

Building Responsive Layouts

by Zoe Mickley Gillenwater
[@zomigi](http://zomigi.com)

翻译: iXieMin
<http://xiemin.me>

August 28, 2012

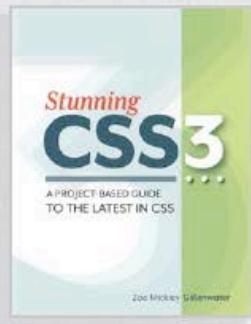
Responsive Web Design Summit

What I do

Books

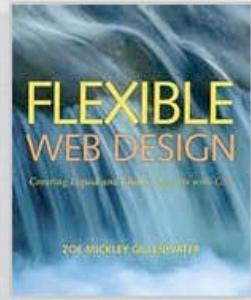
Stunning CSS3:
A Project-based Guide to
the Latest in CSS

www.stunningcss3.com



Flexible Web Design:
Creating Liquid and Elastic
Layouts with CSS

www.flexiblewebbook.com



Web

Accessibility
specialist at AT&T

Visual designer

CSS developer
and consultant



why

responsive web design works



what



why

响应式设计意味着什么？



what



why



how

怎么做响应式设计？

流式/液态 布局

宽度使用百分比的方式，以适应
视口大小

混合布局

固定栏 + 灵活栏, 只有固定栏

响应式设计

利用**media queries**, 实现流式布局
和灵活的图像适应

www.alistapart.com/articles/responsive-web-design/

自适应布局

是多个固定宽度的布局并且利用
media queries让位置相互之间变
换

www.netmagazine.com/tutorials/adaptive-layouts-media-queries



看啊！
这有多艰难啊！
我在这如此高的地方有
多危险啊！



Oh, 等等...

怎么才能 做到流式 布局？

You deserve a sweet little treat every now and then.

Pellentesque habitant morbi tristique senectus et netus et malesuada fames ac turpis egestas. Vestibulum tortor quam, feugiat vitae, ultricies eget, tempor sit amet, ante. Donec eu libero sit amet quam egestas semper. Aenean ultricies mi vitae est. Mauris placerat eleifend leo. Quisque sit amet est et sapien

ullamcorper pharetra. Vestibulum erat wisi, condimentum sed, commodo vitae, ornare sit amet, wisi. Aenean fermentum, elit eget tincidunt condimentum, eros ipsum rutrum orci, sagittis tempus lacus enim ac dui. Donec non enim in turpis pulvinar facilisis. Ut felis.



Candies

TRUFFLES, BARS,
CARAMELS, AND MORE

Pellentesque habitant morbi tristique senectus et netus et malesuada fames ac turpis egestas. Vestibulum tortor quam, feugiat vitae, ultricies eget, tempor sit amet, ante.



Pastries

CROISSANTS, DANISHES,
CREAM PUFFS, AND MORE

Vestibulum tortor quam, feugiat vitae, ultricies eget, tempor sit amet, ante. Donec eu libero sit amet quam egestas semper. Aenean ultricies mi vitae est. Mauris placerat



Desserts

CAKES, PIES, TARTS,
COOKIES, AND MORE

eleifend leo. Vestibulum tortor quam, feugiat vitae, ultricies eget, tempor sit amet, ante.

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Email:

subscribe

MOTHER'S DAY SPECIAL

Pellen tesque habitant morbi tristique senectus et netus et malesuada fames ac turpis egestas.

NEWS

[Lorem ipsum dolor sit amet, consectetur adipiscing elit](#)

[Aliquam fringilla mauris eu risus](#)

[Vestibulum auctor dapibus neque](#)

[Read more at our blog and follow us on Twitter](#)

About this Page

This page is for a fictional site. It was created by [Zoe Mickey Gleewater](#) as an exercise in the book [Stunning CSS3: A Project-based Guide to the Latest in CSS](#). It uses CSS3 media queries to change the design at different screen sizes: resize your browser window or load it up in a mobile device to check it out!

Credits

WEB FONTS:

Nada Serif from [Kernest](#)

ILLUSTRATIONS:

Yummy by [Icon Eden](#)

开始设定一个div容器，margin为6%

The screenshot shows a website layout with a top navigation bar and a main content area. The top navigation bar has a yellow header section on the left and right sides, each containing a 6% margin placeholder. The main content area has a blue background and features a large central text block with a 6% margin placeholder. Below this are three sections: 'Candies', 'Pastries', and 'Desserts', each with its own 6% margin placeholder. On the right side, there's a sidebar with a yellow header section containing a 6% margin placeholder, followed by sections for 'SWEET DEALS', 'NEWS', and social media links.

little pea
BAKERY

wrapper

HOME ABOUT MENU LOCATION CATERING CONTACT US

You deserve a sweet little treat every now and then.

Pellentesque habitant rhori frustique
venenatis et netus et malesuada fames
ac turpis egestas. Vestibulum tortor
nuam feugiat vitae ultricies eget
tempor sit amet, ante. Donec eu libero
sit amet quam eu est semper. Aenean
ultricies mi vitae est. Mauris placerat
eleifend leo. Quisque sit amet est et

sapien ullamcorper pharetra.
Vestibulum erat wisi, condimentum sed,
commodo vitae, ornare sit amet, wisi.
Aenean fermentum, elit eget tincidunt
condimentum, eros ipsum rutrum orci.
Sagittis tempor lacus enim ad eu.
Donec non enim in turpis pulvinar
faelisis, ut felis.

Candies

CHOCOLATE PARFAITS, CARAMELS,
AND MORE.

Pellentesque habitant rhori
frustique venenatis et netus et
malesuada fames ac turpis
egestas. Vestibulum tortor
nuam feugiat vitae ultricies
eget tempus. Aenean
ultricies mi vitae est.

Pastries

CROISSANTS, DAUGHETS,
CREAM PUFFS, AND MORE.

Vestibulum tortor quam,
massa id sit amet, lorem
erat. Aliquam id sit amet quam
erat. Vestibulum tortor
nuam feugiat vitae ultricies
eget tempus. Aenean
ultricies mi vitae est.

Desserts

CAKES, PIES, TARTS,
COOKIES, AND MORE.

Vestibulum id sit amet quam
erat. Vestibulum tortor
nuam feugiat vitae ultricies
eget tempus. Aenean
ultricies mi vitae est.

SEARCH

EMAIL NEWSLETTER
Sign up to get more delicious
bakery news, updates, and more!

Small

SWEET DEALS

MOTHER'S DAY SPECIAL

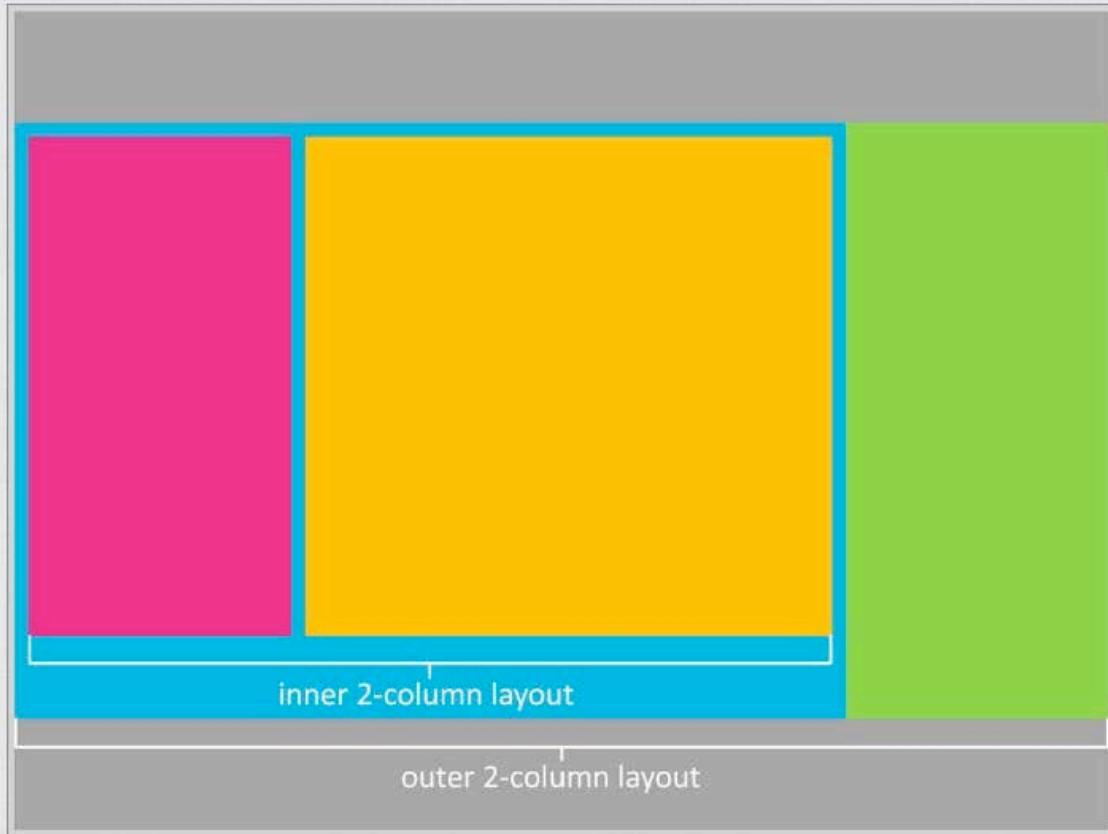
NEWS

Aliquam id sit amet quam
erat. Vestibulum tortor
nuam feugiat vitae ultricies
eget tempus. Aenean
ultricies mi vitae est.

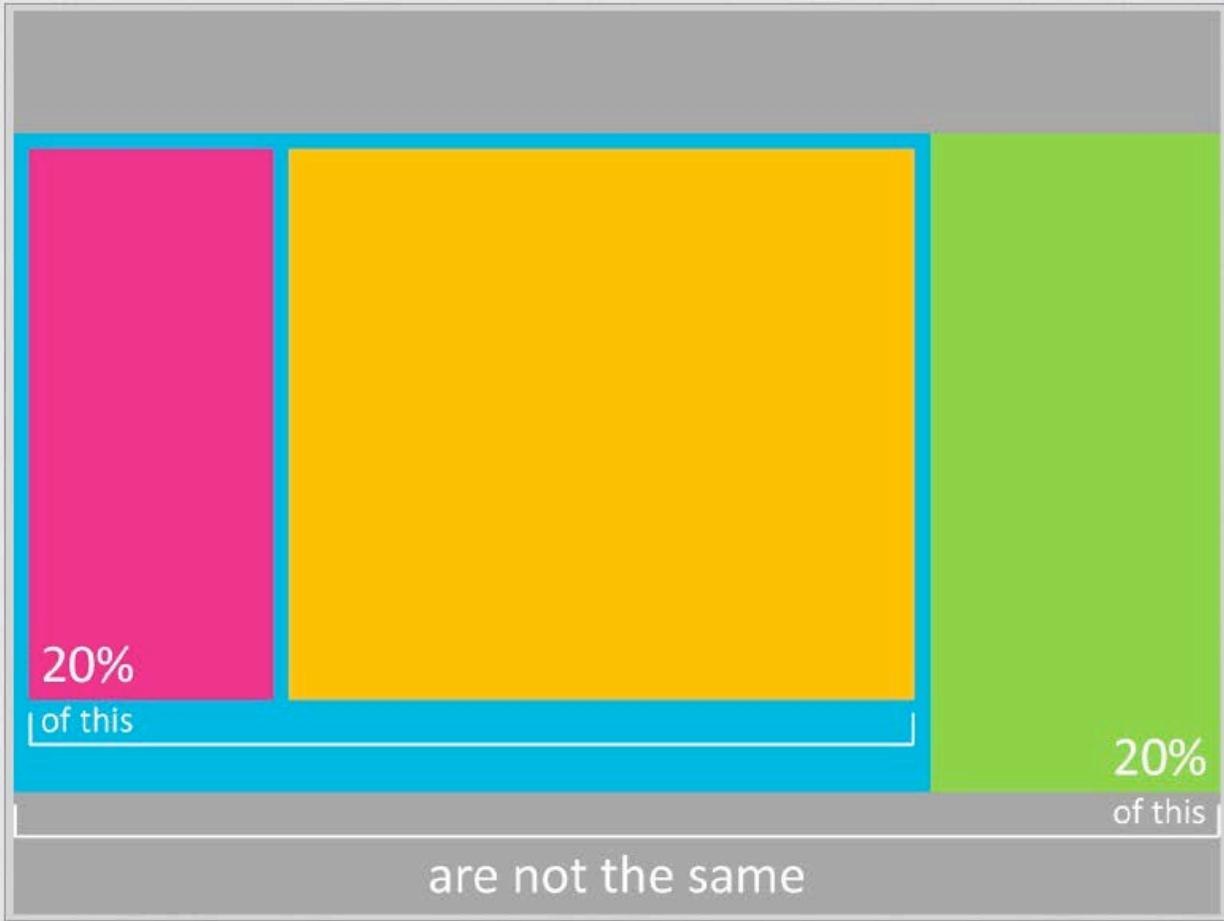
Read more about our blog and follow
us on Twitter.

添加相对内浮动

三栏式布局：两栏中一列嵌套另两栏



百分比是相对的



确定嵌套列的宽度

$$\text{你希望的列宽} \quad \div \quad \text{父列宽} \quad = \quad \text{嵌套列的宽度}$$

确定嵌套列的宽度

你希望的列宽 \div 父列宽 $=$ 嵌套列的宽度

目标 \div 上下文 $=$ 结果

Determining nested widths

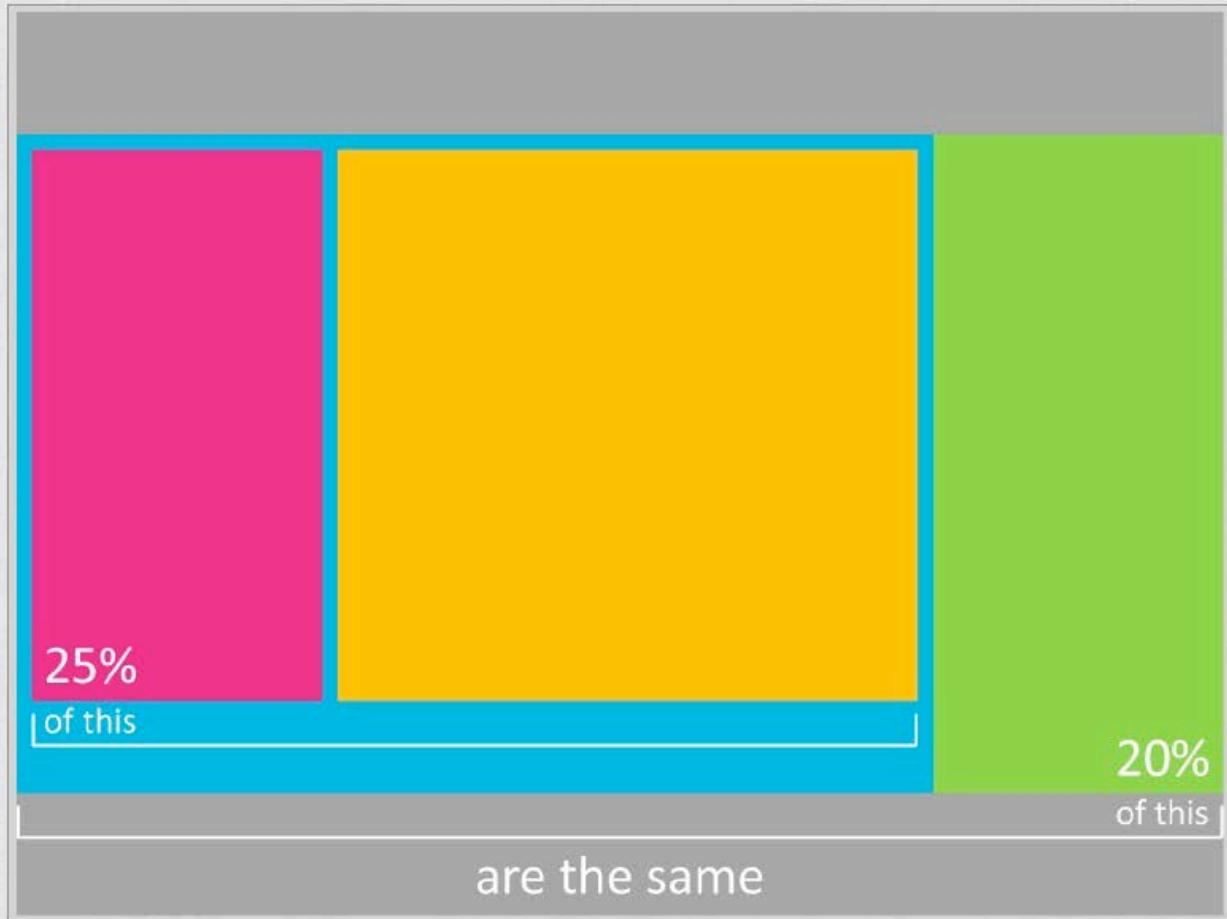
你希望的列宽 \div 父列宽 = 嵌套列的宽度

目标 \div 上下文 = 结果

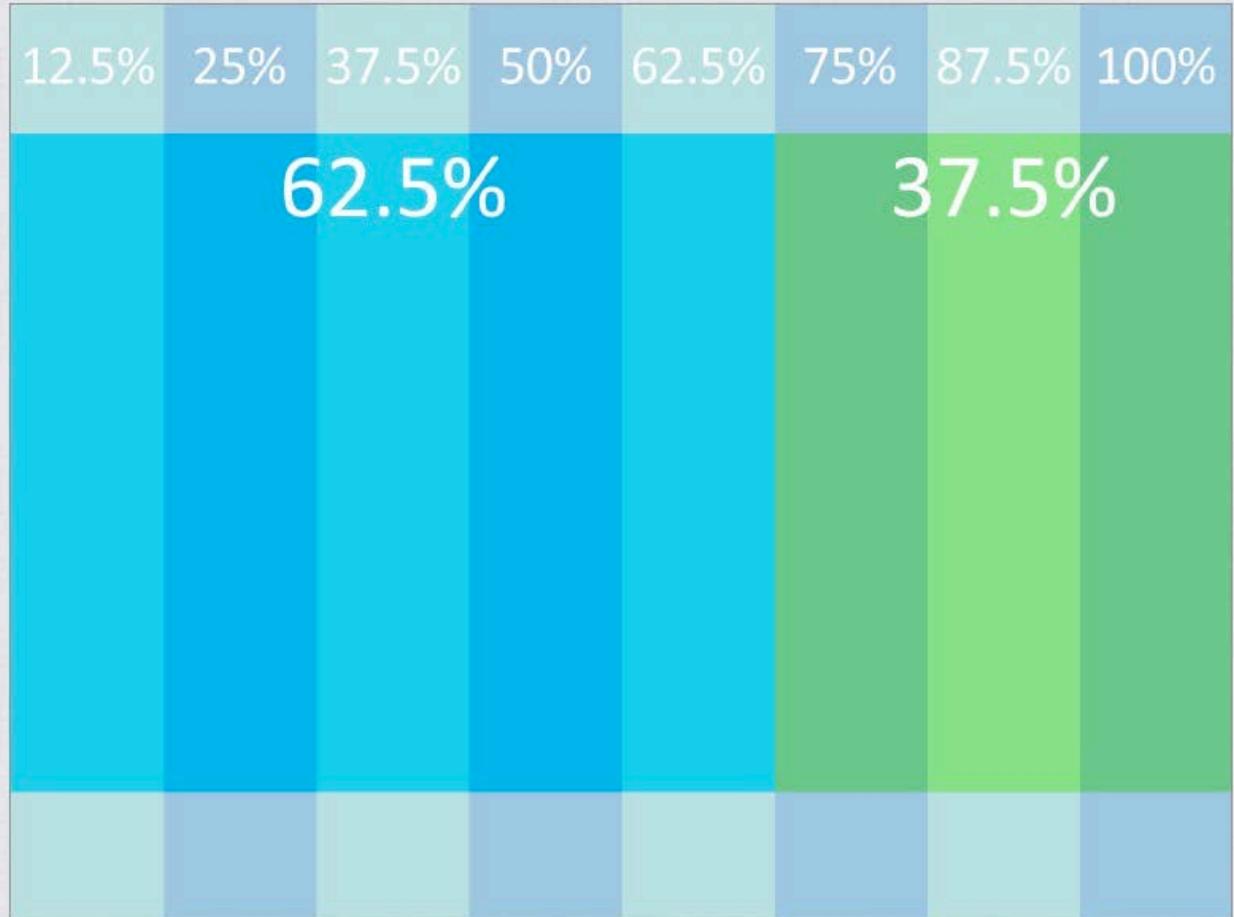
$$20 \div 80 = .25$$

即
25%

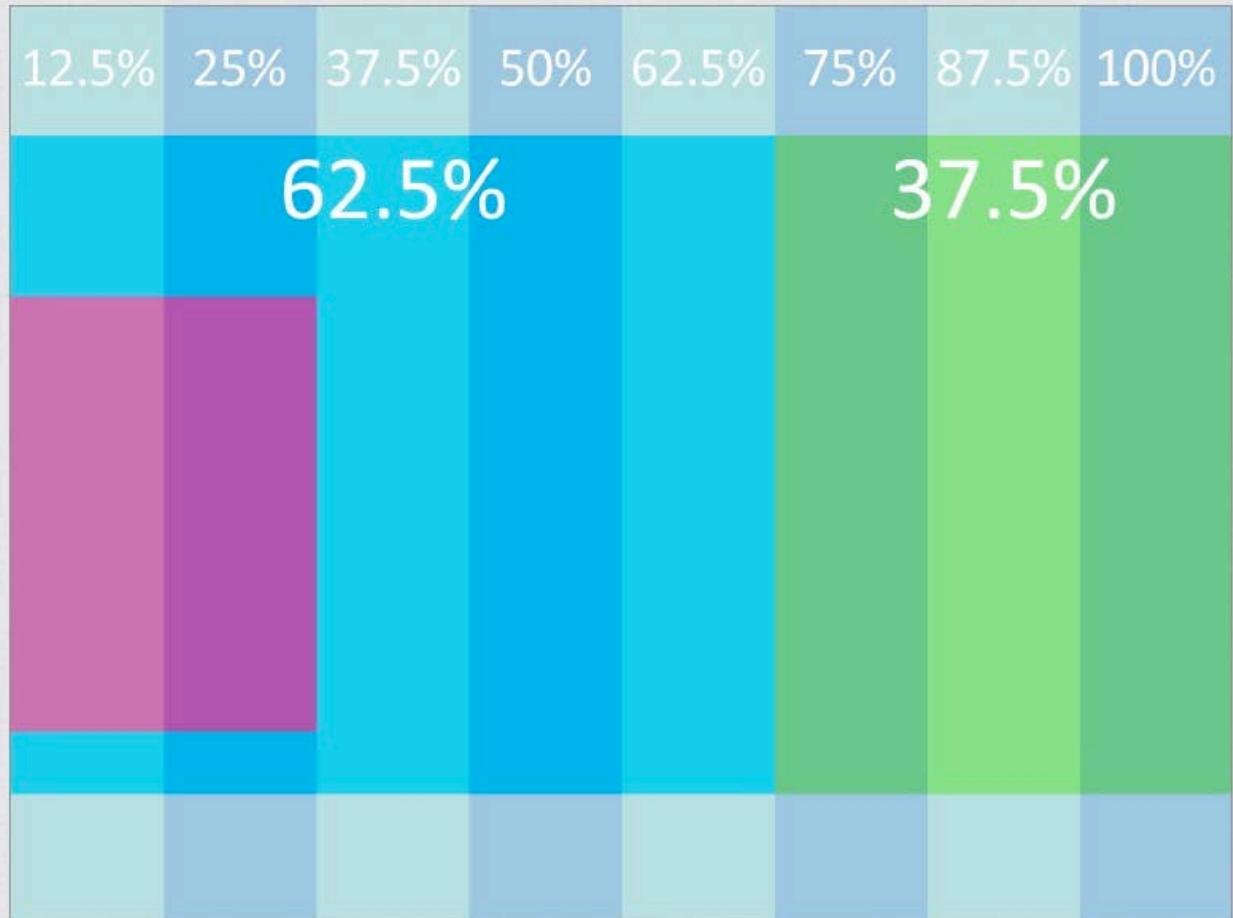
差不多是这样



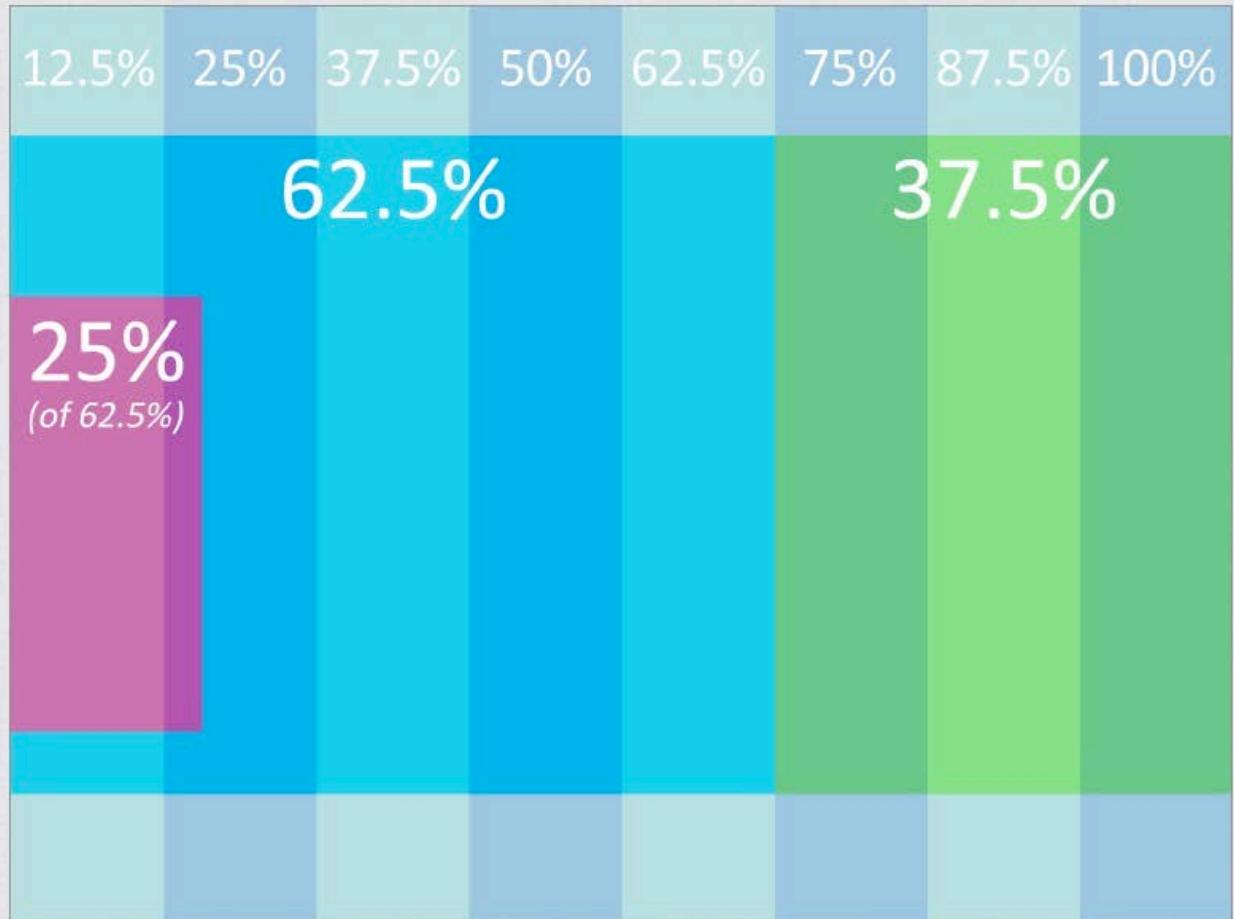
什么是流式网格？



这个嵌套模块宽度是多少？



当然，这是不正确的



实验时间！

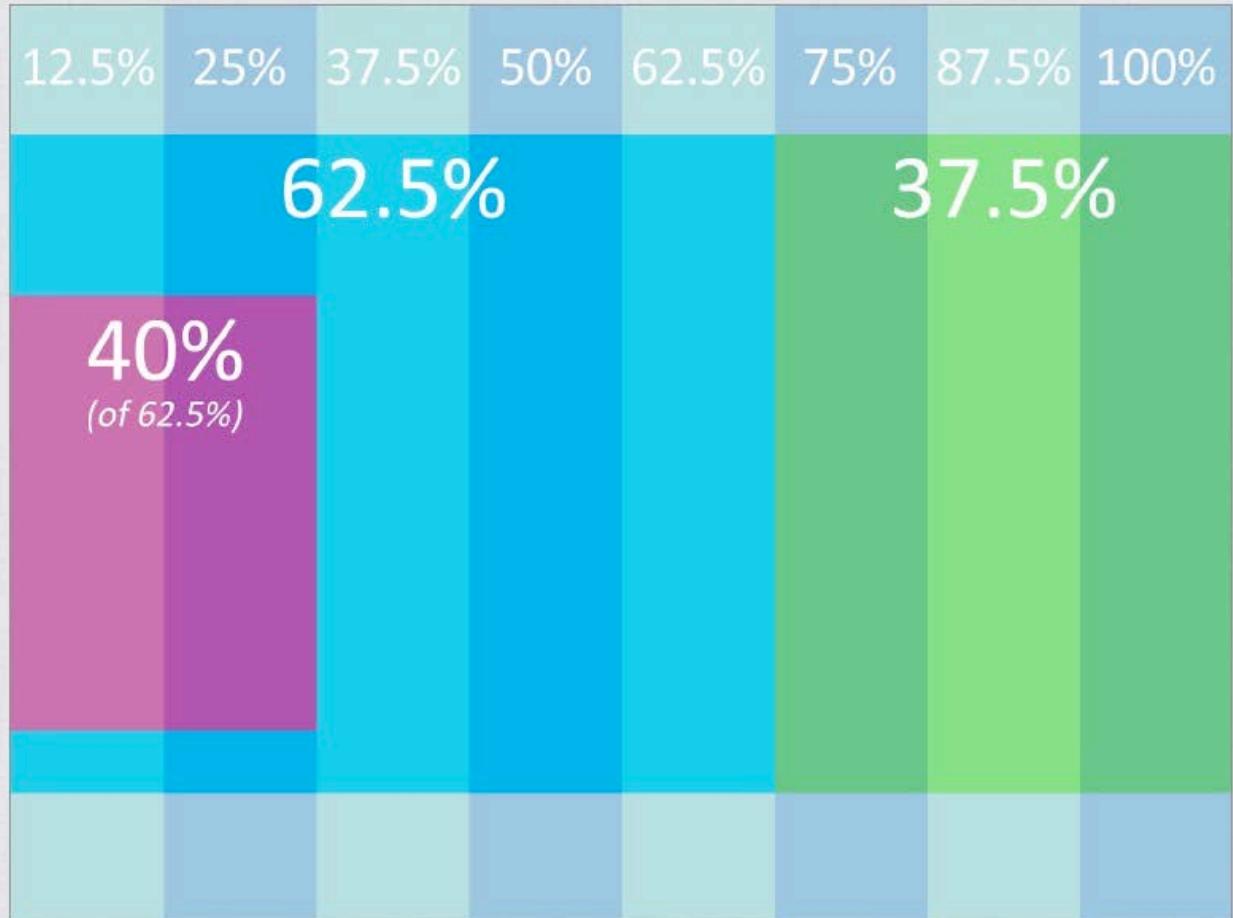
你希望的列宽 \div 父列宽 $=$ 嵌套列的宽度

目标 \div 上下文 $=$ 结果

$$25 \div 62.5 = .4$$

即
40%

来看看结果如何





宽度



间距

在流式列之间空隙的宽度

留下了一个空隙的宽度

little pea
BAKERY

1

HOME ABOUT MENU LOCATION

You deserve a sweet little treat every now and then.

100% - 70% - 25% = 5%
(plus or minus a pixel)

Candies

CHOCOLATE, PARFAITS, CARAMELS, AND MORE

Pastries

CROISSANTS, DAUGHETS, CREAM PUFFS, AND MORE

Desserts

CAKES, PIES, TARTS, COOKIES, AND MORE



2

CATERING CONTACT US

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SUBSCRIBE

MOTHER'S DAY SPECIAL

Radiant corpora habitant
modi tristis
litteras et rotulas at
molesta latus ac turbae operae

SWEET DEALS

Quodam puer dolens sat amplexus
obsecrante amico quisque illi

NEWS

Quodam puer dolens sat amplexus
obsecrante amico quisque illi

Alio dico tunc dicitur vix id sit illud
Quodam puer dolens sat amplexus
obsecrante amico quisque illi

Vestibulum tunc sicut rupibus operae

Et si modo, a cuius blog and follow
us on twitter

声明流式列的margin/padding

- 调整列宽度，所有加起来不超过100%
 - Avoids problems due to rounding % to px
- 嵌套也影响margin/padding的值
 - 使用 target/context (目标/上下文) 公式，计算内外间距

使用box-sizing

- 让固定宽度的margin/padding在流式布局更加容易
- 标准的盒子模型
 - box-sizing: **content-box**
 - 在Padding & border 添加 宽 / 高
- 新盒子模型
 - box-sizing: **border-box**
 - 从宽 / 高减去的特定值，剩下Padding & border的值

流式网格，固定宽度的间距

```
.column {  
    float: left;  
    -webkit-box-sizing: border-box;  
    -moz-box-sizing: border-box;  
    box-sizing: border-box;  
    padding: 0 20px;  
}
```

Use border as faux margin

```
.column {  
    float: left;  
    -webkit-box-sizing: border-box;  
    -moz-box-sizing: border-box;  
    box-sizing: border-box;  
    padding: 0 20px;  
    border-left: 10px solid rgba(0,0,0,0);  
    -moz-background-clip: padding-box;  
    -webkit-background-clip: padding-box;  
    background-clip: padding-box;  
}  
.row {  
    margin-left: -10px;  
}
```

解决box-sizing在IE6/7的问题

- 在content-box-model提供不同的基本尺寸
- 或者使用Christian Schaefer的box-sizing polyfill

<https://github.com/Schepp/box-sizing-polyfill>

```
.column {  
    box-sizing: border-box;  
    *behavior: url(boxesizing.htc);  
}
```

推荐gridpak.com

The screenshot shows the Gridpak website interface. At the top, there's a navigation bar with the Gridpak logo, a 'Beta' badge, and social sharing links for Facebook (1.1k likes) and Twitter (2,290 tweets). Below the header is a dark sidebar containing configuration options: 'No. of columns' set to 6, 'Column padding' at 1.5%, and 'Gutter width' at 2%. A button labeled '+ Add break-point' is also present. The main content area displays a 6-column grid with light red vertical bars separating the columns. A horizontal slider at the bottom allows for zooming in and out, with a value of 0% currently selected. The total width of the grid is indicated as 960px. At the bottom left, a red button says 'Download your Gridpak'. On the bottom right, there's a small bird icon and text about the Creative Commons Attribution 3.0 license.

Gridpak BETA

The Responsive grid generator
Created by Erskine Design

Like 1.1k Tweet 2,290 Learn about Gridpak

No. of columns: 6

Column padding: 1.5 % px

Gutter width: 2 % px

+ Add break-point

960px

0%

Download your Gridpak

Includes: 1 PNG(s), 1 CSS, 1 LESS, 1 SCSS, 1 JavaScript file & 1 Readme.

This site is licensed under a Creative Commons Attribution 3.0 license.
Created by [Erskine Design](#)



流式



混合

流式的主列，固定的侧栏

混合布局选项

- Easy: HTML的第一个侧栏
 - 浮动侧栏，在浮动中主要内容块向上移动
 - 但在响应式设计中通常不采用该选择
- Tricky: HTML的main content
 - 需要浮动，但宽度需要多少？
 - 解决办法一：负值的margins

以固定宽度的侧栏为起点

LITTLE
pea
BAKERY

HOME ABOUT MENU LOCATION CATERING CONTACT US

You deserve a sweet little treat every now and then.

Pellentesque habitant morbi tristique senectus et netus et malesuada fames ac turpis egestas. Vestibulum tortor quam, feugiat vitae, ultricies eget; tempor sit amet, ante. Donec eu libero sit amet quam egestas semper. Aenean ultricies mi vitae est. Mauris placerat eleifend leo. Quisque sit amet est et sapien ullamcorper pharetra.

Vestibulum erat wisi, condimentum sed, commodo vitae, ornare sit amet, wisi. Aenean fermentum, elit eget tincidunt condimentum, eros ipsum rutrum orci, sagittis tempus lacus enim ac dui. Donec non enim in turpis pulvinar facilisis. Ut felis.



Candies
TRUFFLES, BARS, CARAMELS, AND MORE

Pellentesque habitant morbi tristique senectus et netus et malesuada fames ac turpis egestas. Vestibulum tortor quam, feugiat vitae, ultricies eget; tempor sit amet, ante. Donec eu libero sit amet quam egestas semper. Aenean ultricies mi vitae est. Mauris placerat eleifend leo. Quisque sit amet est et sapien ullamcorper pharetra.

Pastries
CROISSANTS, DANISHES, CREAM PUFFS, AND MORE

Vestibulum tortor quam, feugiat vitae, ultricies eget; tempor sit amet, ante. Donec eu libero sit amet quam egestas semper. Aenean ultricies mi vitae est.

Desserts
CAKES, PIES, TARTS, COOKIES, AND MORE

Donec eu libero sit amet quam egestas semper. Aenean ultricies mi vitae est. Mauris placerat eleifend leo. Quisque sit amet est et sapien ullamcorper pharetra.

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MOTHER'S DAY SPECIAL
Pellen tesque habitant morbi tristique senectus et netus et malesuada fames ac turpis egestas.

SWEET DEALS
Pellen tesque habitant morbi tristique senectus et netus et malesuada fames ac turpis egestas.

NEWS
Lorem ipsum dolor sit amet, consetetur sadipscing elitr.
[Aliquam fecundant mauris eu risus](#)
Vestibulum auctor dapibus neque
Read more in our [blog](#) and follow us on [Twitter](#).

About this Page
This page is a fictional site. It was created by [Zach Meehan](#) illustrating an example in the book ["Learning CSS: A Project-based Guide to Web Layout in CSS"](#). It uses CSS media queries to change the design at different screen sizes. Resize your browser window or load it up in a mobile device to check it out.

Credits
WEB FONTS:
Nada serif from [Fontsmith](#)
ILLUSTRATIONS:
Turning by [fontello](#)

添加含有right padding的容器

```
#content-wrapper {  
    padding-right: 290px;  
}
```

The screenshot shows a website for 'LITTLE pea BAKERY'. At the top, there's a navigation bar with links for HOME, ABOUT, MENU, LOCATION, CATERING, and CONTACT US. A search bar is also present. The main content area has a light blue background. On the right side of this area, there is a vertical yellow sidebar. The main content is enclosed in a container with right padding, which creates a gap between the text and the yellow sidebar. This padding is what the CSS rule #content-wrapper { padding-right: 290px; } is referring to. The page features sections for 'Breakfast', 'Lunch', 'Dinner', and 'Sweets', each with small images and descriptions.

About this Page
This page is for a fictional site I've created for [Yves Meyer's website](#), as an exercise in the book [Learning CSS2: A Project-based Guide to the Latest in CSS](#). It uses CSS3 media queries to change the design at different screen sizes. Have your browser resize or load it up in a mobile device to check it out.

Credits

- WEB PONTS: [Natalia Saldívar](#)
- ILLUSTRATIONS: [Survey by kate eden](#)

布局主内容(main content) div

```
#content-main {  
    float: left;  
    width: 100%;  
}
```

You deserve a sweet little treat every now and then.

Pellentesque habitant morbi tristique senectus et netus et malesuada fames ac turpis egestas. Vestibulum tortor quam, feugiat vitae, ultricies eget, tempor sit amet, ante. Donec eu libero sit amet quam egestas semper. Aenean ultricies mi vitae est. Mauris placerat eleifend leo. Quisque sit amet est et sapien ullamcorper pharetra. Vestibulum erat wisi, condimentum sed, commodo vitae, ornare sit amet, wisi. Aenean fermentum, elit eget tincidunt condimentum, eros ipsum rutrum orci, sagittis tempus lacus enim ac dui. Donec eu lorem enim in turpis pulvinar facilisis. Ut felis.



Candies
TRUFFLES, HAD, CARAMEL AND MORE

Pellentesque habitant morbi tristique senectus et netus et malesuada fames ac turpis egestas. Vestibulum tortor quam, feugiat vitae, ultricies eget, tempor sit amet, ante. Donec eu libero sit amet quam egestas semper. Aenean ultricies mi vitae est.



Pastries
CROISSANTS, DANISHES, CREAM PUFFS, AND MORE

Vestibulum tortor quam, feugiat vitae, ultricies eget, tempor sit amet, ante. Donec eu libero sit amet quam egestas semper. Aenean ultricies mi vitae est.



Desserts
CAKES, PIES, TARTS, COOKIES, AND MORE

Donec eu libero sit amet quam egestas semper. Aenean ultricies mi vitae est. Mauris placerat eleifend leo. Vestibulum tortor quam, feugiat vitae, ultricies eget, tempor sit amet, ante.

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SWEET DEALS
MOTHER'S DAY SPECIAL
Pellentesque habitant morbi tristique senectus et netus et malesuada fames ac turpis egestas.

NEWS
[Lorem ipsum dolor sit amet.](#)
[Sed etiamet ad picing ellit.](#)
[Aliquet feodicit maulis et illua.](#)
[Vestibulum auger dictibus neque.](#)
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About this Page
This page was created by [Pixelarity](#). It's built using [React](#), [Node.js](#), [MongoDB](#), [Express](#), and [React Router](#). It's styled with [Sass](#) and [Less](#). All assets are served via [Cloudinary](#). It's optimized for mobile devices and has a responsive design. It's built with semantic HTML and follows the [Web Content Accessibility Guidelines](#).

Credits
PHOTOGRAPHY: [Pixelarity](#)
Maria San Román Benítez
ILLUSTRATIONS: [Survey by karen finer](#)

浮动侧栏

```
#content-secondary {  
    float: right;  
    width: 250px;  
}
```



HOME ABOUT MENU LOCATION CATERING CONTACT US

You deserve a sweet little treat
every now and then.

Pellentesque habitant morbi tristique
senectus et netus et malesuada fames
ac turpis egestas. Vestibulum tortor
quam, feugiat vitae, ultricies eget,
tempor sit amet, ante. Donec eu libero
sit amet quam egestas semper. Aenean
utrisque mi vitae est. Mauris placerat
eleifend leo. Quisque sit amet est et

sapien ullamcorper pharetra.
Vestibulum erat wisi, condimentum sed,
commmodo vitae, ornare sit amet, wisi.
Aenean fermentum, elit eget tincidunt
condimentum, eros ipsum rutrum orci,
sagittis tempus lacus enim ac dui.
Donec non enim in turpis pulvinar
facilisis. Ut felis.



Candies

TRUFFLES, BARE CHARMEUSE
AND MORE

Pellentesque habitant morbi
tristique senectus et netus et
malesuada fames ac turpis
egestas. Vestibulum tortor
quam, feugiat vitae, ultricies eget,
tempor sit amet, ante. Donec eu libero
sit amet quam egestas semper. Aenean
utrisque mi vitae est.



Pastries

CRESCIENTS, DANISHES,
CREAM PUFFS, AND MORE

Vestibulum tortor quam,
feugiat vitae, ultricies eget,
tempor sit amet, ante. Donec eu libero
sit amet quam egestas semper. Aenean
utrisque mi vitae est.



Desserts

CAKES, PIE, TARTS,
COOKIES, AND MORE

Donec eu, feugiat vitae, ultricies eget,
tempor sit amet, ante. Donec eu libero
sit amet quam egestas semper. Aenean
utrisque mi vitae est.

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MOTHER'S DAY
SPECIAL
Pellentesque habitant
morbi tristique
senectus et netus et
malesuada fames ac turpis egestas.

NEWS

[Lemon Basil Dolce di Latte](#),
[Concord Grape Croissants](#)

Aliquam fringilla magna eu nisl
Vestibulum egestas dapibus neque
Read more at our [Blog](#) and follow
us on [Twitter](#).

About this Page

This page is for a fictional site. It was created by [Zoe Miller](#). [GreenSock](#) is an sponsor in the [HTML5 Doctor](#)'s [CSS3: A Project-Based Guide to the Latest in CSS](#). It uses CSS3 media queries to change the design on different screen sizes. Most of the content is from [Bootstrap](#). Bootstrap's website is cool & up-to-date, so check it out!

Credits

WEB FONTS:
Noto Sans from [Google](#)

ILLUSTRATIONS:
Courtesy by [Unsplash](#)

正值的right margin

Pellentesque habitant morbi tristique senectus et netus et malesuada fames ac turpis egestas. Vestibulum tortor quam, feugiat vitae, ultricies eget, tempor sit amet, ante.

Vestibulum tortor quam, feugiat vitae, ultricies eget, tempor sit amet, ante. Donec eu libero sit amet quam egestas semper. Aenean ultricies mi vitae est.

Donec eu libero sit amet quam egestas semper. Aenean ultricies mi vitae est. Mauris placerat eleifend leo. Vestibulum tortor quam, feugiat vitae, ultricies eget, tempor sit amet, ante.

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MOTHER'S DAY SPECIAL

Pellen tesque habitant morbi tristique senectus et netus et malesuada fames ac turpis egestas.

NEWS

[Lorem ipsum dolor sit amet, consectetur adipiscing elit](#)

[Aliquam tincidunt mauris eu risus](#)

[Vestibulum auctor dapibus neque](#)

150px

负值的right margin

Pellentesque habitant morbi tristique senectus et netus et malesuada fames ac turpis egestas. Vestibulum tortor quam, feugiat vitae, ultricies eget, tempor sit amet, ante. Donec eu libero sit amet quam egestas semper. Aenean ultricies mi vitae est.

Vestibulum tortor quam, feugiat vitae, ultricies eget, tempor sit amet, ante. Donec eu libero sit amet quam egestas semper. Aenean ultricies mi vitae est.

Donec eu libero sit amet quam egestas semper. Aenean ultricies mi vitae est. Mauris placerat eleifend leo. Vestibulum tortor quam, feugiat vitae, ultricies eget, tempor sit amet, ante.



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添加一个与容器right padding相等的right margin负值

```
#content-secondary {  
    float: right;  
    width: 250px;  
    margin-right: -290px;  
}
```

成功!

You deserve a sweet little treat every now and then.

Pellentesque habitant
morbi tristique
senectus et netus et

Quisque sit amet est et
sapien ullamcorper
pharetra. Vestibulum

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turpis egestas. Vestibulum tortor quam,
feugiat vitae, ultricies eget, tempor sit amet,
ante. Donec eu libero sit amet quam
egestas semper. Aenean ultricies mi vitae
est. Mauris placerat eleifend leo. Quisque

sit amet est et sapien ullamcorper pharetra.
Vestibulum erat wisi, condimentum sed,
commodo vitae, ornare sit amet, wisi.
Aenean fermentum, elit eget tincidunt
condimentum, eros ipsum rutrum orci,
sagittis tempus lacus enim ac dui. Donec
non enim in turpis pulvinar facilisis. Ut felis.



Candies

TRUFFLES, BARS, CARAMELS,
AND MORE



Pastries

CROISSANTS, DANISHES, CREAM
PUFFS, AND MORE



Desserts

CAKES, PIES, TARTS, COOKIES,
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us on [Twitter](#).

为了侧栏可以在IE6上显示

```
#content-wrapper {  
    zoom: 1;  
}  
  
#content-main,  
#content-secondary {  
    display: inline;  
}
```

三栏混合布局

- 两栏布局，其中一栏被嵌套其他栏
- 每个布局的组成部分：
 1. 容器的一边包含padding
 2. 固定宽度的侧栏
 - 与padding相同宽度（或更小）
 - 浮动的方向和定义padding的方向相同
 - 定义负值的margin需要和容器padding同一方向
 3. 流式列
 - 反方向的浮动
 - 宽度100%



流式布局



media queries

在窗口大小的基础上提供不同的样式

选择默认样式

- 在"移动设备", 应用较宽敞的风格?
- 在"传统桌面", 应用较窄细的风格?
- 介于两者之间, 这两种风格是否都需要?
- 了解 full pros/cons:

www.zomigi.com/blog/essential-considerations-crafting-quality-media-queries

Starting in the middle

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ullamcorper pharetra. Vestibulum erat wisi, condimentum sed, commodo vitae, ornare sit amet, wisi. Aenean fermentum, elit eget tincidunt condimentum, eros ipsum rutrum orci, sagittis tempus lacus enim ac dui. Donec non enim in turpis pulvinar facilisis. Ut felis.



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CARAMELS, AND MORE

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Pastries

CROISSANTS, DANISHES,
CREAM PUFFS, AND MORE

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Desserts

CAKES, PIES, TARTS,
COOKIES, AND MORE

eleifend leo. Vestibulum tortor quam, feugiat vitae, ultricies eget, tempor sit amet, ante.

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About this Page

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Credits

WEB FONTS:
Nada Serif from [Kernest](#)

ILLUSTRATIONS:
Yummy by [Icon Eden](#)

宽屏的media query

```
/*其他样式写在这里*/
```

```
@media screen and (min-width: 1200px) {  
    /*这里写宽屏的样式 */  
}
```

添加栏

```
@media screen and (min-width: 1200px) {  
    #nav-main {  
        position: fixed;  
        top: 136px;  
        width: 13%;  
        margin: 0;  
    }  
    #content-main {  
        width: 58%;  
        margin-left: 18%;  
    }  
    #content-secondary { width: 20%; }  
}
```

Style nav as vertical menu

```
@media screen and (min-width: 1200px) {
```

```
...
```

```
#nav-main li {  
    float: none;  
    margin: 0;  
}
```

```
#nav-main a {  
    -moz-border-radius: 0;  
    -webkit-border-radius: 0;  
    border-radius: 0;  
}
```

```
}
```

宽屏设计



HOME
ABOUT
MENU
LOCATION
CATERING
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sapien ullamcorper pharetra. Vestibulum erat wisi, condimentum sed, commodo vitae, ornare sit amet, wisi. Aenean fermentum, elit eget tincidunt condimentum, eros ipsum rutrum orci, sagittis tempus lacus enim ac dui. Donec non enim in turpis pulvinar facilisis. Ut felis.



Candies

TRUFFLES, BARS, CARAMELS, AND MORE

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Pastries

CROISSANTS, DANISHES, CREAM PUFFS, AND MORE

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Desserts

CAKES, PIES, TARTS, COOKIES, AND MORE

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Credits

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Nadia Serif from [Kernest](#)

ILLUSTRATIONS:

Yummy by [Icon Ede](#)

小屏幕media query

```
/*all the other styles up here*/
```

```
@media screen and (max-width: 760px) {
```

```
    /*这里写小屏幕的样式*/
```

```
}
```

解决问题

如果布局都保持一列，这样每行的字数太少了

这里太过狭窄，以至于图片文字上下摆放而不是图片在文字左边

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et sapien ullamcorper pharetra. Vestibulum erat wisi, condimentum sed, commodo vitae, ornare sit amet, wisi. Aenean fermentum, elit eget tincidunt condimentum, eros ipsum rutrum orci, sagittis tempus lacus enim ac dui. Donec non enim in turpis pulvinar facilisis. Ut felis.



Candies

TRUFFLES,
BARS,
CARAMELS, AND
MORE

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Pastries

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AND MORE

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Desserts

CAKES, PIES,
TARTS, COOKIES,
AND MORE

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窄屏幕 设计

LITTLE
pea
BAKERY

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Vestibulum euctor dapibus neque

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移动设备media query

```
/*all the other styles up here*/
```

```
@media screen and (max-width: 550px) {
```

```
    /*这里写移动设备屏幕的样式*/
```

```
}
```

下面样式不会重叠

```
@media screen and (min-width: 551px) and  
(max-width: 760px) {  
    /*这里写小屏幕的样式*/  
}  
  
@media screen and (max-width: 550px) {  
    /*这里写移动设备屏幕的样式*/  
}
```

改变单一栏

```
@media screen and (max-width: 550px) {  
    #content-main, #content-secondary,  
    #about, #credits {  
        float: none;  
        width: 100%;  
    }  
}
```

改变图像

```
@media screen and (max-width: 550px) {  
    ...  
    .feature { padding-left: 70px; }  
    #feature-candy {  
        background-image: url(icon_candy_64.png);  
    }  
    #feature-pastry {  
        background-image: url(icon_pastry_64.png);  
    }  
    #feature-dessert {  
        background-image: url(icon_dessert_64.png);  
    }  
}
```

移动设备上的设计

LITTLE
pea
BAKERY

Search: Go

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Candies



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Desserts



CAKES, PIES, TARTS, COOKIES, AND MORE

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Credits

WEB FONTS: Nelia Serif from [Kernest](#)

ILLUSTRATIONS: Yummy by [Icon Etc.](#)

Viewport meta tag

强制把移动设备的缩放视口宽度等于设备实际宽度

```
<meta name="viewport"  
      content="width=device-width">
```

在iOS缩放的问题

- iOS设备的设备宽度总是等于纵向宽度
- 这意味着当屏幕从纵向切换到横向的时候，设计没有跟着变化，只是放大而已

修复 (和添加) 缩放问题

- 方法1: 添加 `maximum-scale=1`

- 但这禁止用户缩放

```
<meta name="viewport"  
      content="width=device-width, maximum-scale=1">
```

- 方法2: 添加 `initial-scale=1`

- 允许用户缩放
 - 但从纵向切换到横向会触发网页过度缩放或者裁剪网页的错误

```
<meta name="viewport"  
      content="width=device-width, initial-scale=1">
```

The best way to fix zoom issues

- 方法3：添加 initial-scale=1 同时添加一个修复缩放问题的脚本
 - http://filamentgroup.com/lab/a_fix_for_the_ios_orientationchange_zoom_bug/

```
<head>
...
<meta name="viewport"
      content="width=device-width, initial-scale=1">
<script src="ios-orientationchange-fix.js">
...
</head>
```

有不错的评论
*(conditional
comments)*



JavaScript

来解决IE8甚至是更早的版本

不错的评论

- 无论是桌面还是移动设备上的IE，都把样式拆分成单独的表里面并且提供适应IE的样式表
- Approach varies based on which set of styles are your default

桌面样式默认的评论

提供IE Mobile 7 media query sheet:

```
<link rel="stylesheet" href="global.css" media="all">
```

```
<link rel="stylesheet" href="mobile.css" media="all  
and (max-width: 700px)">
```

```
<!--[if IEMobile 7]>  
<link rel="stylesheet" href="mobile.css" media="all">  
<![endif]-->
```

Source: <http://blogs.msdn.com/b/iemobile/archive/2010/12/08/targeting-mobile-optimized-css-at-windows-phone-7.aspx>

移动样式默认的评论

提供旧版本的IE media query sheet, 隐藏IE Mobile 7:

```
<link rel="stylesheet" href="global.css" media="all">

<link rel="stylesheet" href="desktop.css" media="all
and (min-width: 700px)">

<!--[if (lt IE 9)&(!EMobile 7)]>
<link rel="stylesheet" href="desktop.css" media="all">
<![endif]-->
```

Source: <http://adactio.com/journal/4494/>

预防不支持Media Queries的浏览器

- 只需添加其中一个脚本:
 - Respond: <https://github.com/scottjehl/Respond>
 - css3-mediaqueries.js:
<http://code.google.com/p/css3-mediaqueries-js/>
- 为了避免在非IE浏览器中产生额外的HTTP请求，应该使用条件注释

```
<!--[if (lt IE 9)&(!IEMobile 7)]>
<script src= "respond.min.js"></script>
<![endif]-->
```

看看成果

<http://stunningcss3.com/code/bakery/>



了解更多

Download slides and get links at

<http://zomigi.com/blog/responsive-layouts-presentation>

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