

今天的课题

1. 学习Bootstrap
2. 如何设置网络布局（通过CSS网格和[Flexbox](<https://css-tricks.com/snippets/css/a-guide-to-flexbox/>)）

Lecture Boilerplate

<https://github.com/lewagon/layouts-demo>

```
cd ~/code/$GITHUB_USERNAME
git clone git@github.com:lewagon/layouts-demo.git
cd layouts-demo
rm -rf .git
stt
serve
```

Bootstrap (v4.2)



Bootstrap基础

按钮、表单、工具类

Semantic scheme

primary

success

info

warning

danger

按钮

Click me

Click me

Click me

Click me

```
<a href="..." class="btn btn-primary">Click me</a>
<a href="..." class="btn btn-sucess">Click me</a>
<a href="..." class="btn btn-danger">Click me</a>
<a href="..." class="btn btn-warning">Click me</a>
```

工具类（文本）



```
<div class='text-justify'></div>
```



```
<div class='text-left'></div>
```

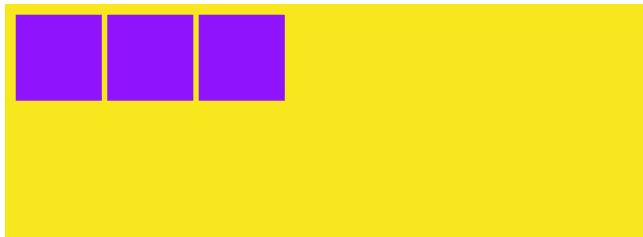


```
<div class='text-center'></div>
```

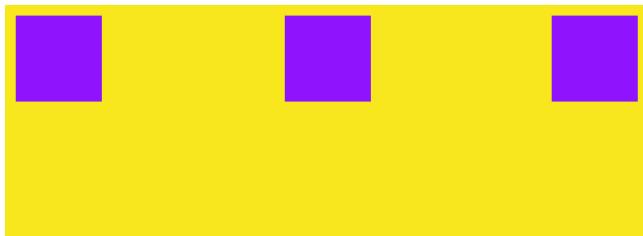


```
<div class='text-right'></div>
```

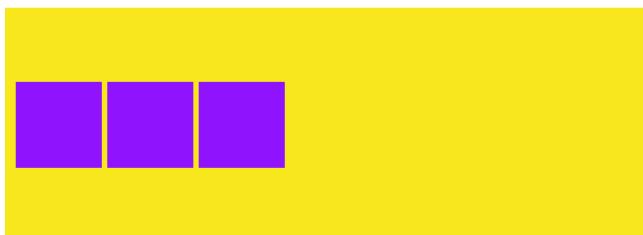
工具类 (Flexbox)



```
<div class="d-flex">...</div>
```



```
<div class="d-flex justify-content-between">...</div>
```



```
<div class="d-flex align-items-center">...</div>
```

工具类（边框）



.rounded



.rounded-circle

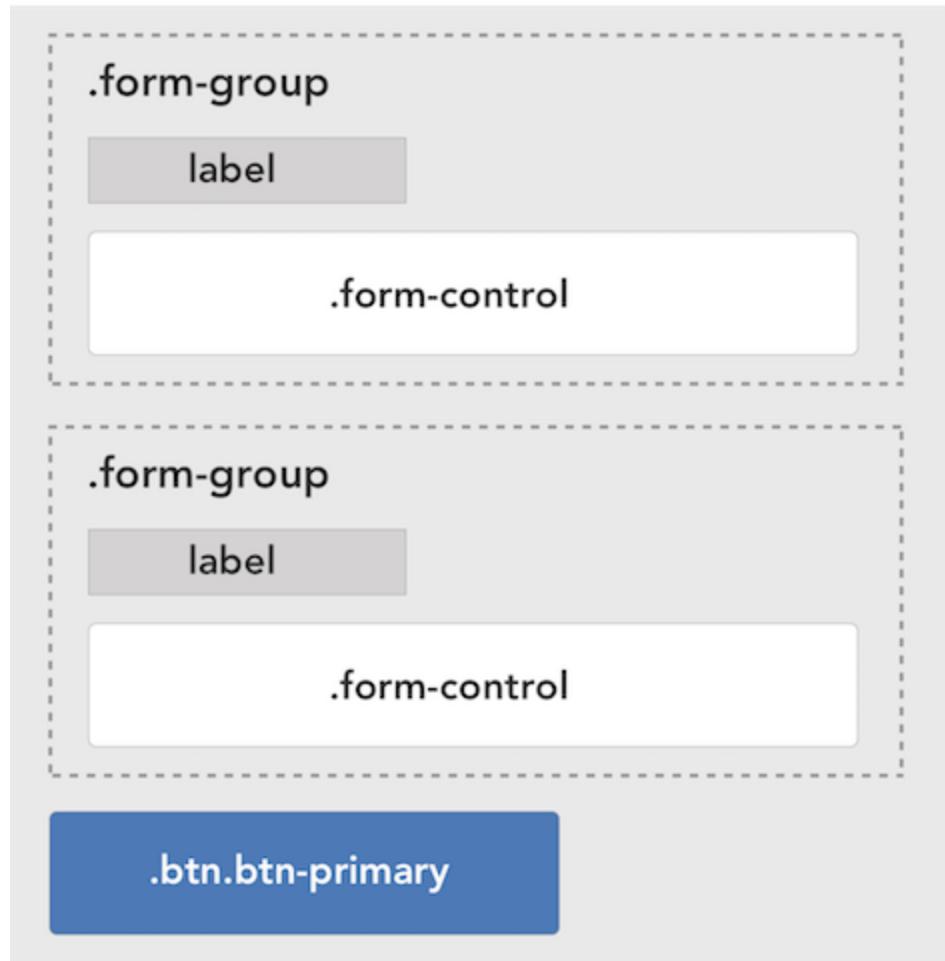
.border-bottom

```
  
  
  
  
<div class="border-bottom"></div>
```

请仔细阅读[bootstrap](#)文档

表单与标签

form



A user interface example showing a sign-up form. It includes two input fields: one for email with the placeholder 'alan@turing.com' and another for password with placeholder dots ('.....'). Below the inputs is a large blue button labeled 'Sign up'.

What's your email?
alan@turing.com

What's your password?
.....

Sign up

表单无标签

form

.form-group

.form-control

.form-group

.form-control

.btn.btn-primary

```
graph TD; form[.form] --> group1[.form-group]; group1 --> control1[.form-control]; form --> group2[.form-group]; group2 --> control2[.form-control]; form --> group3[.form-group]; group3 --> control3[.form-control]; button[.btn.btn-primary]
```

Enter your email

Enter your password

Sign up

```
graph TD; inputEmail[Enter your email]; inputPassword[Enter your password]; signUp[Sign up]
```

Bootstrap唯一的challenge

接下来，我们将编写一个类似于airbnb的民宿页面，不需要任何CSS

以下是产品设计师**brief**给你的设计稿，我们开始来编写吧！

airbnb

Insert Data Create Symbol Zoom Group Ungroup Edit Rotate Mask Scale Flatten Union Subtract Intersect Difference View Preview Cloud Export

2,600 2,700 2,800 2,900 3,000 3,100 3,200 3,300 3,400 3,500 3,600 3,700 3,800 3,900 4,000 4,100 4,200 4,300 4,400 4,500 4,600 4,700 4,800

show flat

Login

0
100
200
300
400
500
600
700
800
900
1,000
1,100
1,200

Lovely flat in Shoreditch, East London

Soak up the trendy aesthetic of this colourful Brick Lane flat set in the heart of ultra hip Shoreditch. Explore London's most thriving quarter via this space with an intimate kitchen, built-in wardrobes for ample storage, and two flat screen TVs. Shoreditch is London's hipster central, full of artisan coffee shops, contemporary bars, and cool pop-up food markets. Spitalfields market is on the doorstep, offering a plethora of food stalls which sit alongside designer shops and brands.

Book this flat

Message:

Arrival:
01/02/2019

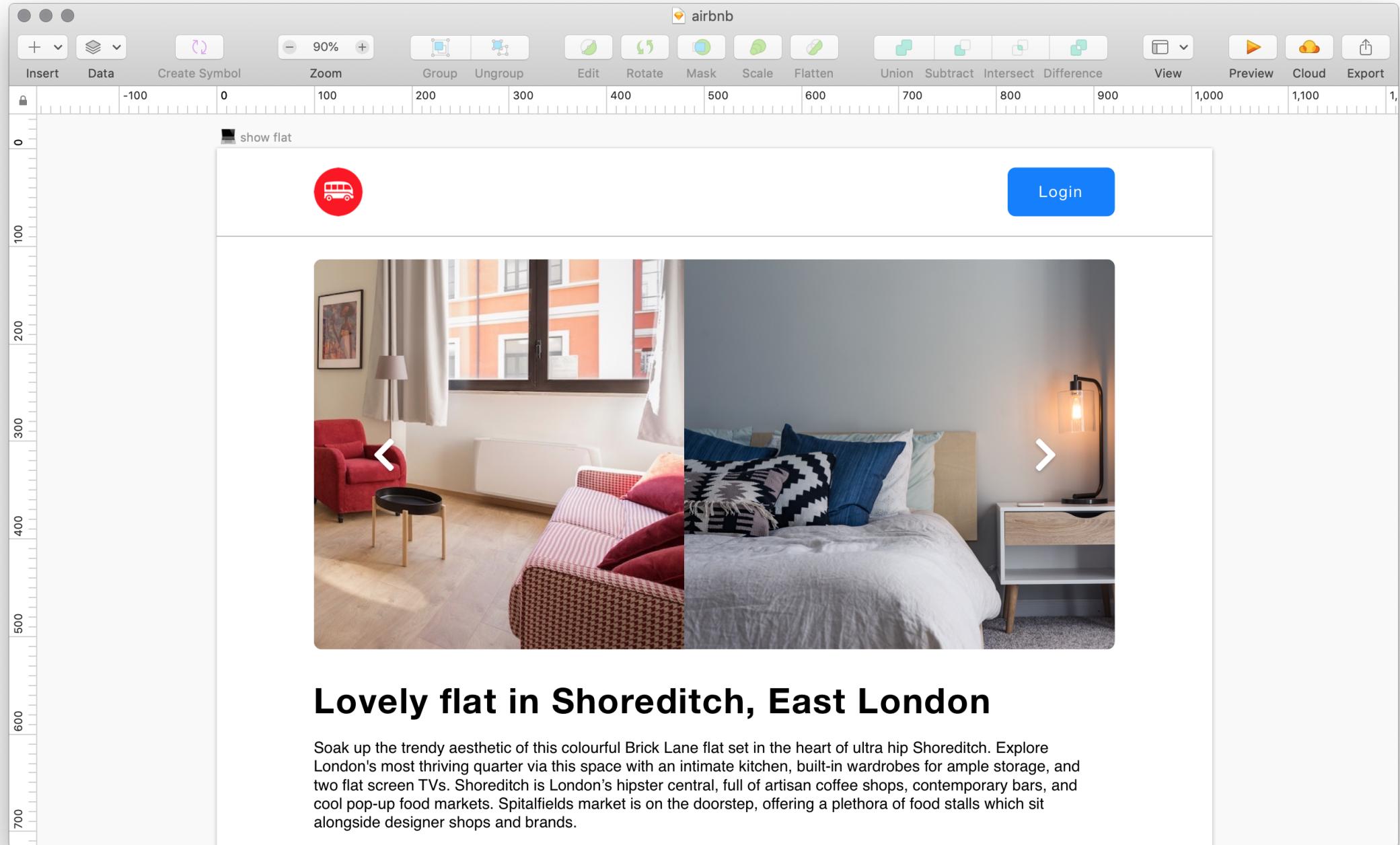
Departure:
07/02/2019

Book now

Bootstrap动态UI库

如何应用Bootstrap动态组件，例如[轮播](#)、[下拉菜单](#)、[模态框](#)、还有更多! 😎

在我们airbnb页面中加一个[轮播](#)吧！



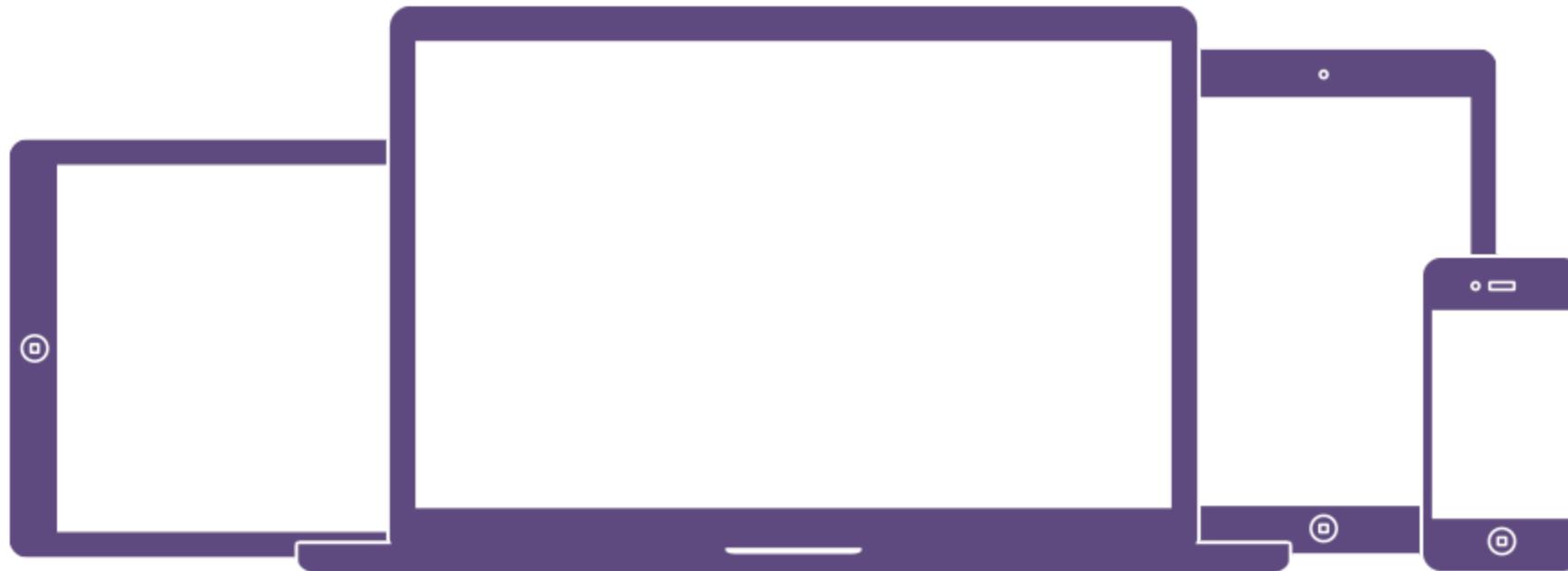
Bootstrap网格系统

如何使用[Bootstrap网格系统](#)来创建响应式布局（responsive layout）

定义

Bootstrap网格系统应用一系列的**containers**、行和列来布局和对齐内容。Flexbox能够解决1、网页布局的问题 2、网页响应式的问题

网页响应式

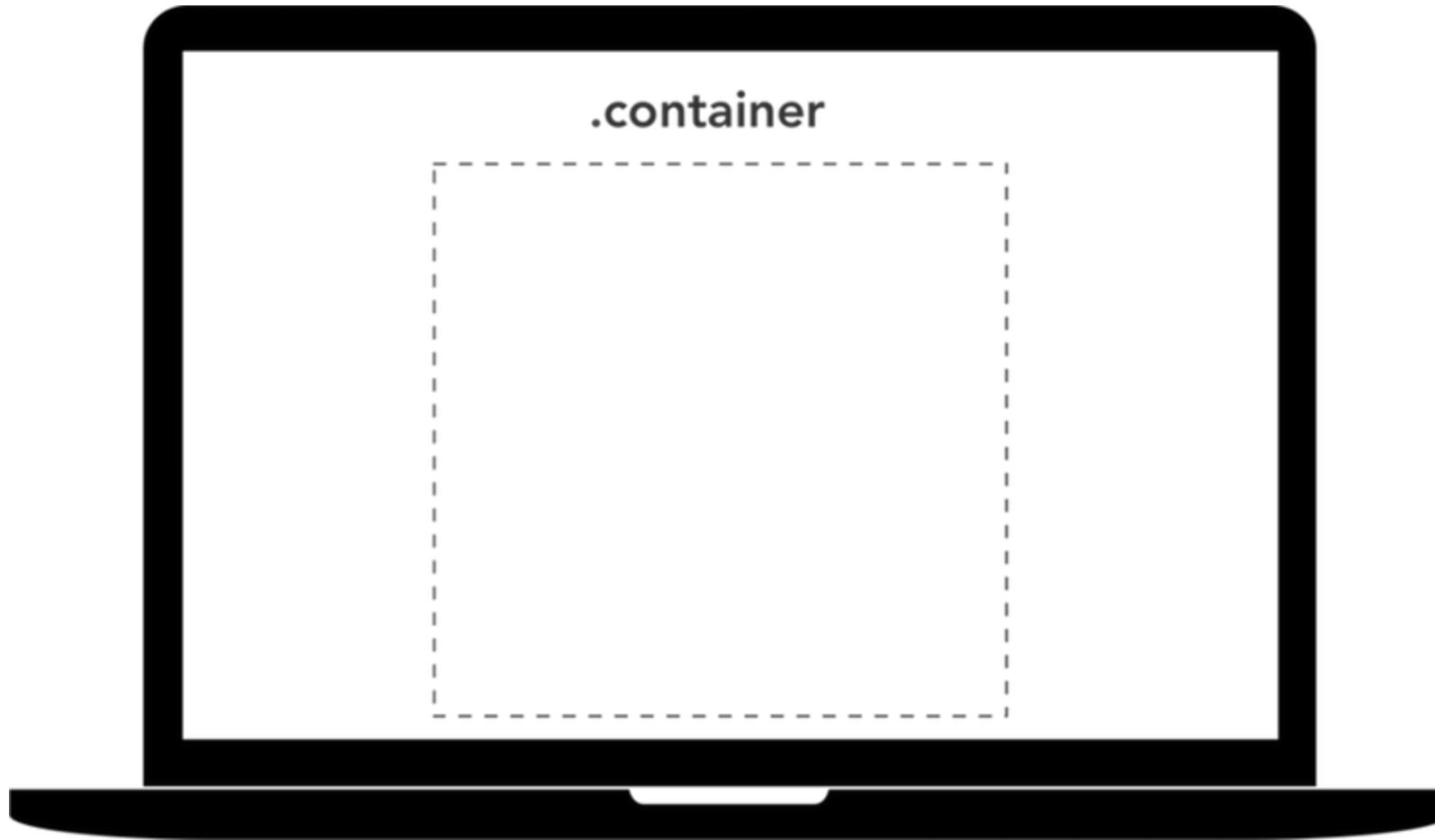


移动优先



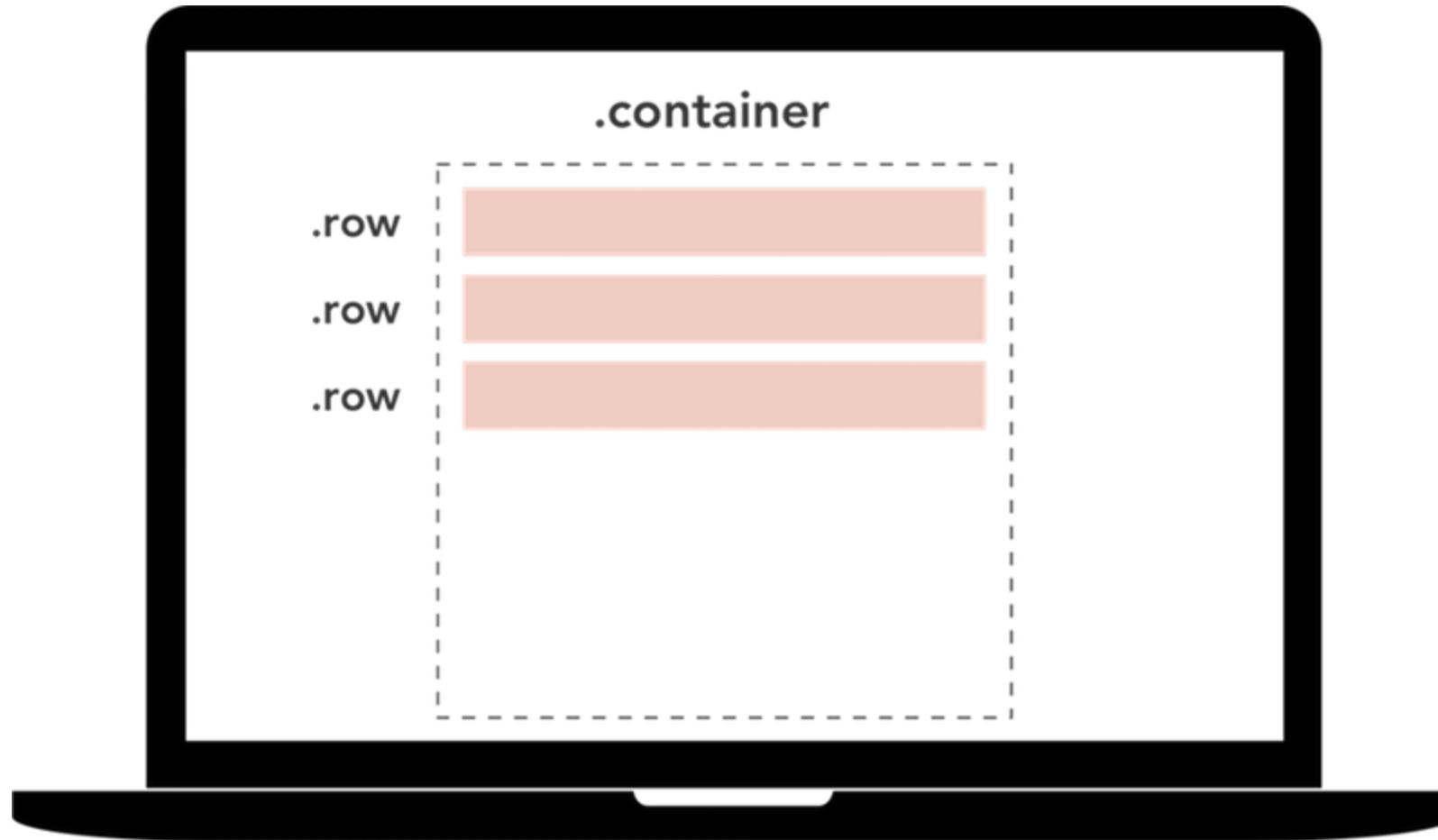
如何使用平面设计中的网格系统？

首先，添加一个 container



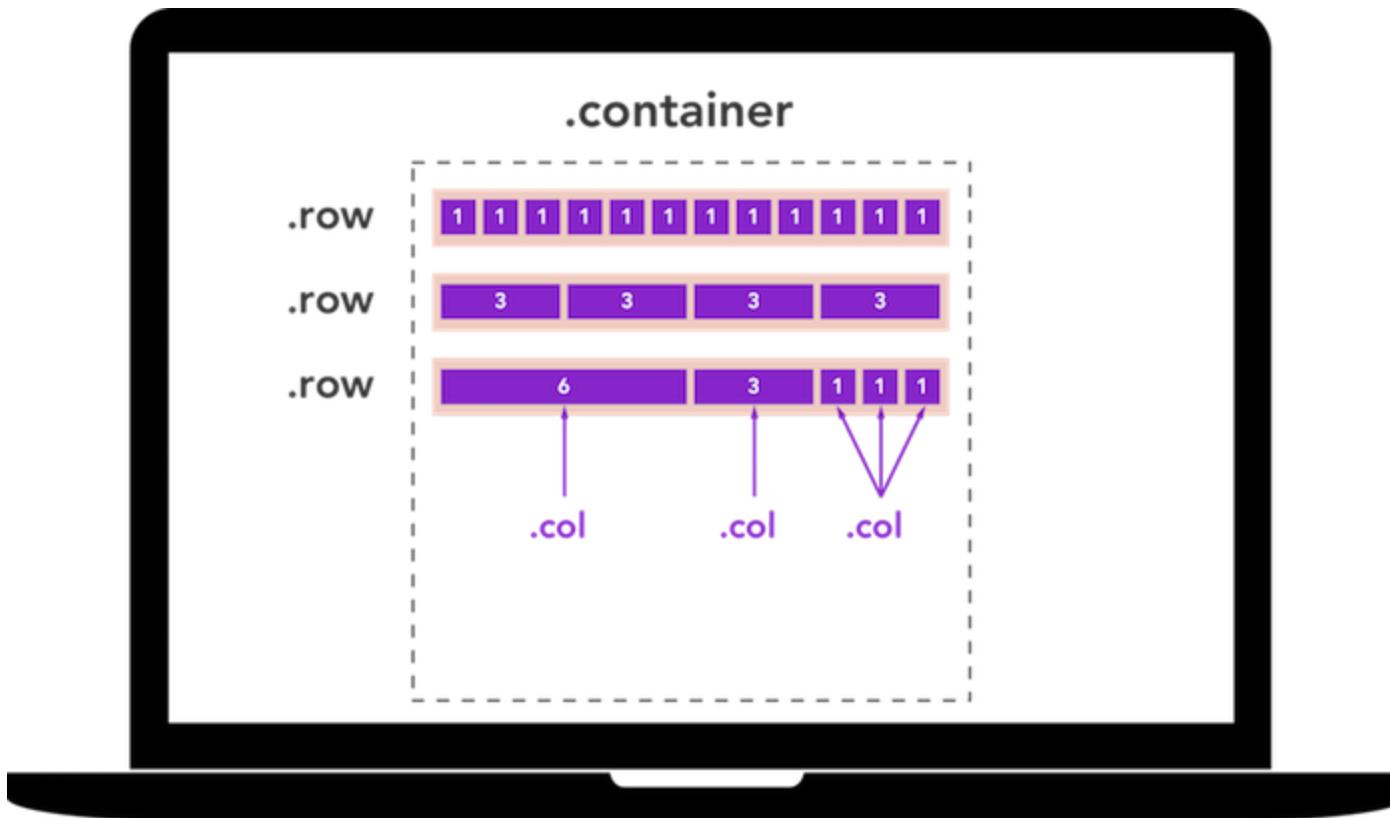
```
<div class="container">
  <!-- 添加网格 -->
</div>
```

第二， 添加几行



```
<div class="container">
  <div class="row"></div>
  <div class="row"></div>
  <div class="row"></div>
</div>
```

最后，添加几列



列是什么？

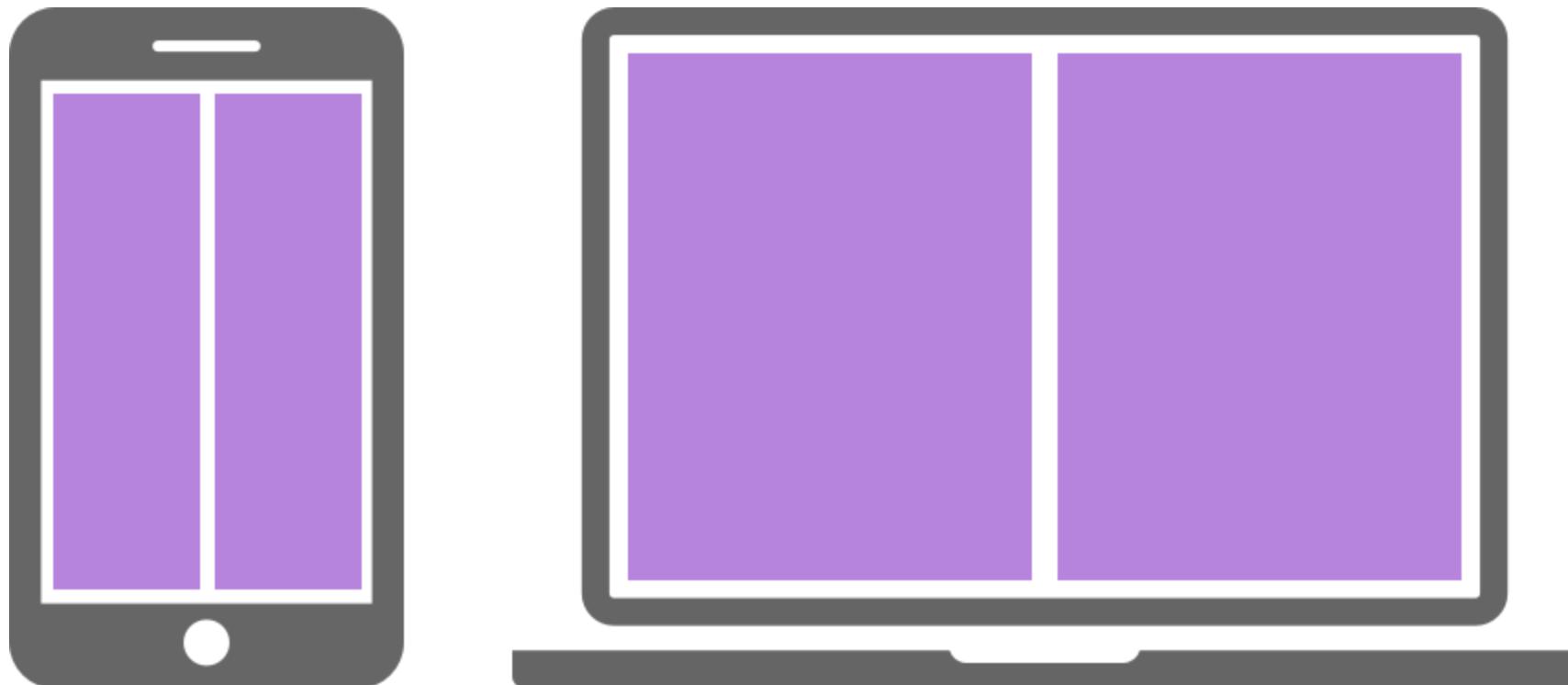
```
<div class="col-sm-6">  
</div>
```

- **col**: 该系统是基于12列的布局
- **sm**: 对应着小型设备的屏幕
- **6**: 对列数进行定义（12列最多）

网格类

- 默认: 极小设备 ➡ 小于576px
- **sm:** 小型设备 (平板 ➡ 576px及以上)
- **md:** 中型设备 (桌面显示器 tablet ➡ 768px及以上)
- **lg:** 大型设备 (大桌面显示器 desktop ➡ 992px及以上)
- **xl:** 超大设备 (超大桌面显示器 large desktop ➡ 1200px及以上)

Example 1



代码

```
<div class="container">
  <div class="row">

    <div class="col-6">
    </div>

    <div class="col-6">
    </div>

  </div>
</div>
```

移动优先

- 如果设定为 `.col-x` 类
- 它将适用于所有较大的屏幕

Example 2



代码

```
<div class="container">
  <div class="row">

    <div class="col-12 col-lg-8">
    </div>

    <div class="col-12 col-lg-4">
    </div>

  </div>
</div>
```

Example 3



可以这样做吗? 🤔

当然！

.row 是默认值，还可以设置不同的排列类

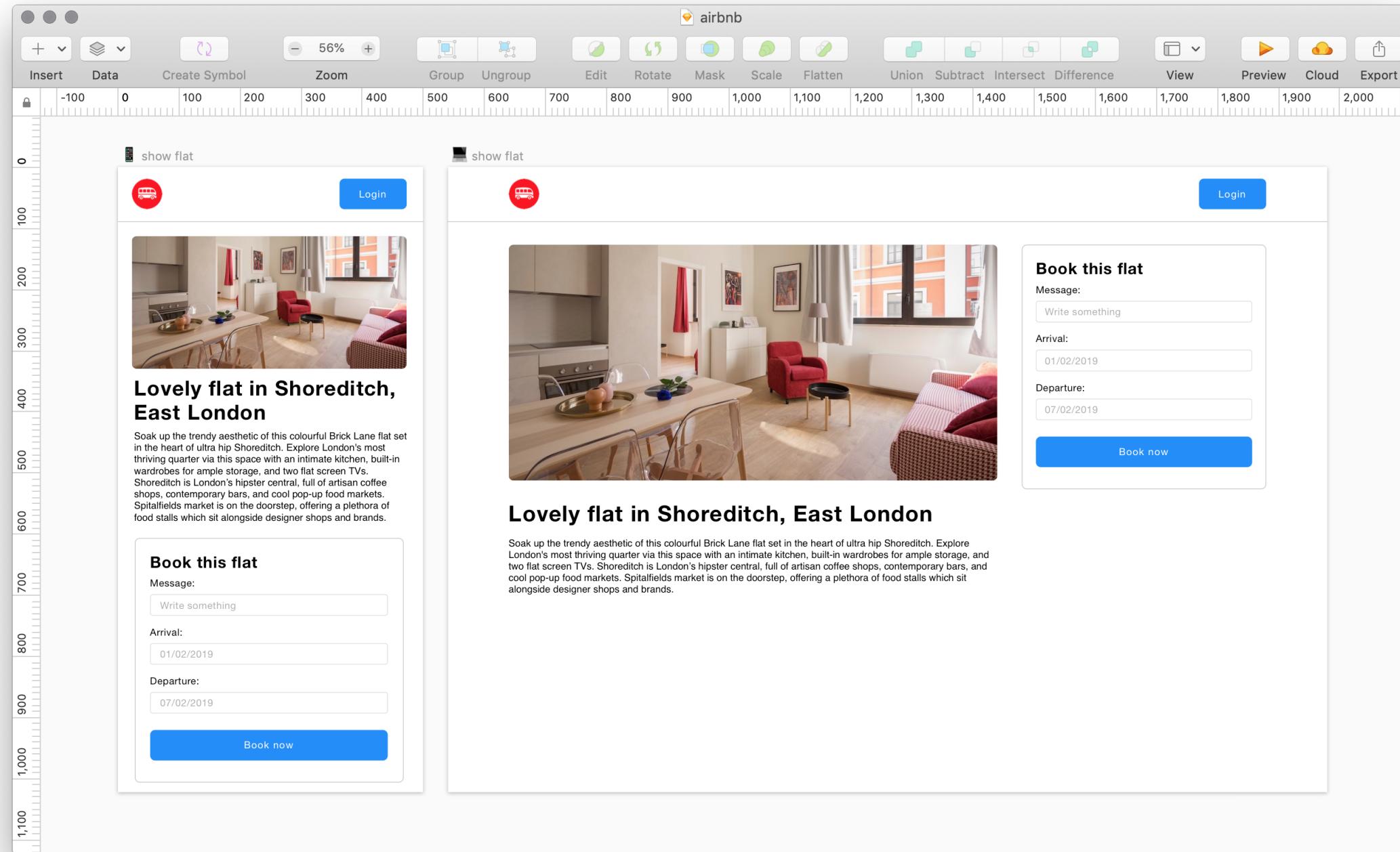
```
html<div class="container"><div class="row justify-content-center"><div  
class="col-12 col-lg-6"><!-- This div is centered and takes 6 columns --></div>  
</div></div>
```

可参考[网页响应式设计](#)的案例

 **Don't break the grid** 

千万不要添加自己的CSS规则到Bootstrap网格元素中！

接下来， 如何让我们airbnb页面快速响应式屏幕呢！



Bootstrap结论（1）

什么时候需要Bootstrap? 

- 原子 如: [按钮](#)和[输入](#).
- 动态组件 如: [下拉菜单](#)或[轮播](#).
- 无media query的响应式布局

Bootstrap结论（2）

什么时候不应该用Bootstrap? 🤔

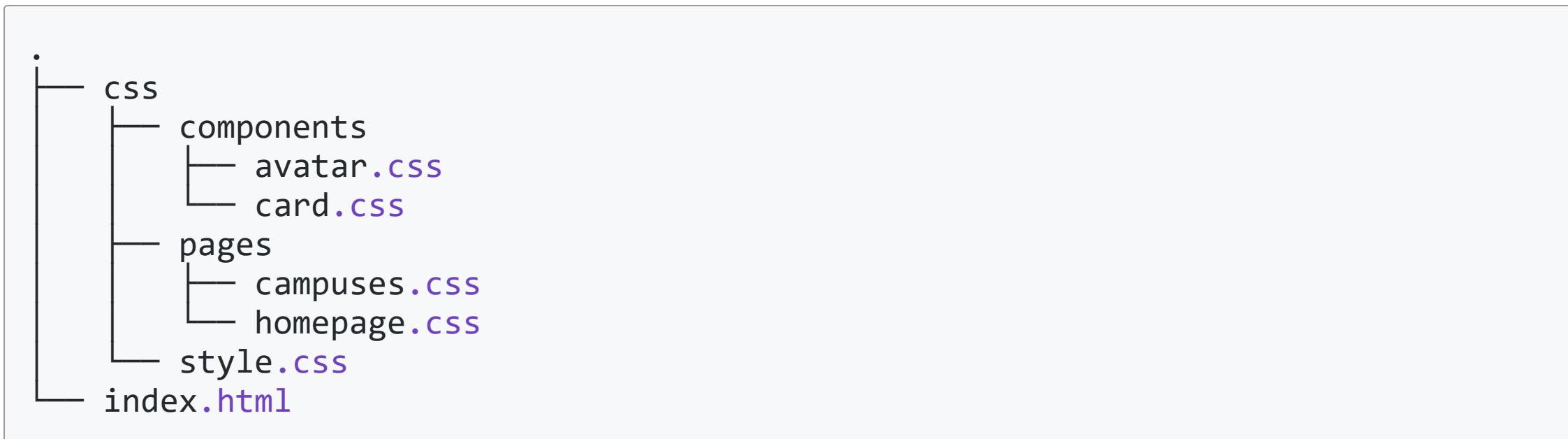
- 分子 如：卡片、banner等👉 自定义设计
- 高级布局👉 使用flexbox或CSS网格

Bootstrap文档

<http://getbootstrap.com/docs/4.2>

高级布局

CSS组织



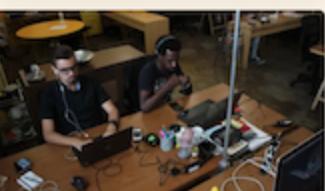
由卡片构成的网格

Our 30 Campuses | Le Wagon

https://www.lewagon.com/campuses

le wagon | Campuses | Program | Graduates | Events | Career services | Select a city

Find your campus among **30 cities**

 Nantes Feb 4, 2019 Course in French	 Kyoto Feb 18, 2019 Course in English	 Shanghai Feb 18, 2019 Course in English	 Shenzhen Feb 25, 2019 Course in English
 Chengdu Mar 11, 2019 Course in English	 Belo Horizonte Mar 12, 2019 Course in Portuguese	 Copenhagen Apr 1, 2019 Course in English	 London Apr 1, 2019 Course in English
			

如何建造以上网格？

- 如果网格是由卡片构成的，bootstrap网格系统将过于复杂
- △ 反而，我们可以应用CSS网格布局！ 😎

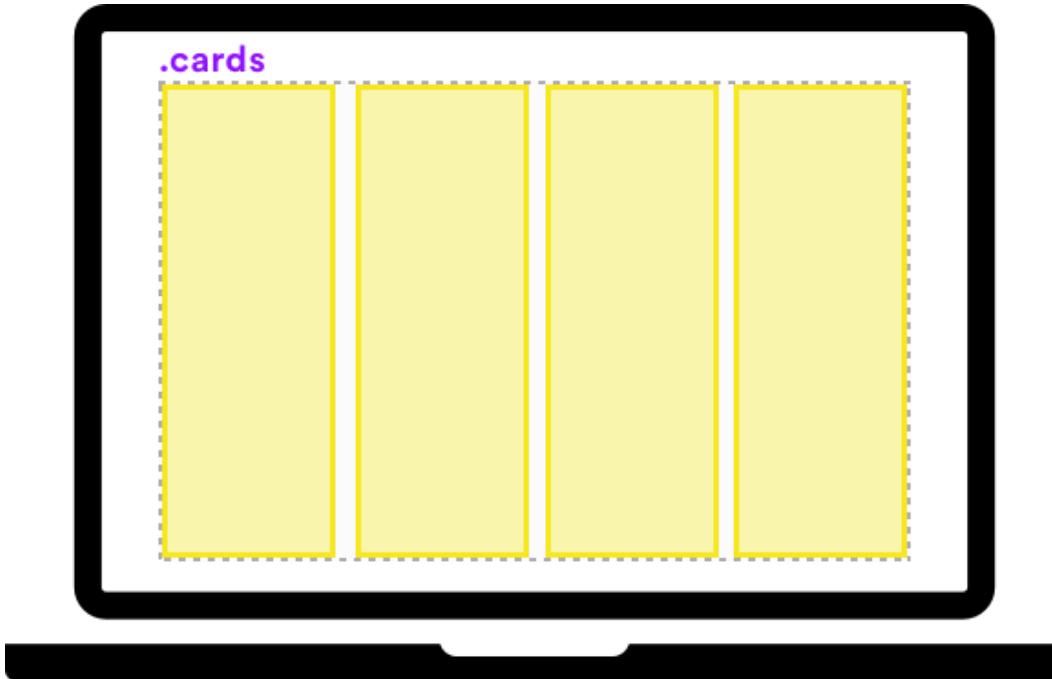
如何应用CSS网格布局



.cards

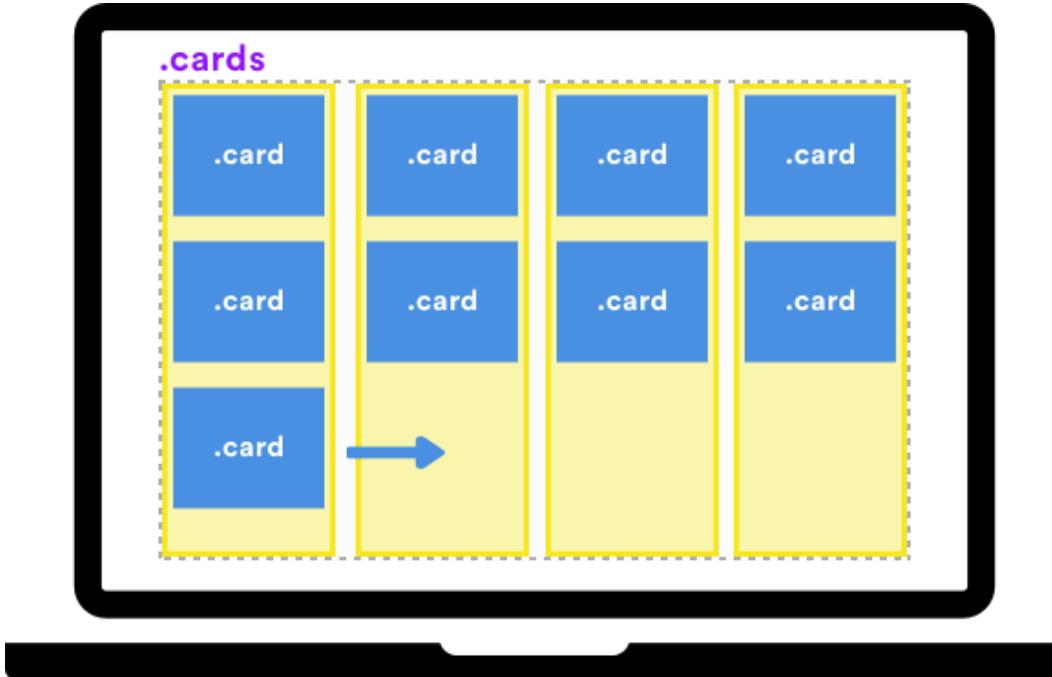
```
.cards {  
  display: grid;  
}
```

添加几列



```
.cards {  
  display: grid;  
  grid-template-columns: 1fr 1fr 1fr 1fr;  
  grid-gap: 16px;  
}
```

网格内的卡片有任何变化吗？

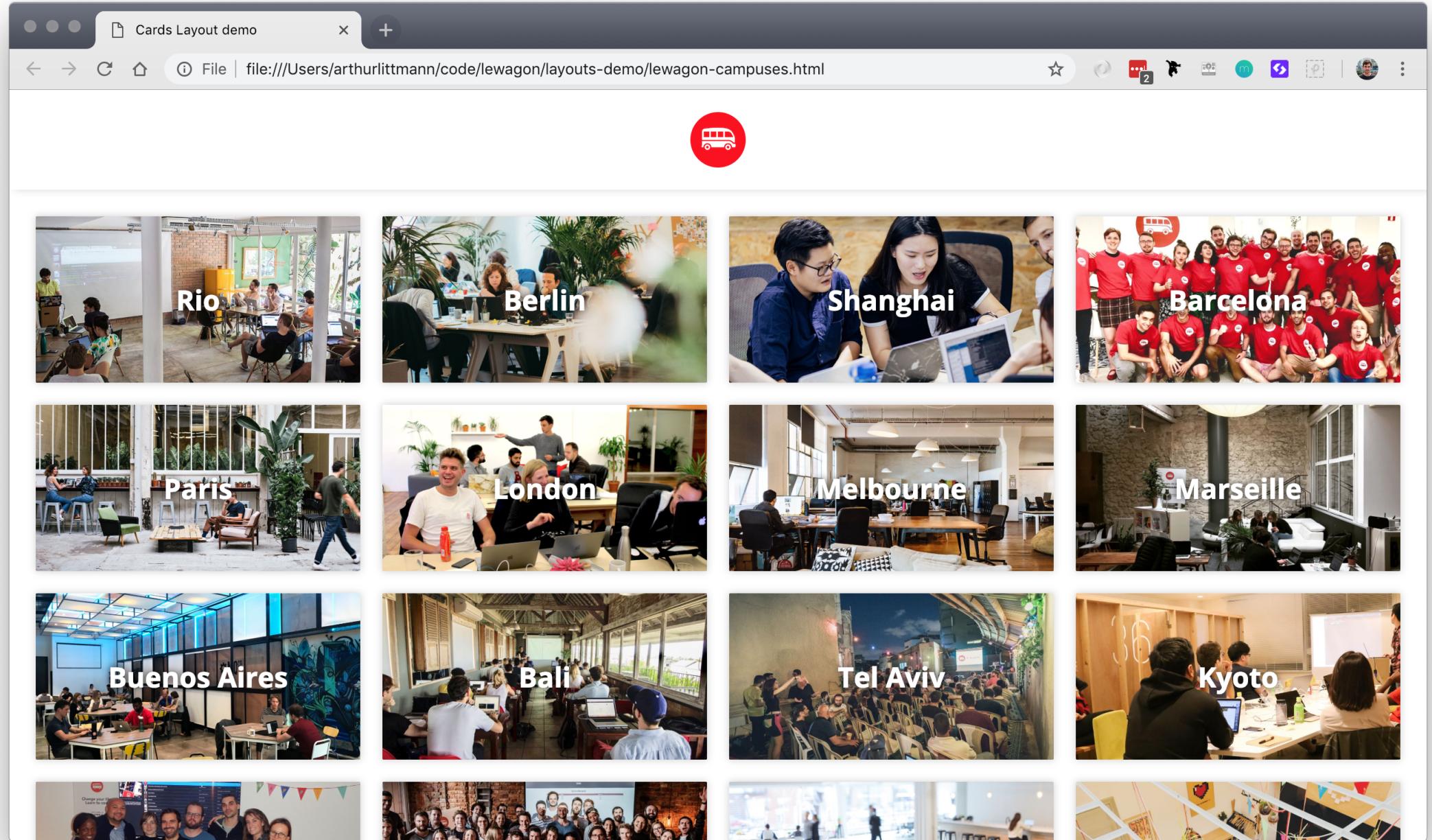


```
.cards {  
  display: grid;  
  grid-template-columns: 1fr 1fr 1fr 1fr;  
  grid-gap: 16px;  
}
```

Media queries

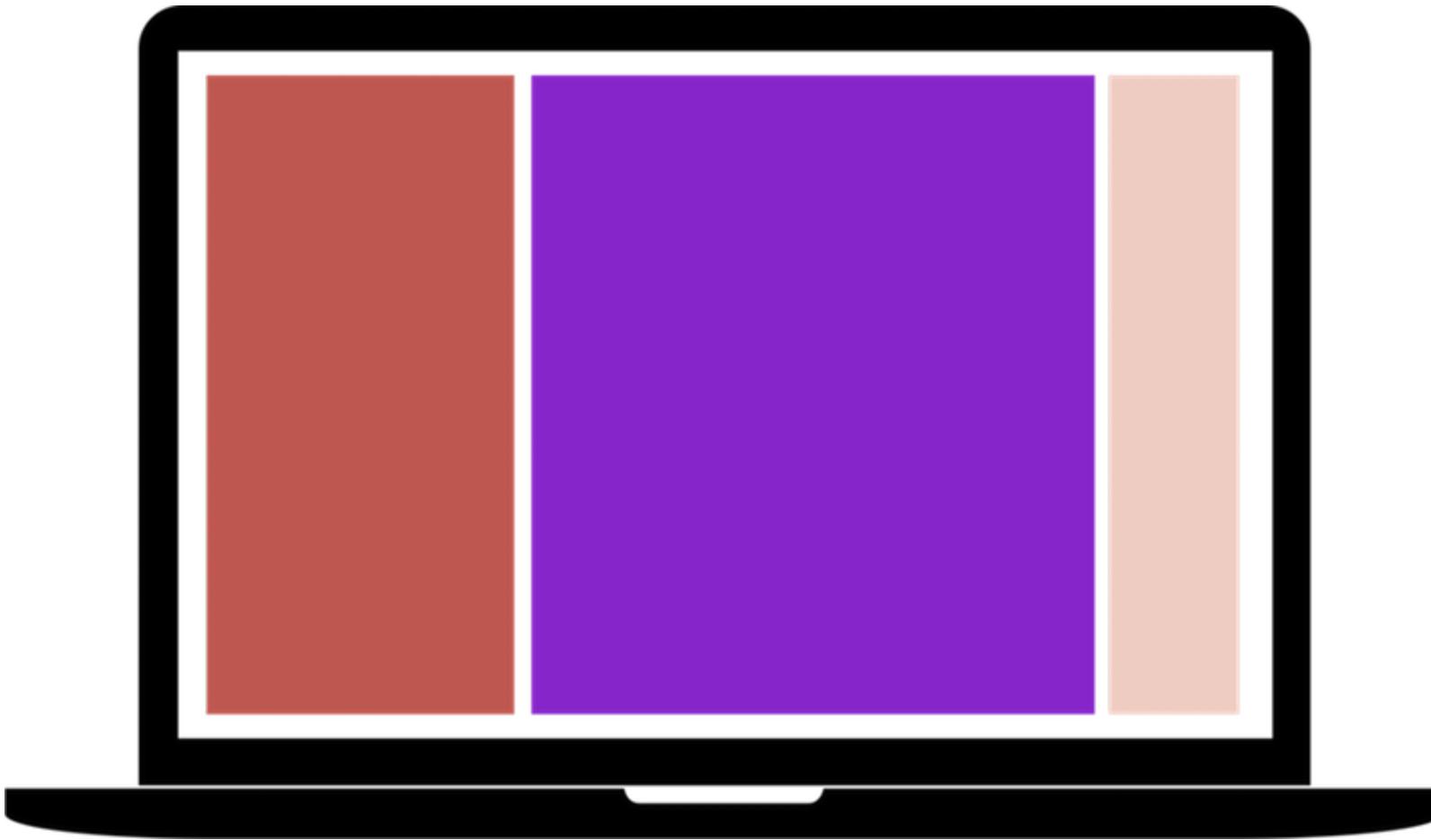
```
@media(max-width: 992px) {  
  .cards {  
    grid-template-columns: 1fr 1fr;  
  }  
}  
  
@media(max-width: 768px) {  
  .cards {  
    grid-template-columns: 1fr;  
  }  
}
```

接下来，我们将编写以下响应式的卡片布局！

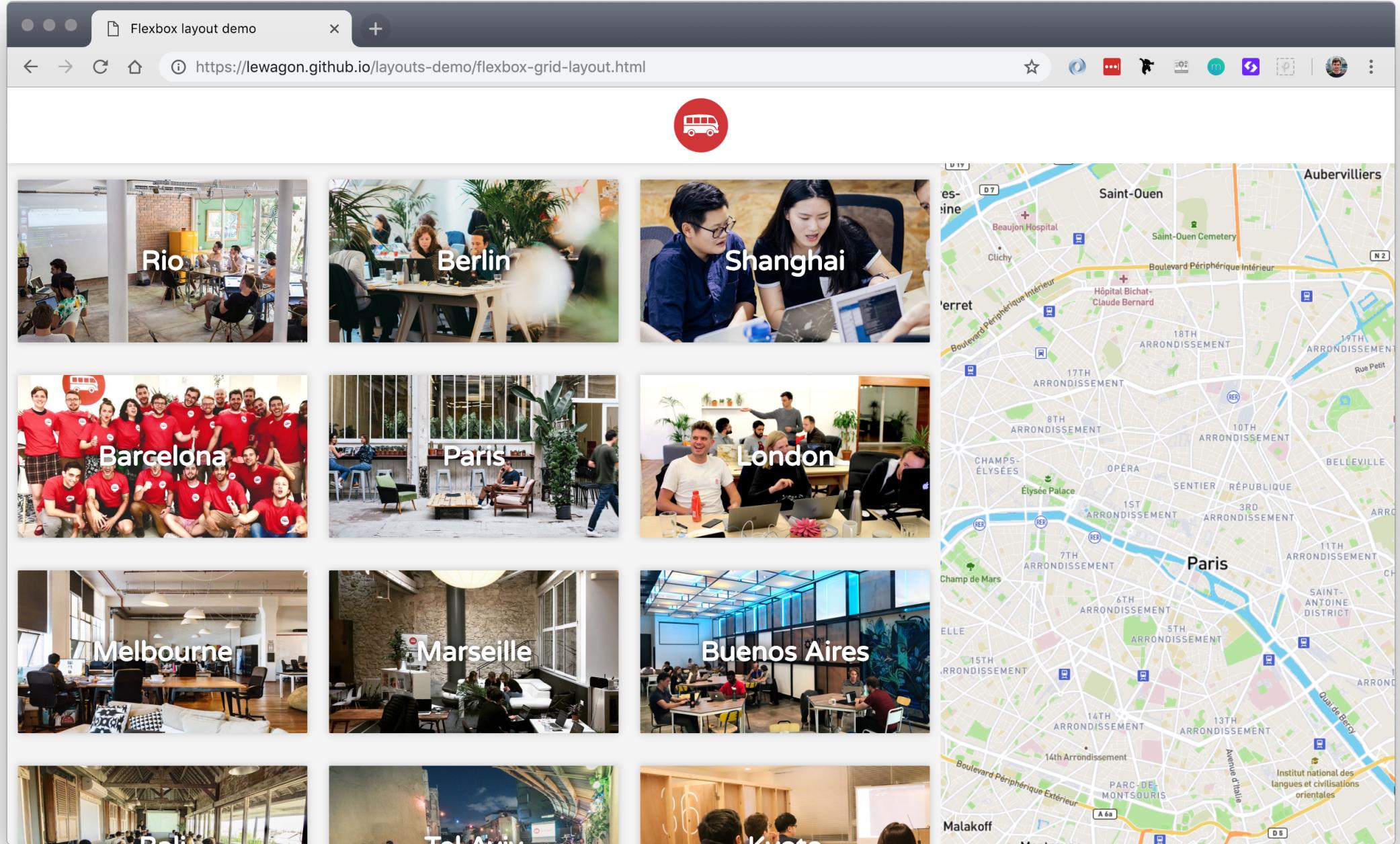


多列布局

使用flexbox将页面分成多个列（e.g. 边栏、地图）



接下来，我们将编写以下布局

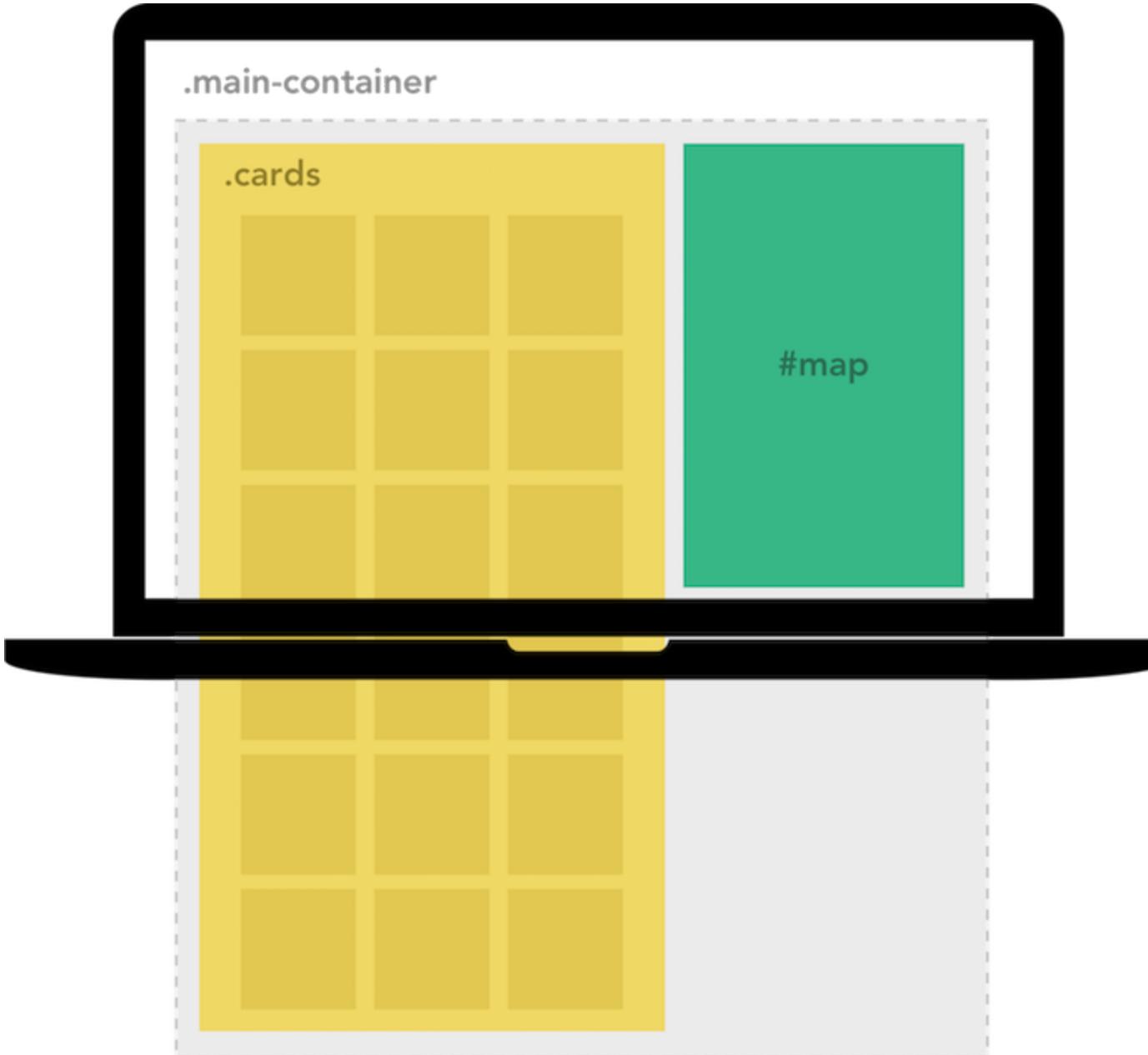


添加个人的Mapbox令牌 (token)

<https://www.mapbox.com/account/access-tokens/>

```
<!-- campuses-with-map.html -->  
  
<img id="map" src='https://api.mapbox.com/ [...] ?access_token=YOUR-TOKEN-HERE'>
```

如何编写该布局呢？



还需要任何CSS吗? 🤔

```
.main-container {  
  display: flex;  
}  
  
#map {  
  height: 100vh;  
}  
  
.cards {  
  flex-grow: 1;  
}
```

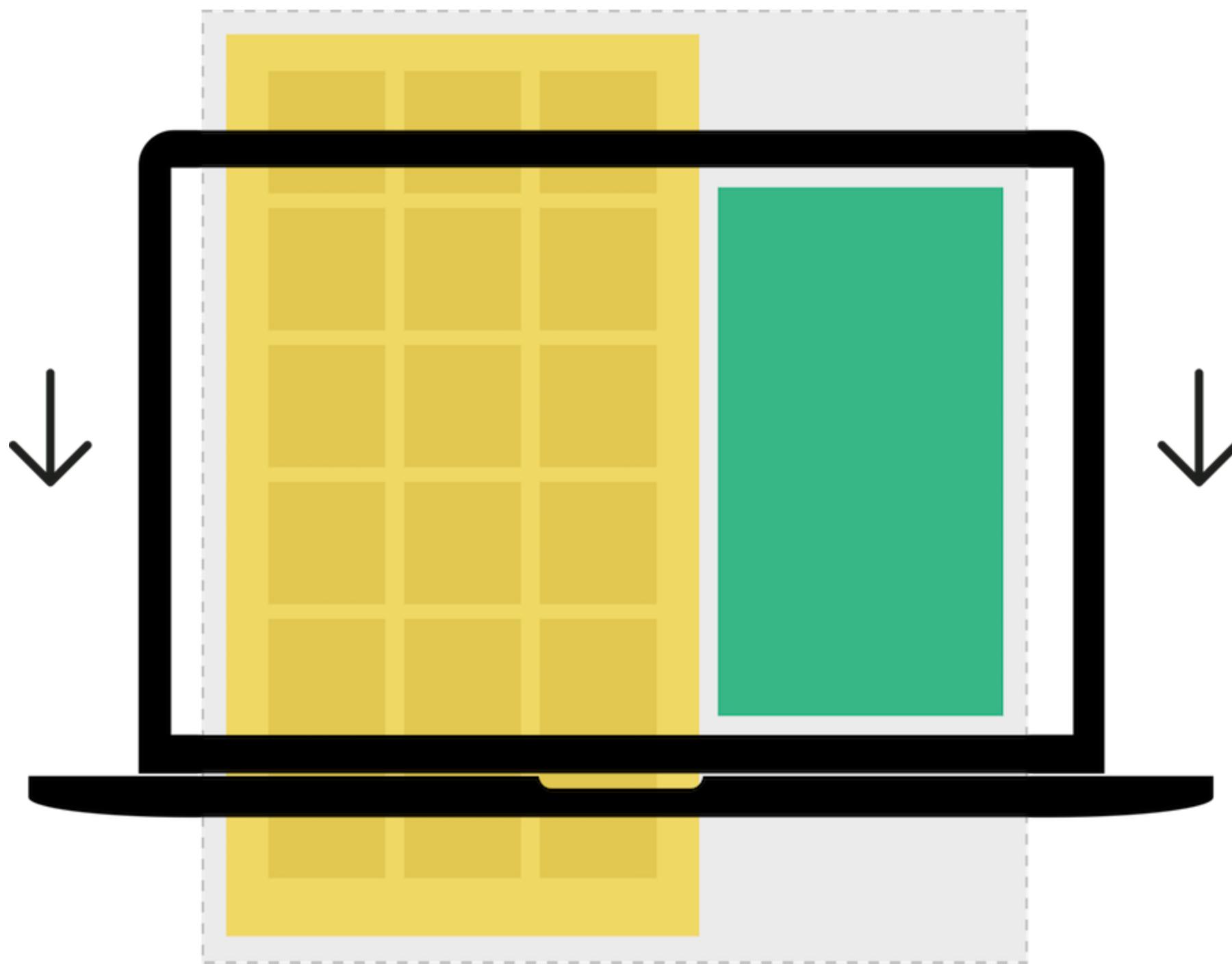
Live-code

在**campuses-with-map.html**文件中我们将编写该布局

如果下移动的话，地图就会消失 😢

No problem

```
#map {  
  height: 100vh;  
  position: sticky;  
  top: 0;  
}
```



Live-code

在campuses-with-map.html文件中加上 position: sticky

Let's build cool layouts 😎