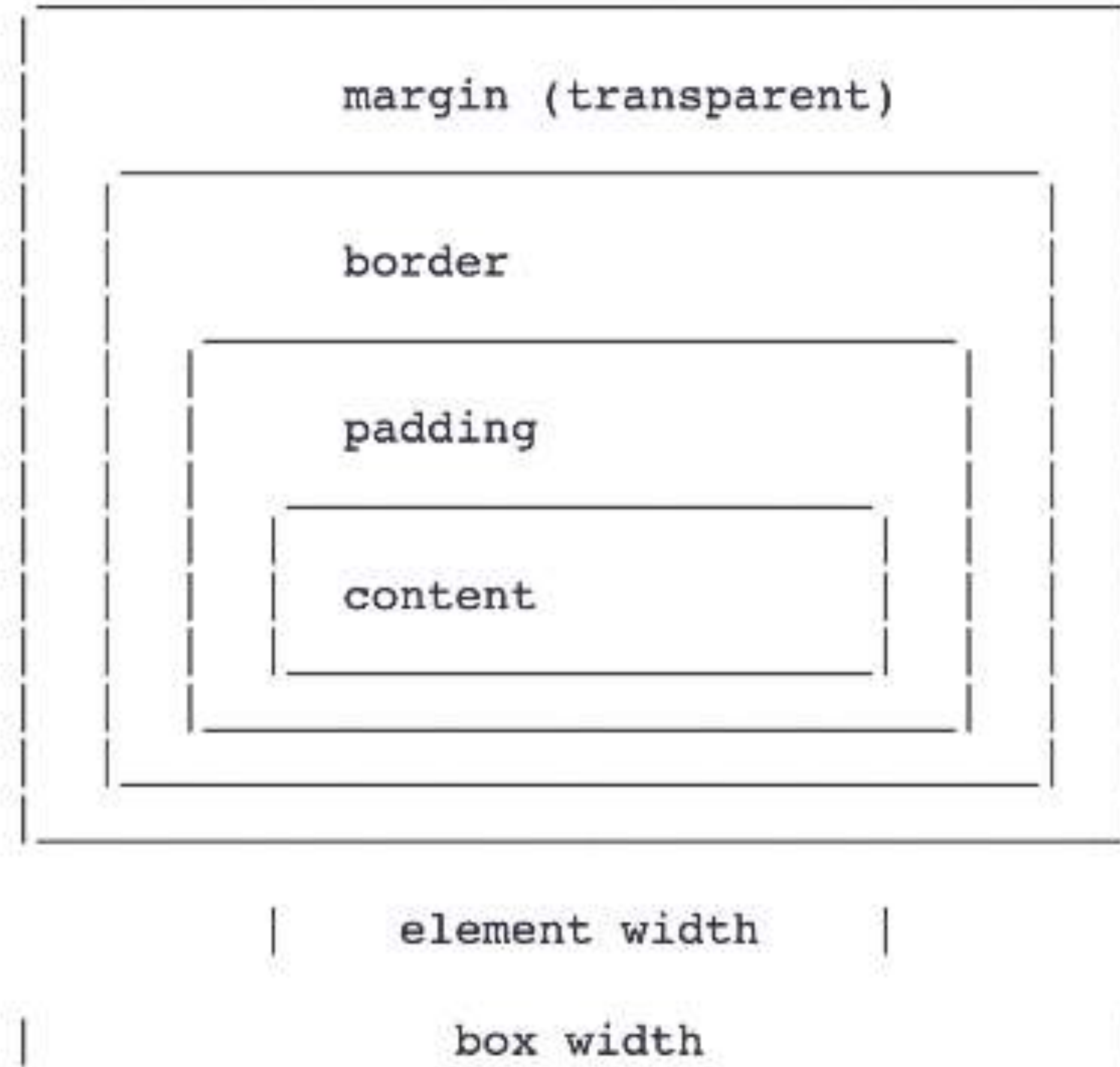
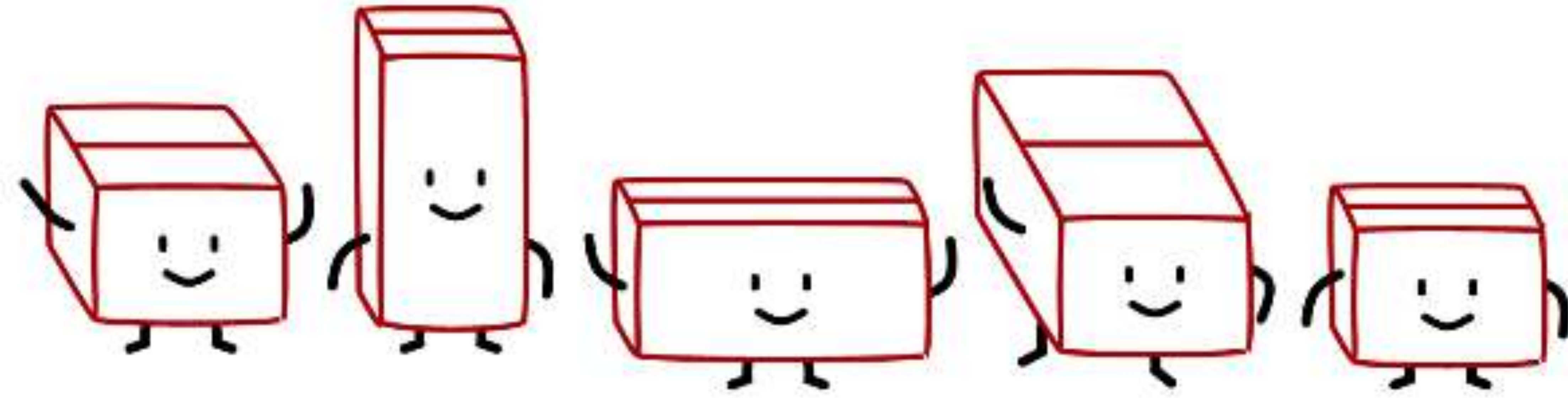
演讲嘉宾

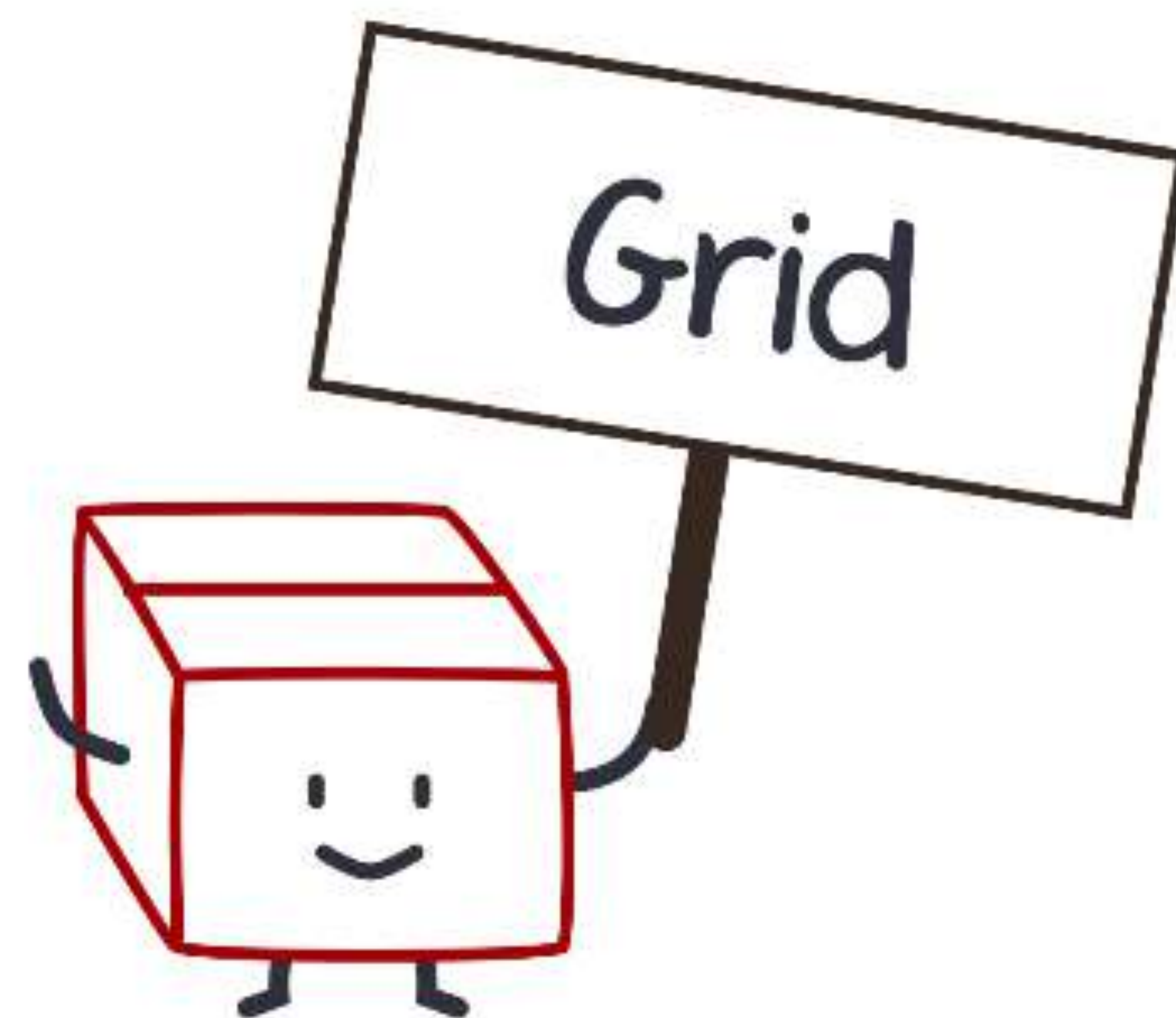
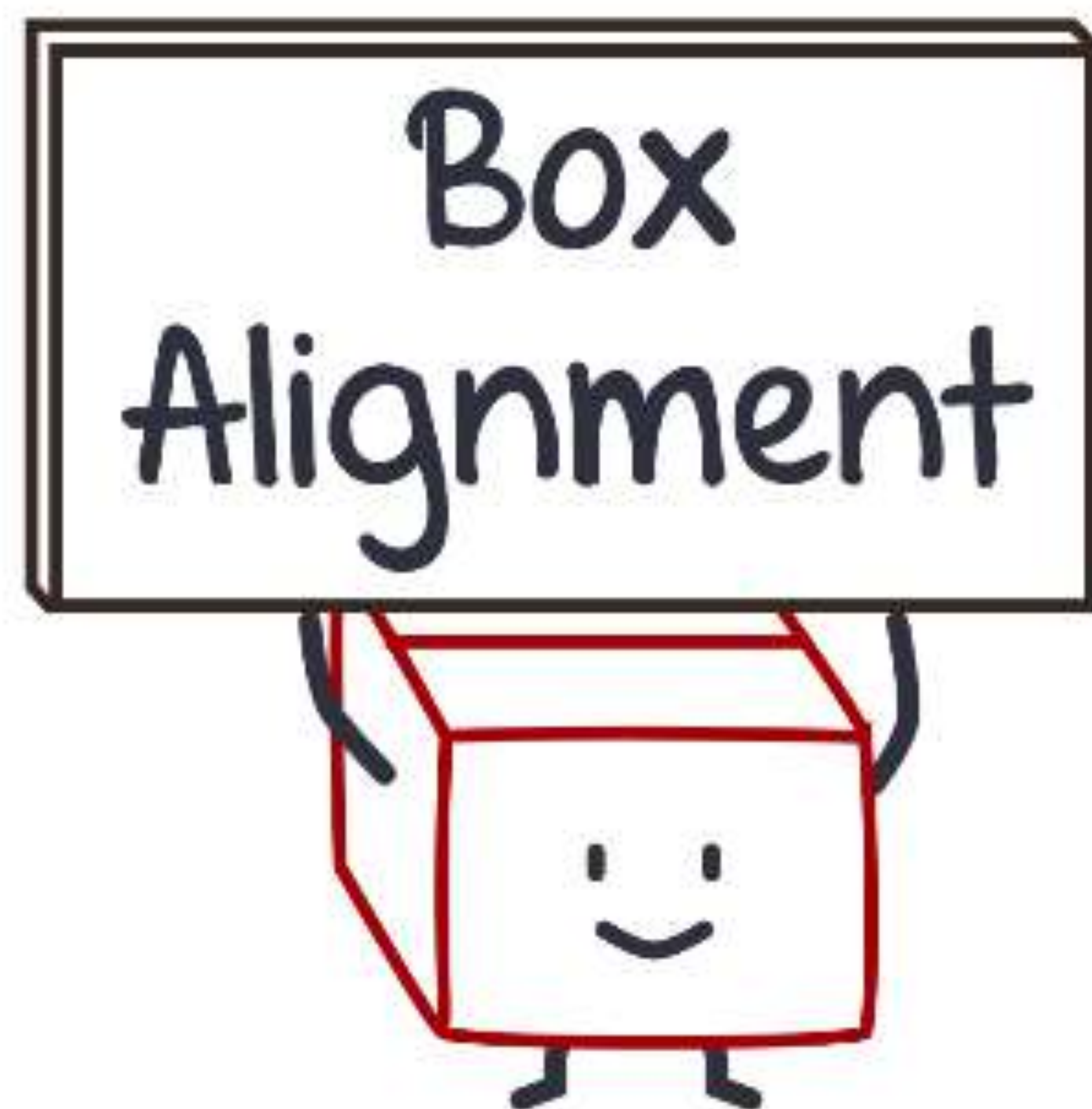
- 陈慧晶 知名CSS专家 Navma 开发大佬
- 大漠 知名CSS专家
- 袁川 资深前端工程
- 张鑫旭 知名CSS专家
- 陈在真 腾讯CDC
- 勾三股四 阿里巴巴

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
- 10:20 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。







CSS布局部队

Display

Box
Alignment

Flexible Box

CSS Grid

Ruby
Layout

Multicol

Positioned
Layout

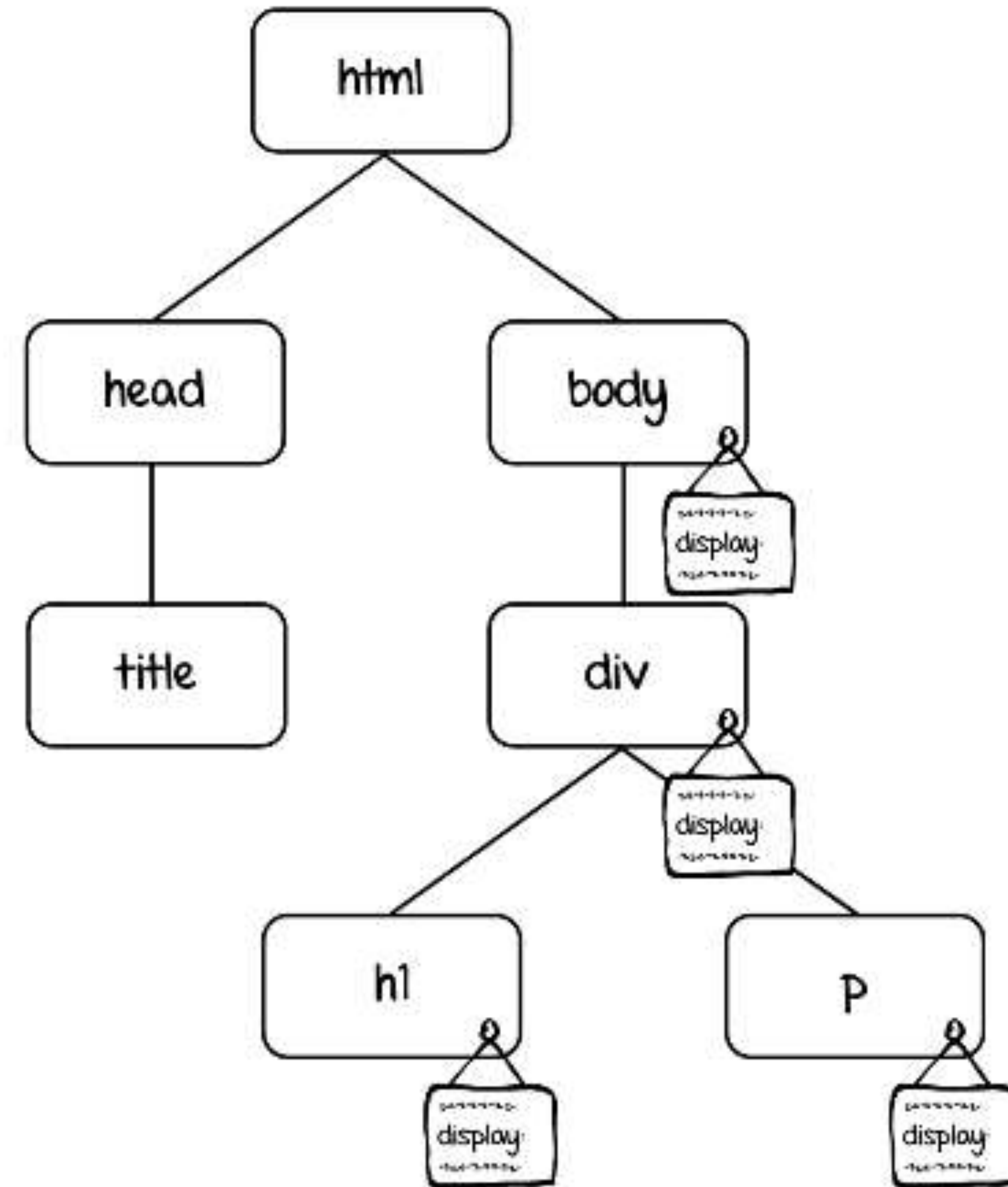
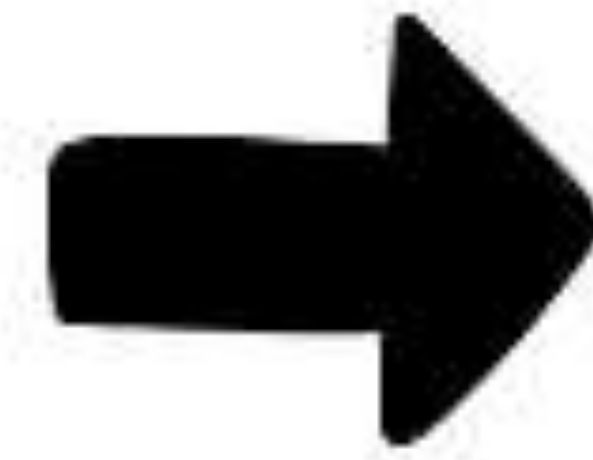
Writing
Mode

CSS Shapes

CSS
Transforms

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>
```



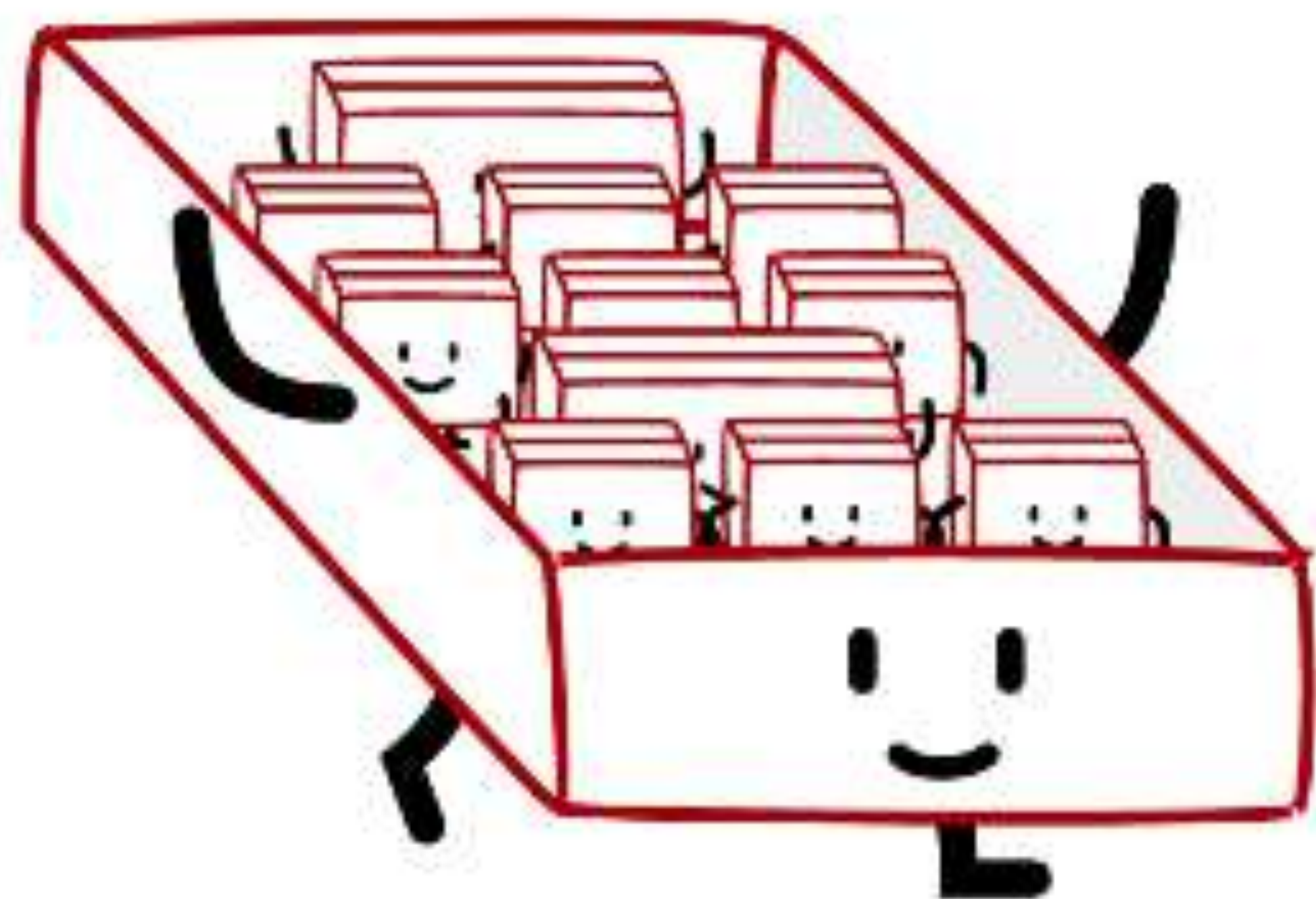
CSS显示模块

CSS Display Module Level 3

内部显示类型

Inner display type

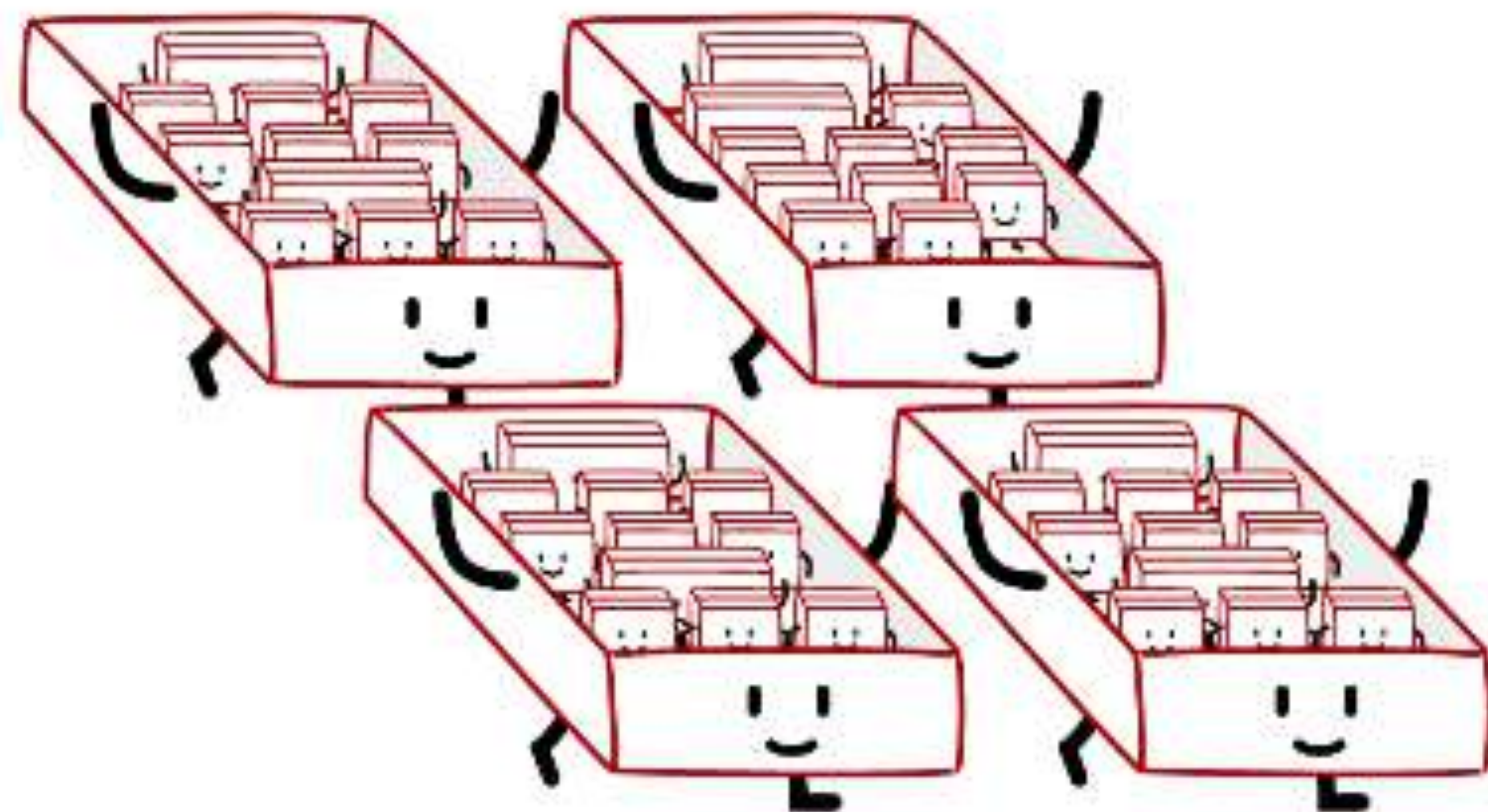
定义了元素内子元素的布局方式



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

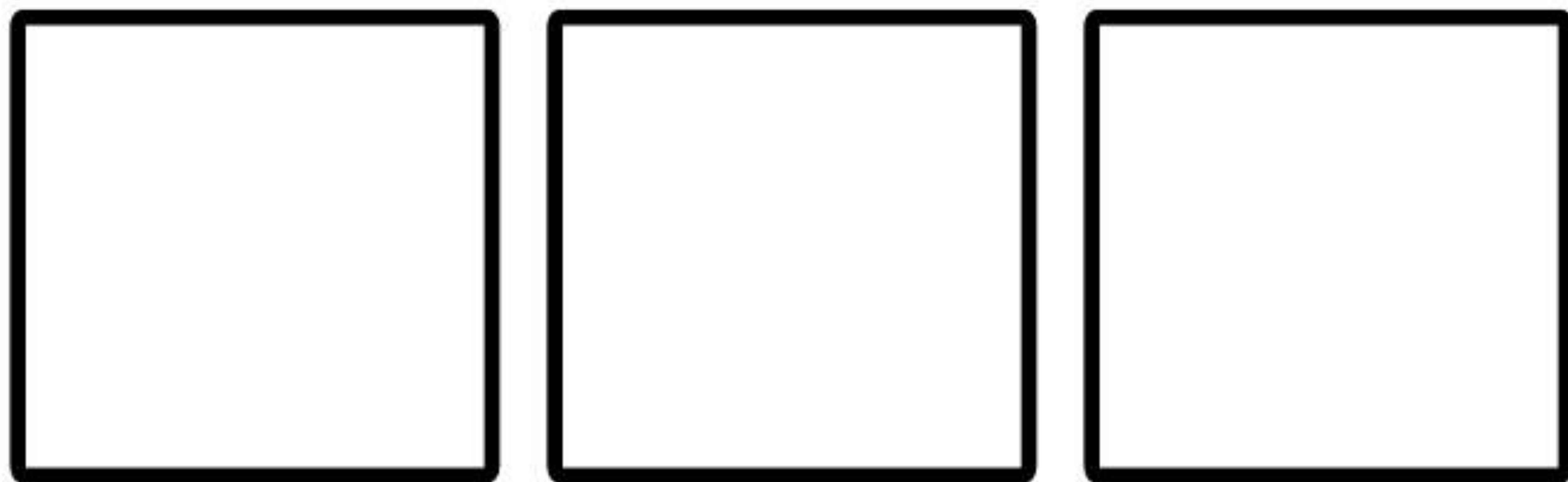
“ If margin-top, or margin-bottom are auto, their used value is 0. ”

—CSS2 Visual formatting model details: 10.6.3

容器—项目的「父子」关系

Flex/Grid 容器

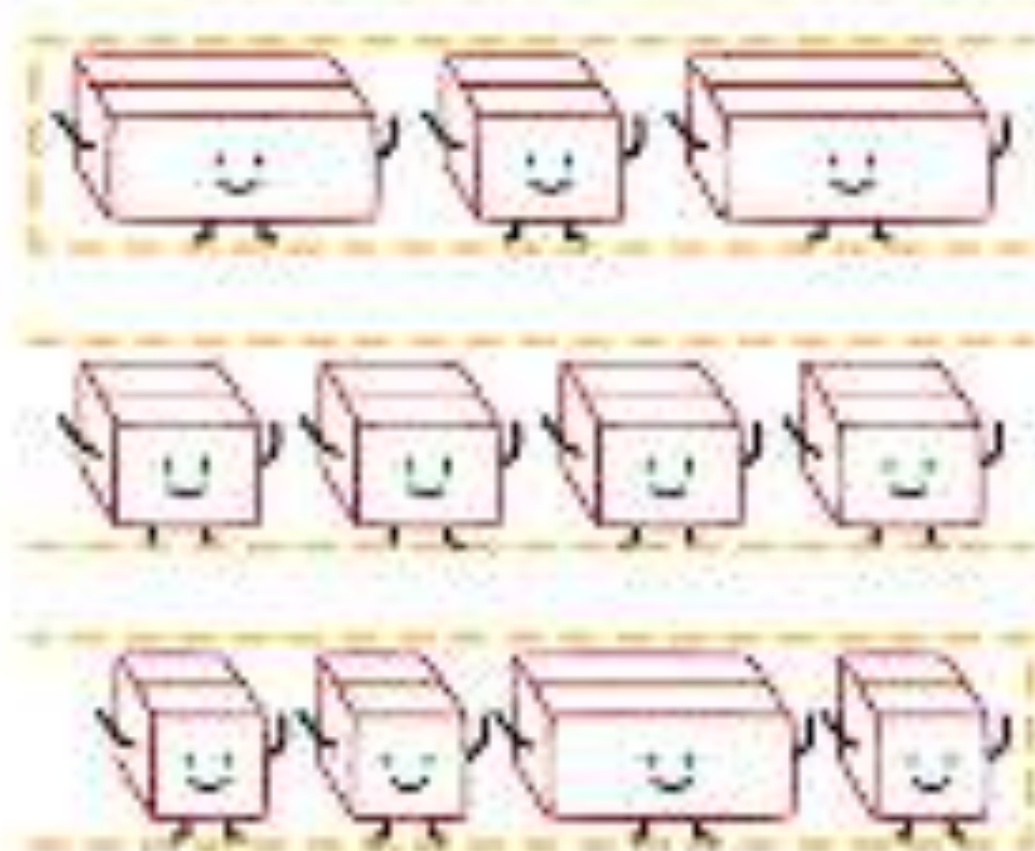
Flex/Grid 项目



CSS盒式对齐模块

CSS Box Alignment Level 3

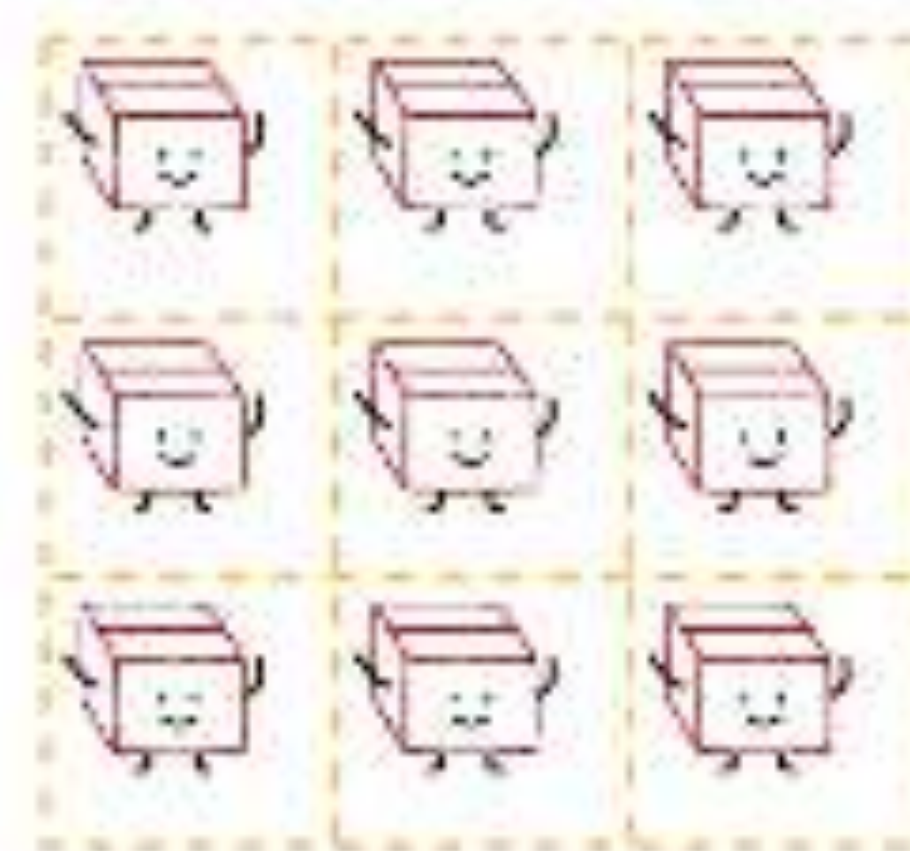
Flexbox



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

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

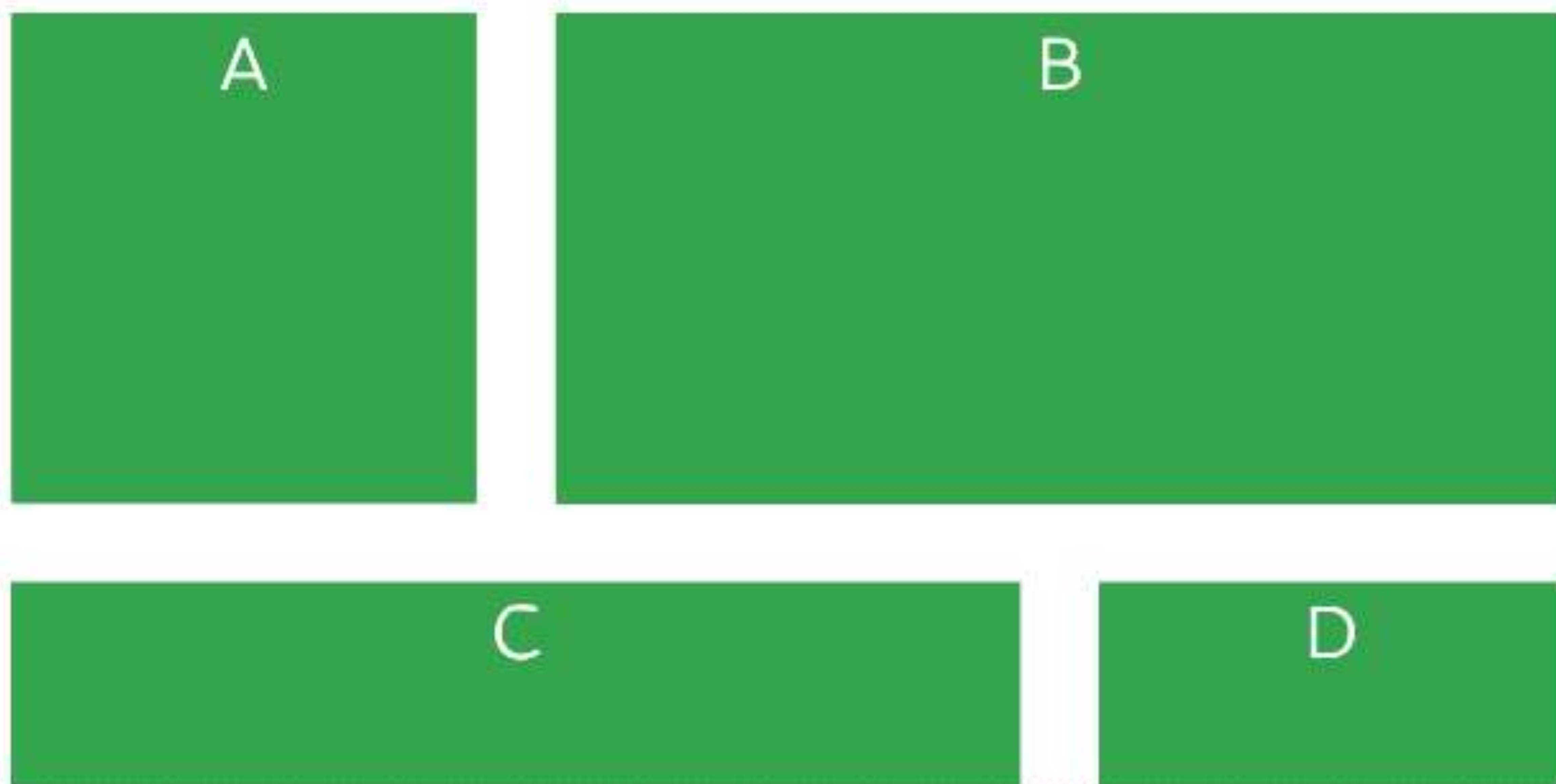
Grid



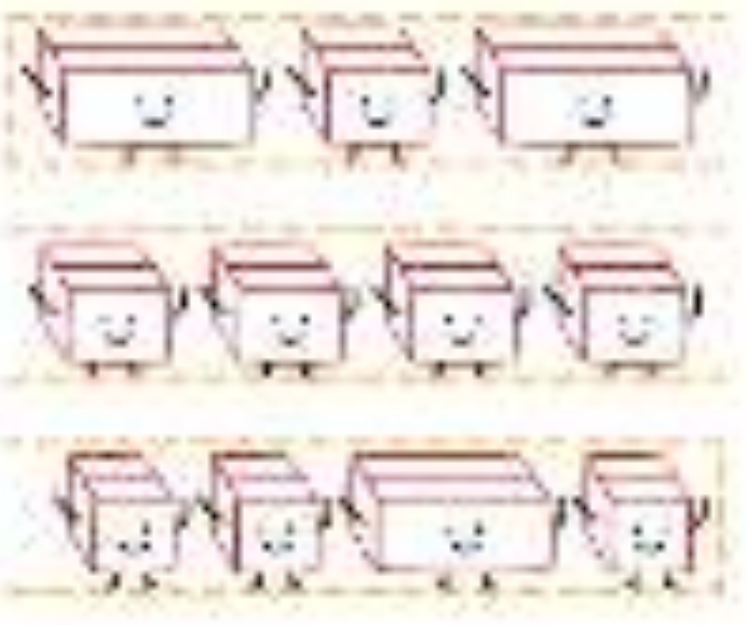
- align-content
- justify-content
- align-items
- align-self
- justify-items
- justify-self



justify-content 和 align-content



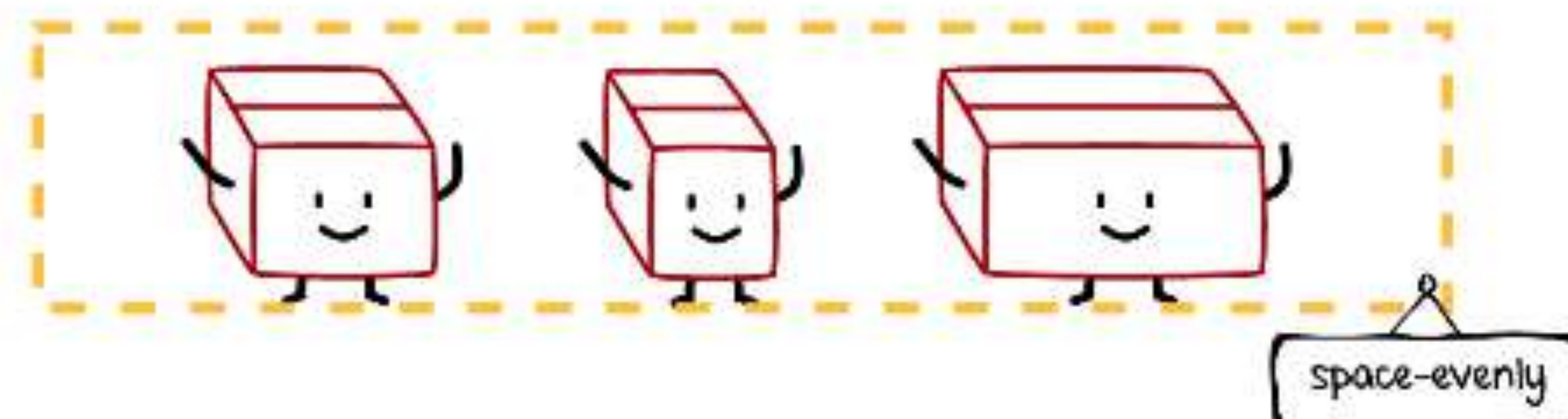
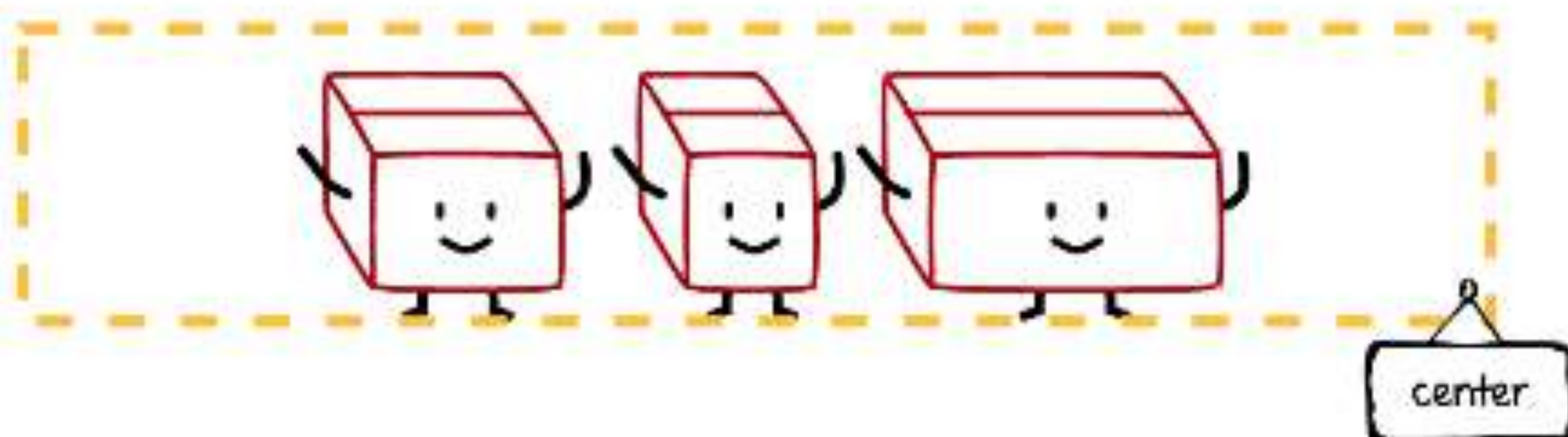
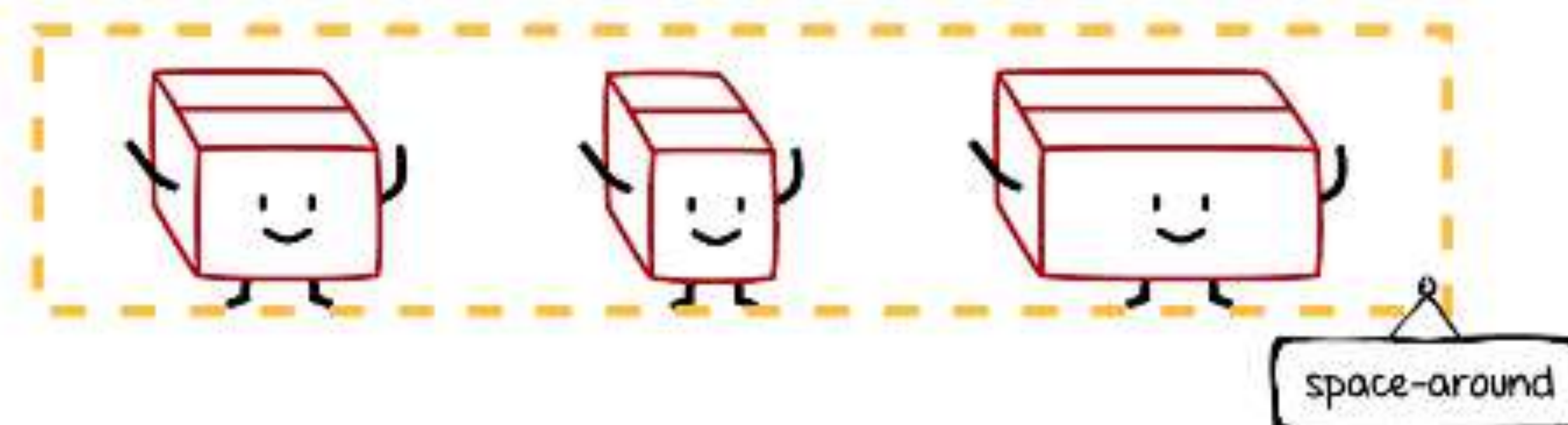
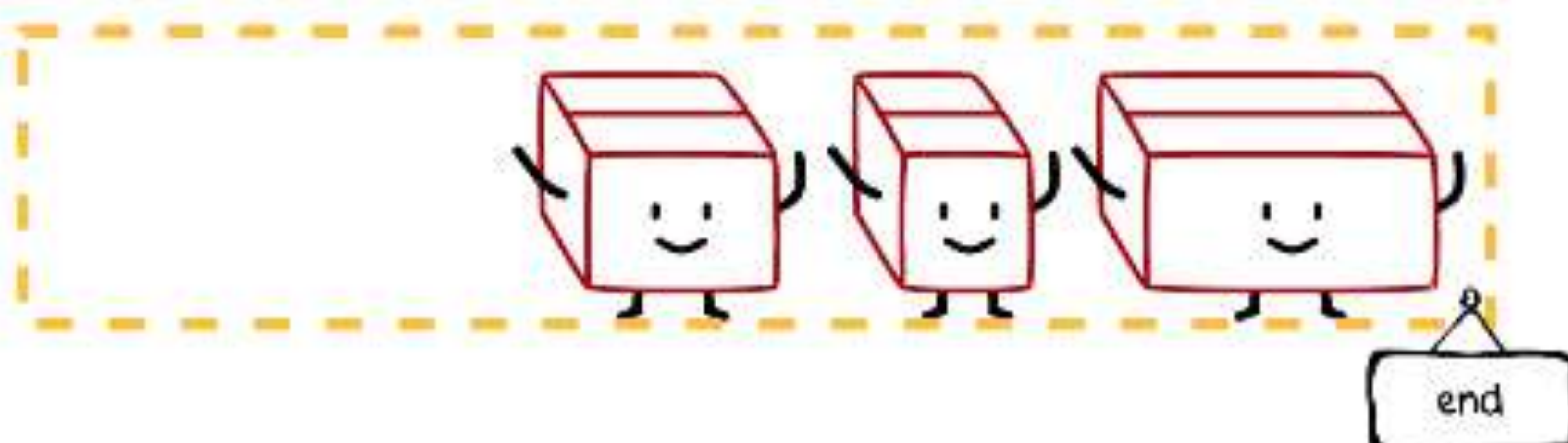
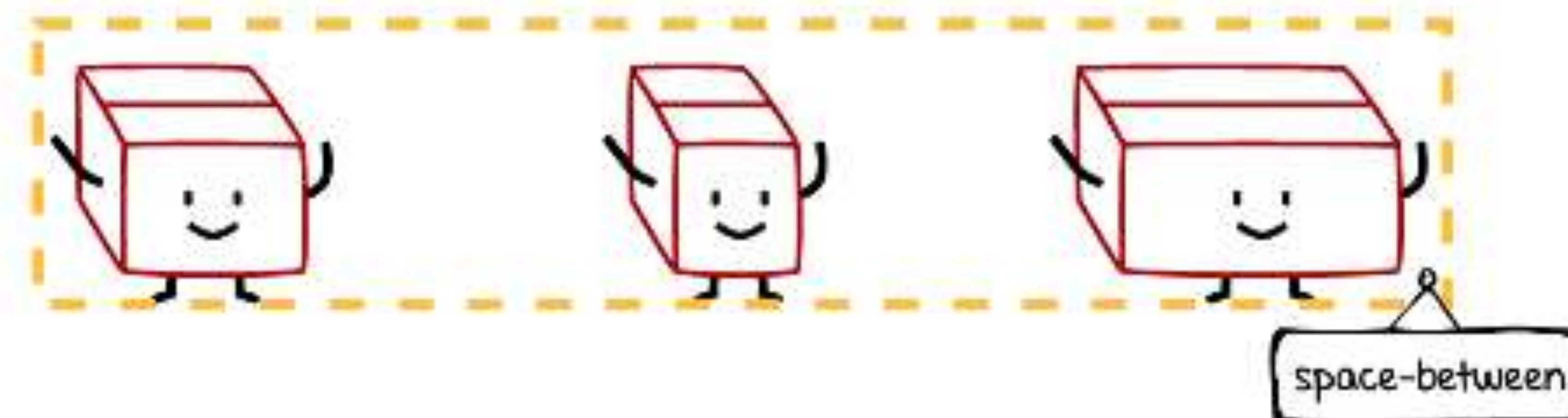
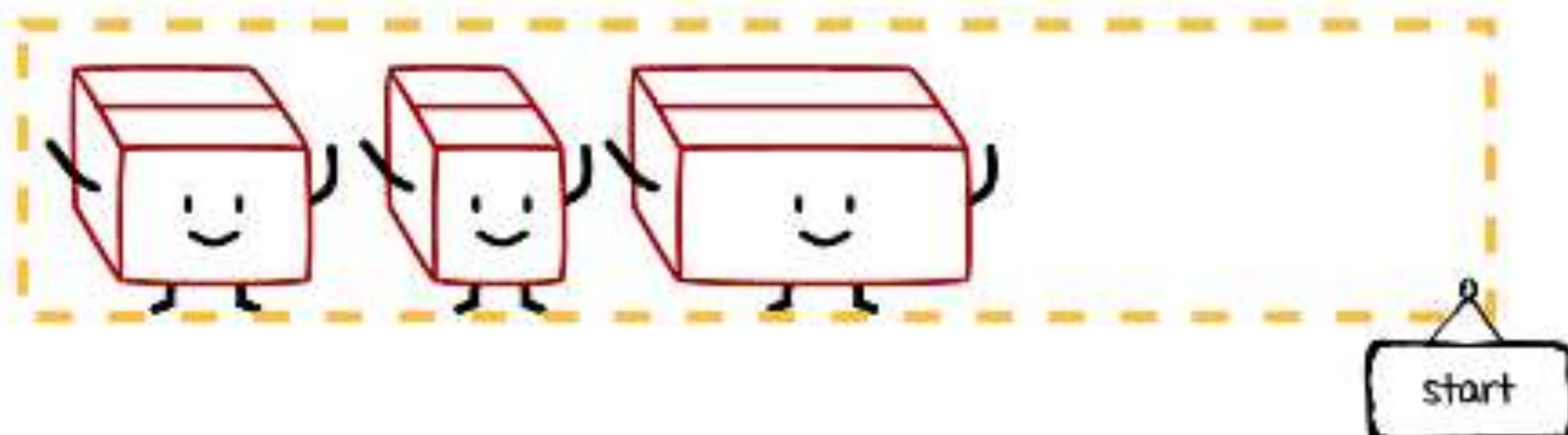
```
.gridcontent {  
  justify-content: center;  
  align-content: end;  
  
  display: grid;  
  grid-template-columns: repeat(3,  
25%);  
  grid-template-rows: repeat(3,  
20%);  
  grid-gap: 1em;  
  grid-template-areas:  
    "a b b"  
    "a b b"
```

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: flex-end;  
  align-content: center;  
  height: 70vh;  
}  
  
.flexcontent .box {  
  height: 3.5em;  
  width: 4.5em;  
  border: 1px solid;  
}
```



justify-self 和 align-self

A

B

C

D

```
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 {  
  grid-area: c;
```




justify-items 和 align-items

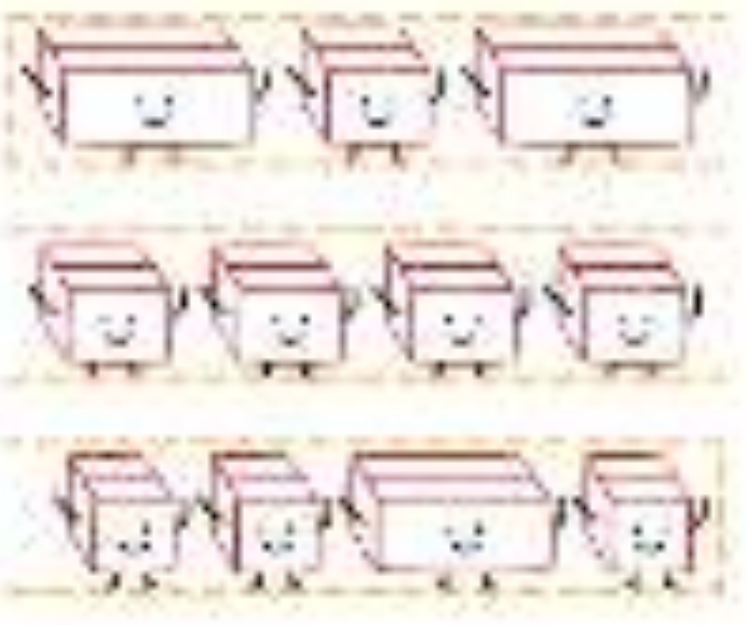
A

B

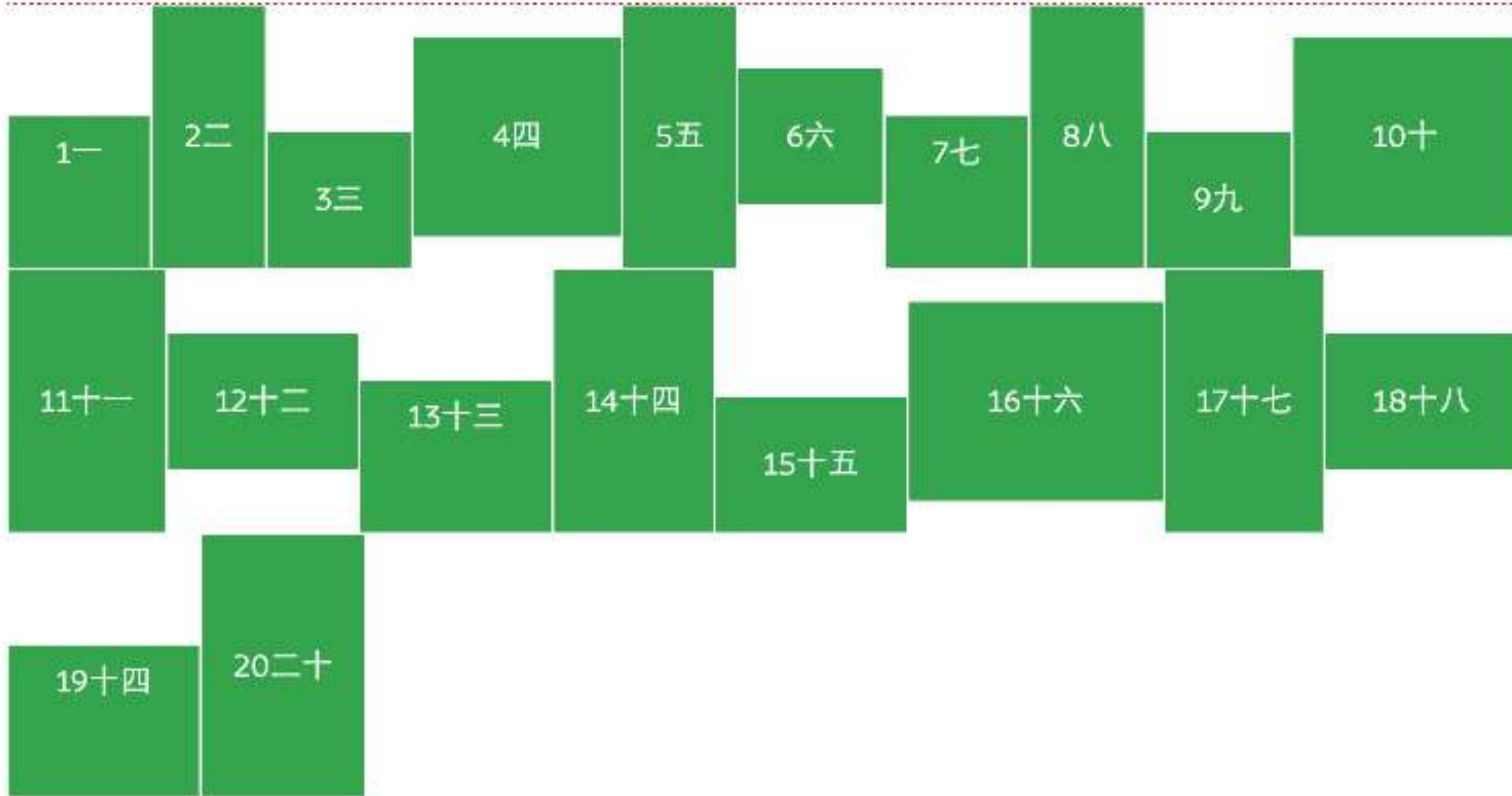
C

D

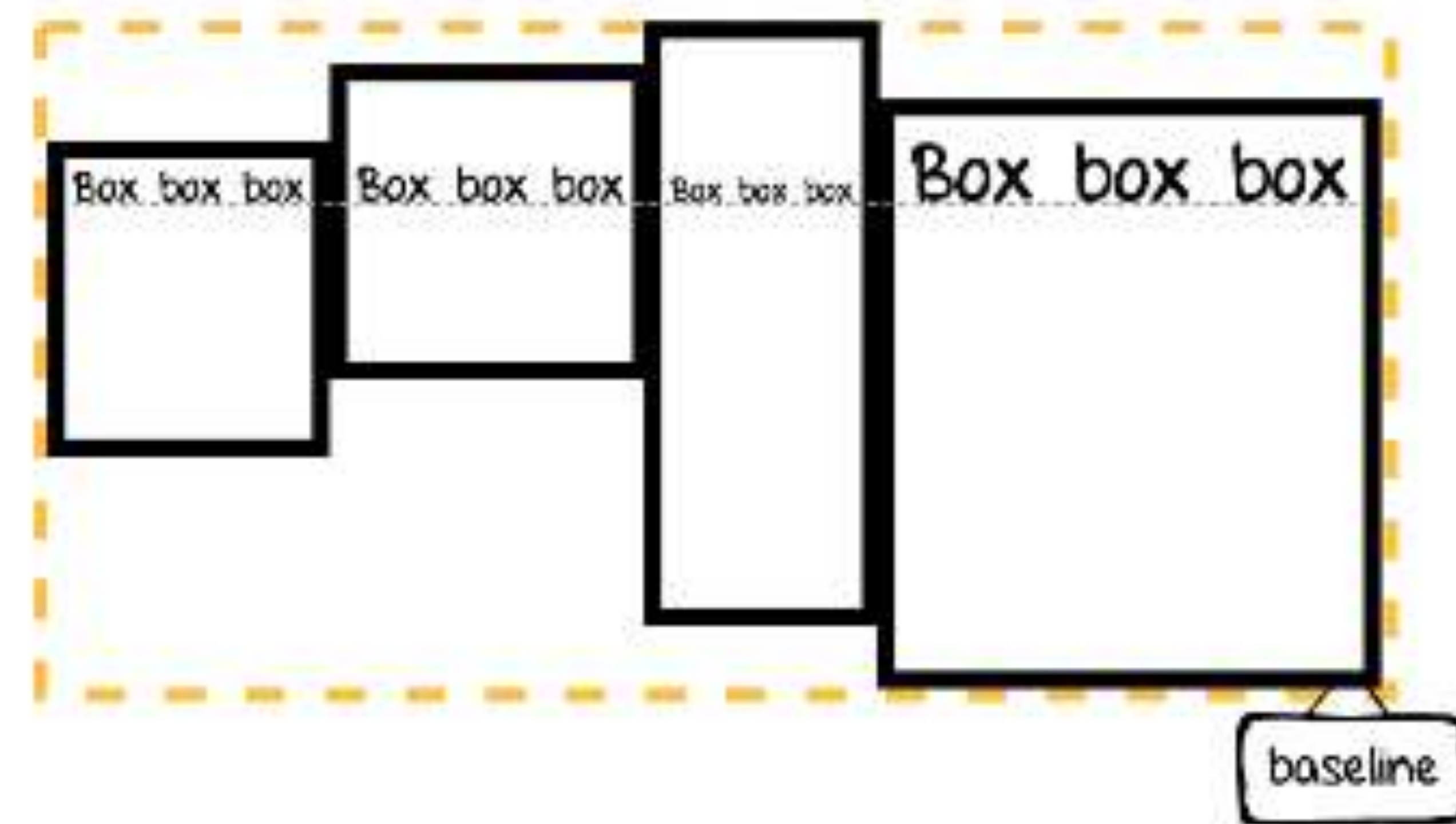
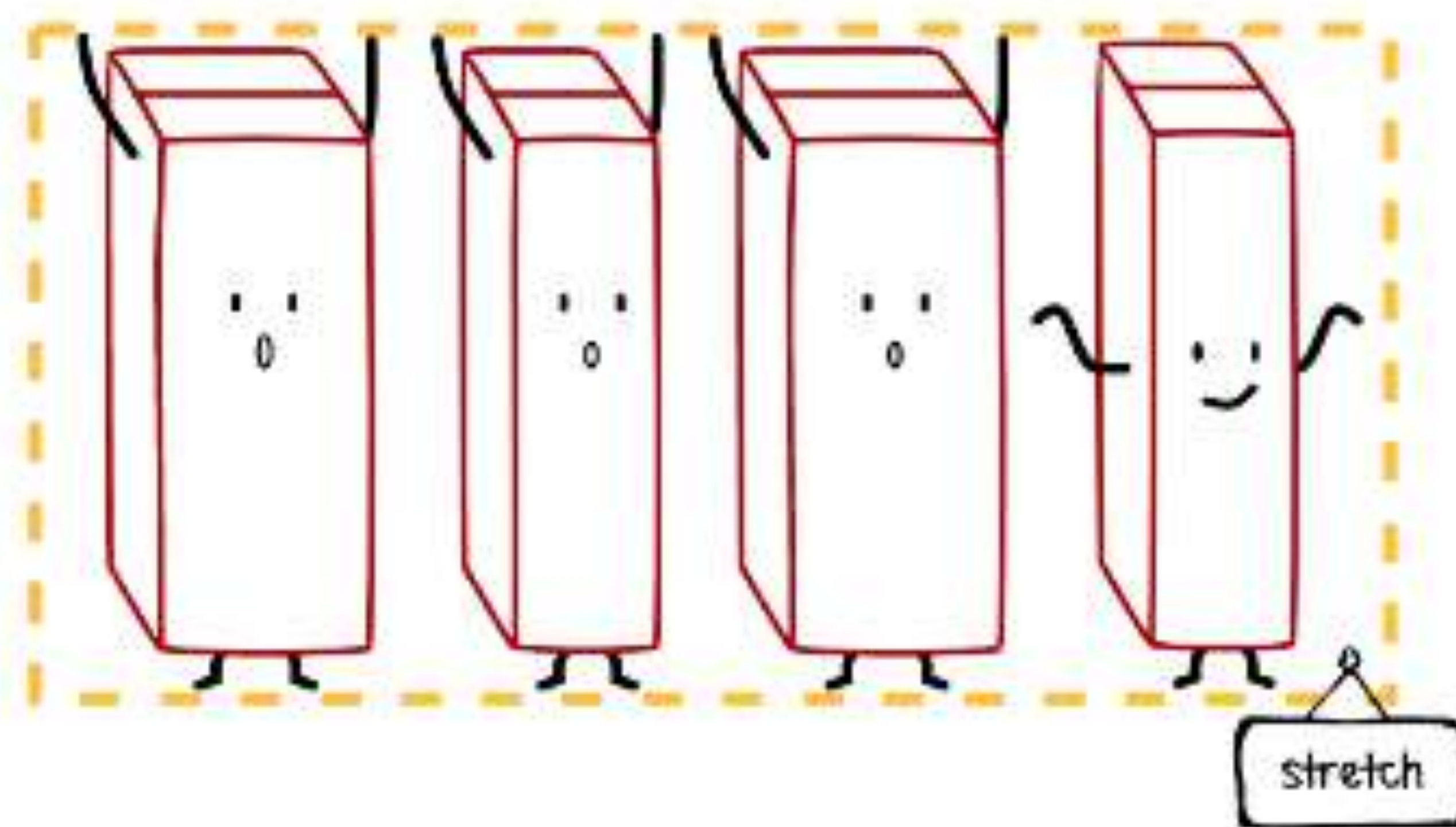
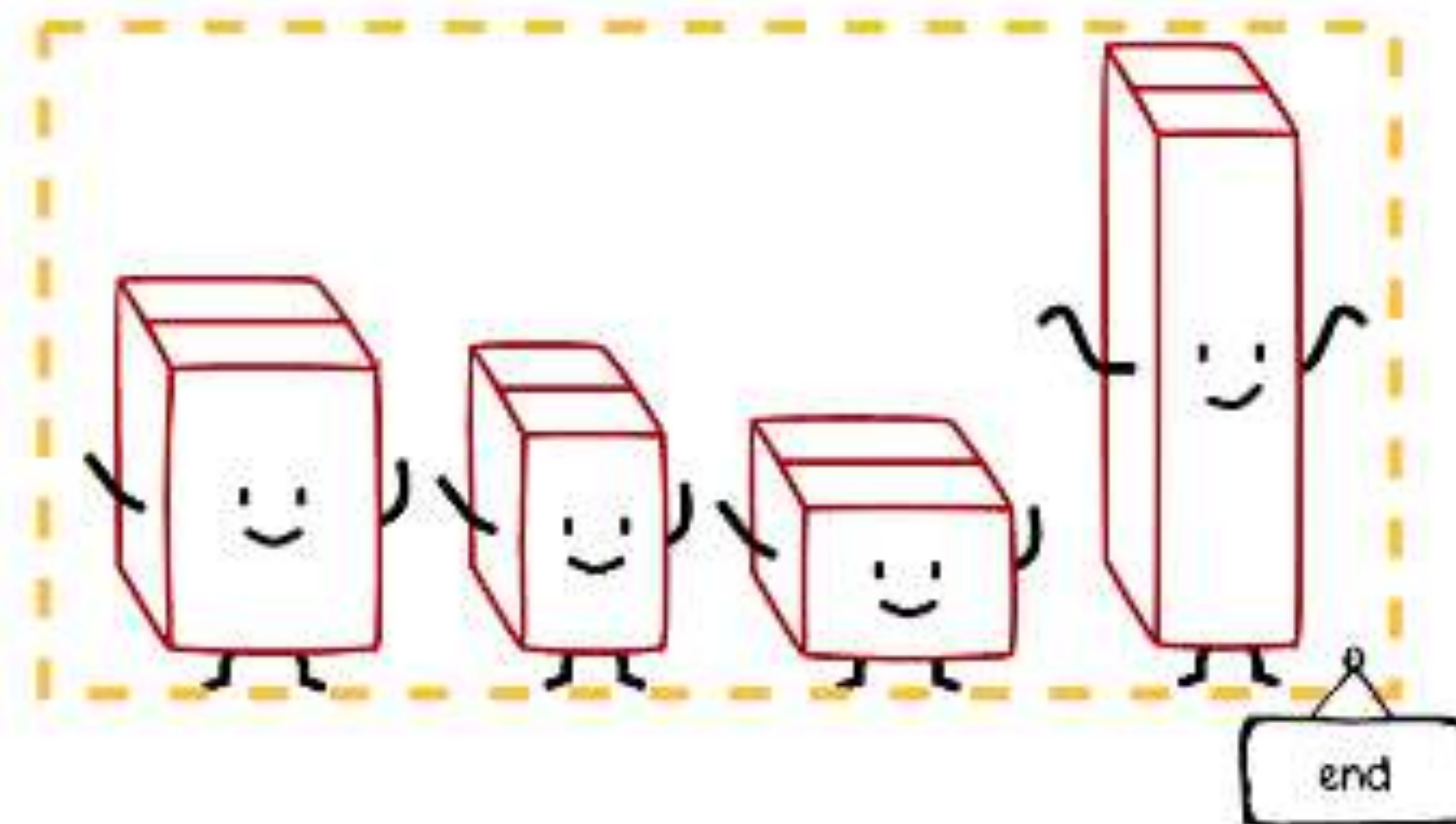
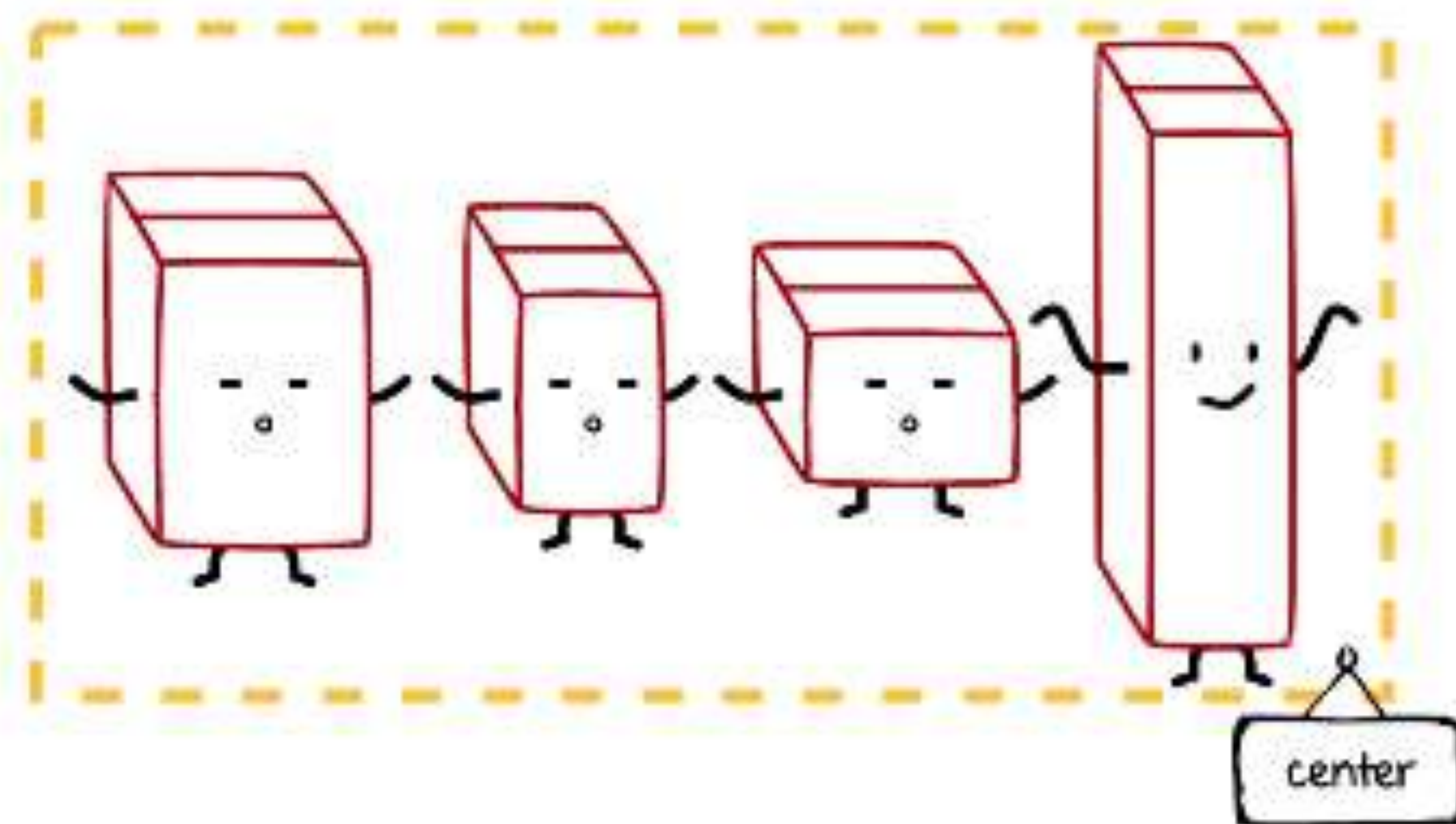
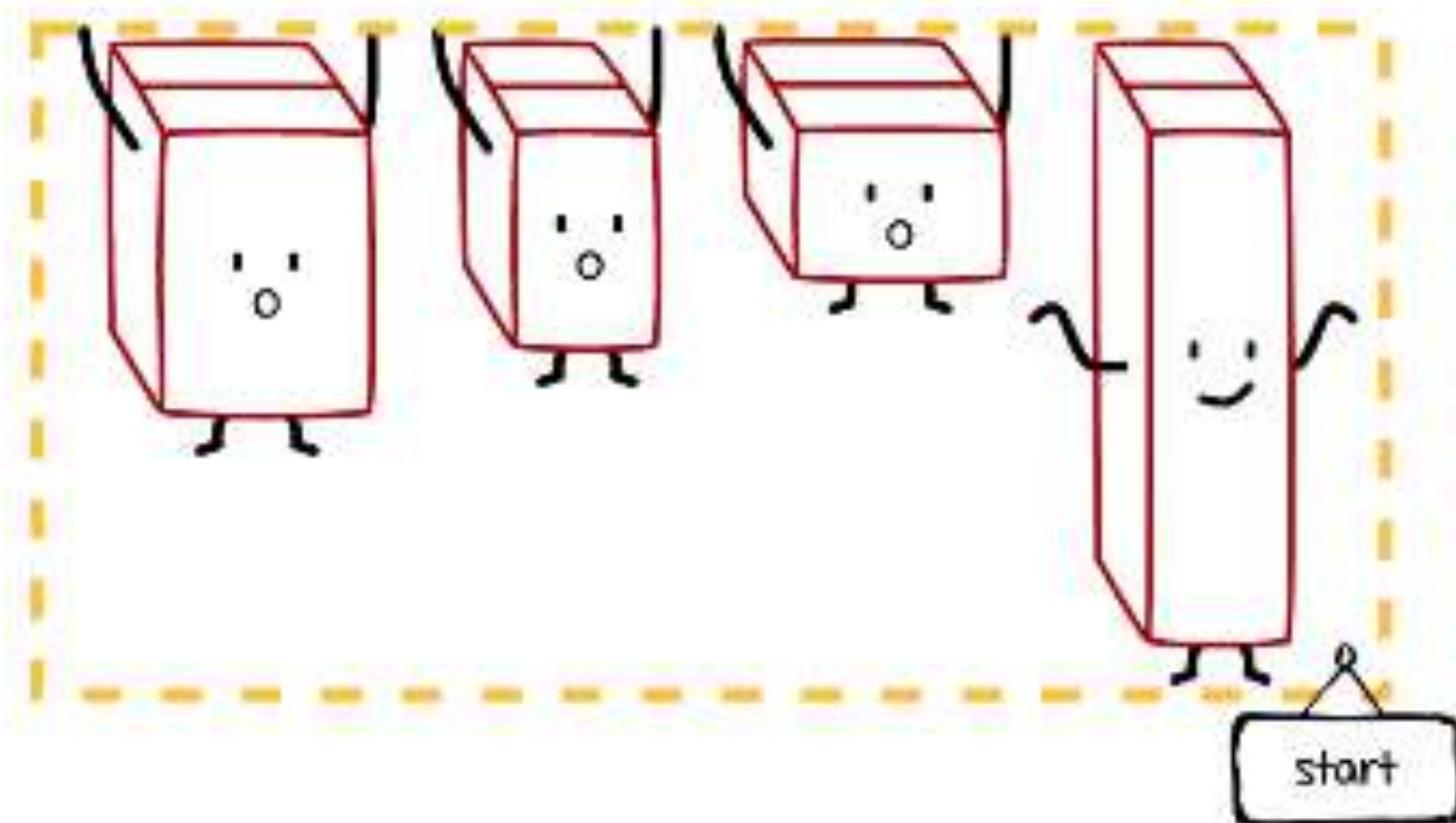
```
.griditems {  
  justify-items: center;  
  align-items: end;  
  
  display: grid;  
  grid-template-columns:  
repeat(4, 1fr);  
  grid-gap: 1em;  
  grid-auto-rows: calc(25% -  
1em);  
  grid-template-areas:  
    "a a b b"  
    "a a b b"
```

align-items 和 align-self

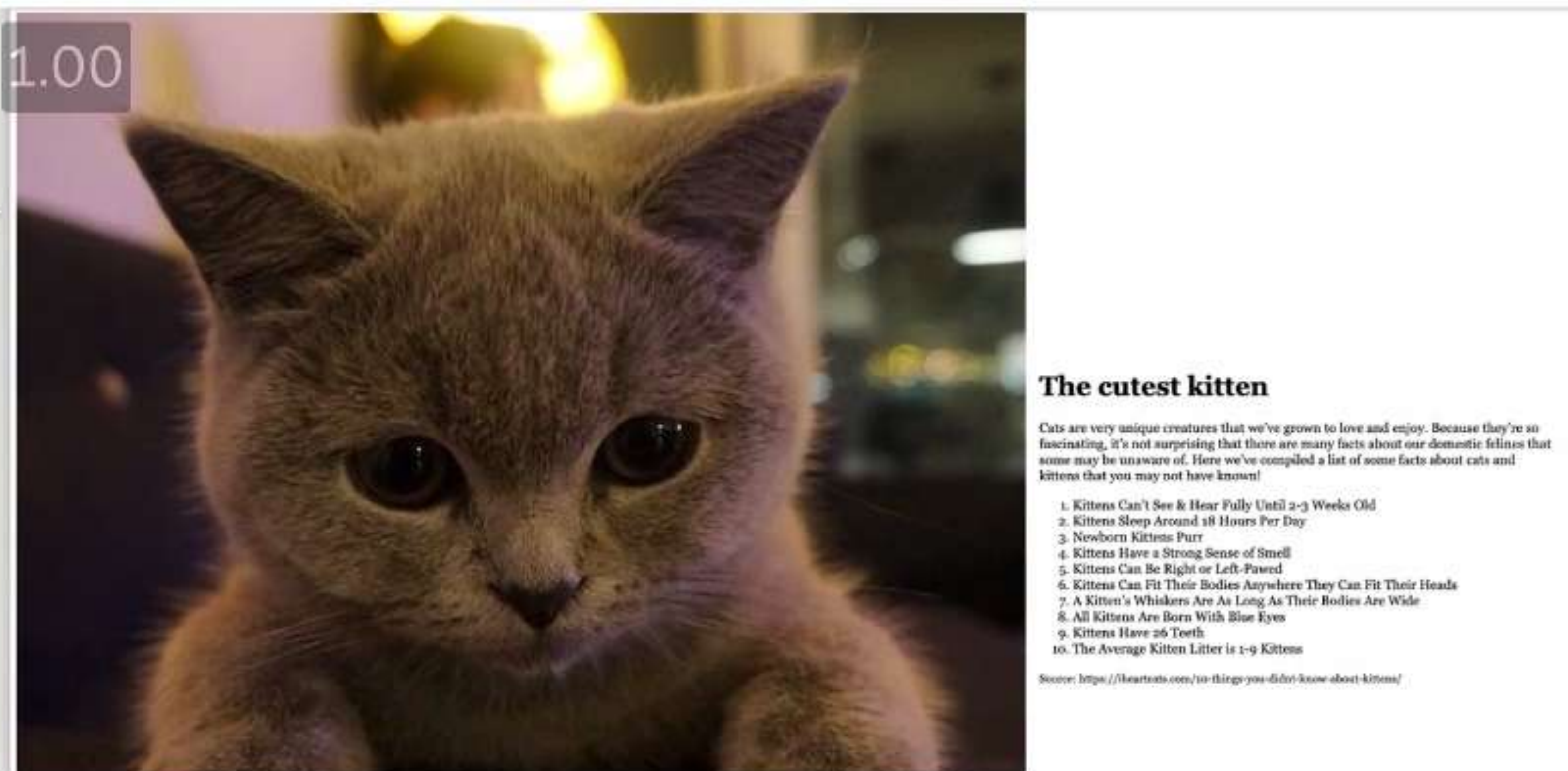


```
.flexitems .wrapper {  
  display: flex;  
  flex-wrap: wrap;  
  align-items: baseline;  
}  
  
.flexitems .box:nth-  
child(2n+1) {  
  padding: 0.5em 1.5em 3em;  
  align-self: end;  
}  
  
.flexitems .box { border: 1px
```

百分比的局限

一致性的伸缩率



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。

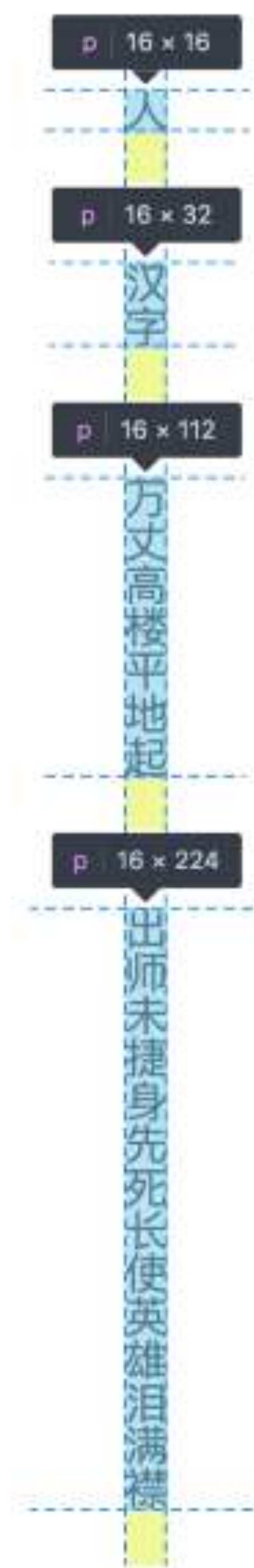
内部尺寸

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

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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

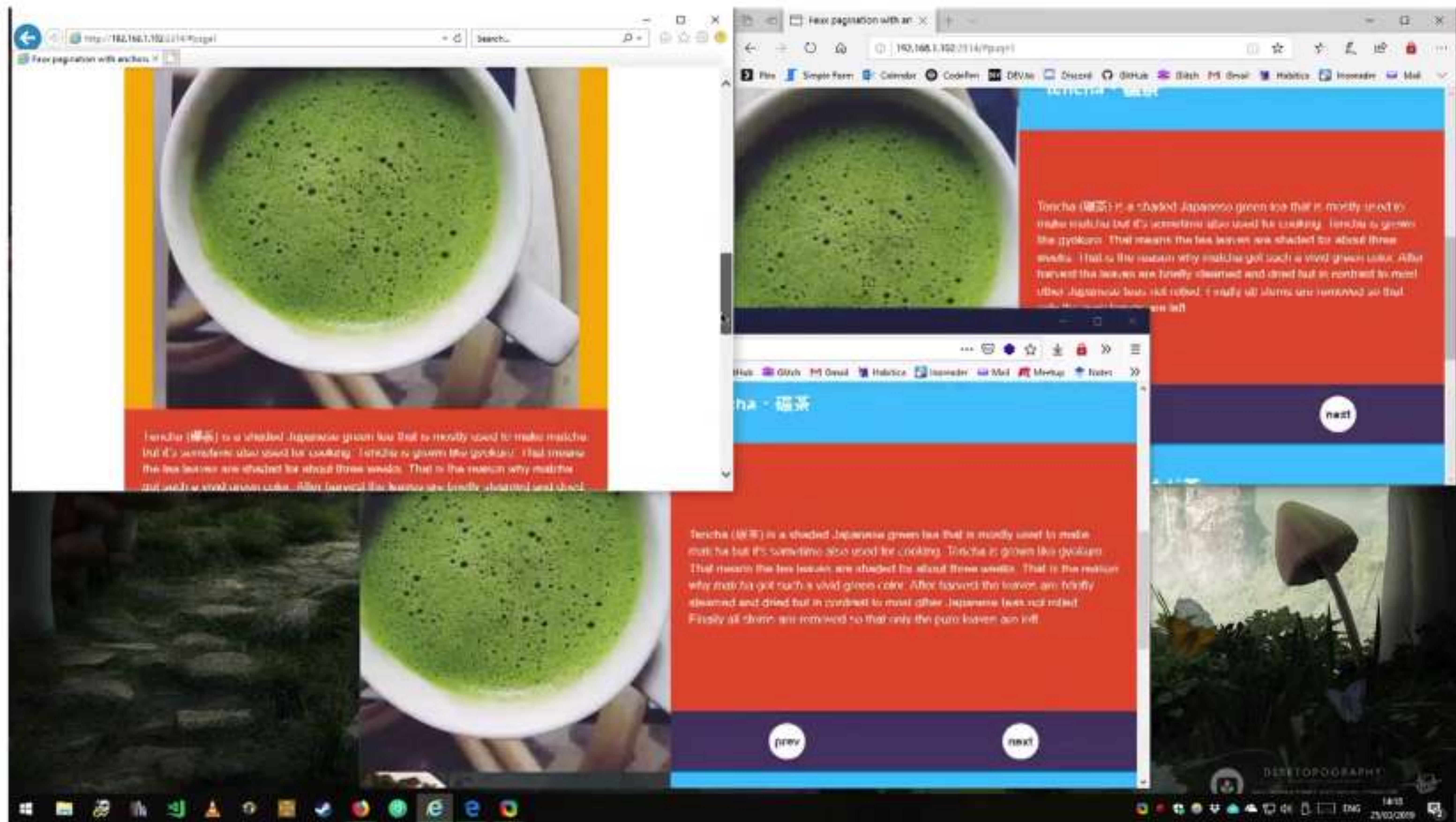
How Florence and the Machine singer overcame personal demons to write her first-ever Number One album and bring it on the road for her biggest tour yet

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





dowbsitesneedtolookexactlythesameineverybrowser



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About 2,620 results (0.32 seconds)

[Do websites need to look exactly the same in every browser?](#)

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[Do Websites Need to Look Exactly the Same in Every Browser? | The ...](#)

[www.peachpit.com/articles/article.aspx?p=1394622](#) ▼

Sep 9, 2009 - When I registered the domain

dowbsitesneedtolookexactlythesameineverybrowser.com, I set out to design the appropriate answer in a simple ...

[dowbsitesneedtolookexactlythesameineverybrowser.com on reddit ...](#)

[https://www.reddit.com/.../dowbsitesneedtolookexactlythesameineverybrowser.com/](#) ▼

[2007-12-11] Do websites need to look exactly the same in every browser? [programming]comments

No!



参考链接

- [WorldWideWeb 浏览器](#)
- [Before Netscape: the forgotten Web browsers of the early 1990s](#)
- [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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谢谢!



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