



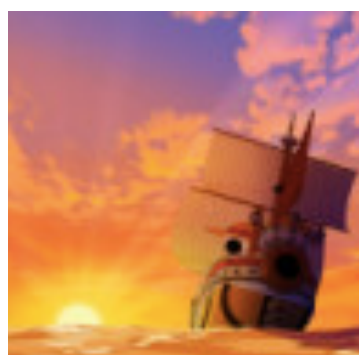
FUSION

解构设计，抽象工程

周源

B2B技术部（体验技术中台）

我



周源（远舟）

B2B 技术部 - 体验技术中台 - 前端专家

Fusion 项目组 PM

专注在 DPL 和 UI 构建领域五年

知乎《前端外刊评论》成员

理想还是要有的

大家想不想不用写一行代码，就构建一套全新的组件库出来？



在 Fusion 中，
设计与前端可以并行协作，
省去了上下游合作的等待时间。

无论是需要新建组件库，还是修改组件库样式，
设计师不需要重新绘制稿件，
前端不需写要一行代码，
组件库和网站的视觉样式便可立即更换。

What inspired by fusion is: work smarter, yet not harder. What inspired by fusion is: work smarter, yet not harder. What inspired by fusion is: work smarter, yet not harder. What inspired by fusion is: work smarter, yet not harder. What inspired by fusion is: work smarter, yet not harder. What inspired by fusion is: work smarter, yet not harder. What inspired by fusion is: work smarter, yet not harder. What inspired by fusion is: work smarter, yet not harder. What inspired by fusion is: work smarter, yet not harder. What inspired by fusion is: work smarter, yet not harder.

FUSION

— 为什么 —

现象A DPL的演进之路



biz style(s)

common style

common.css

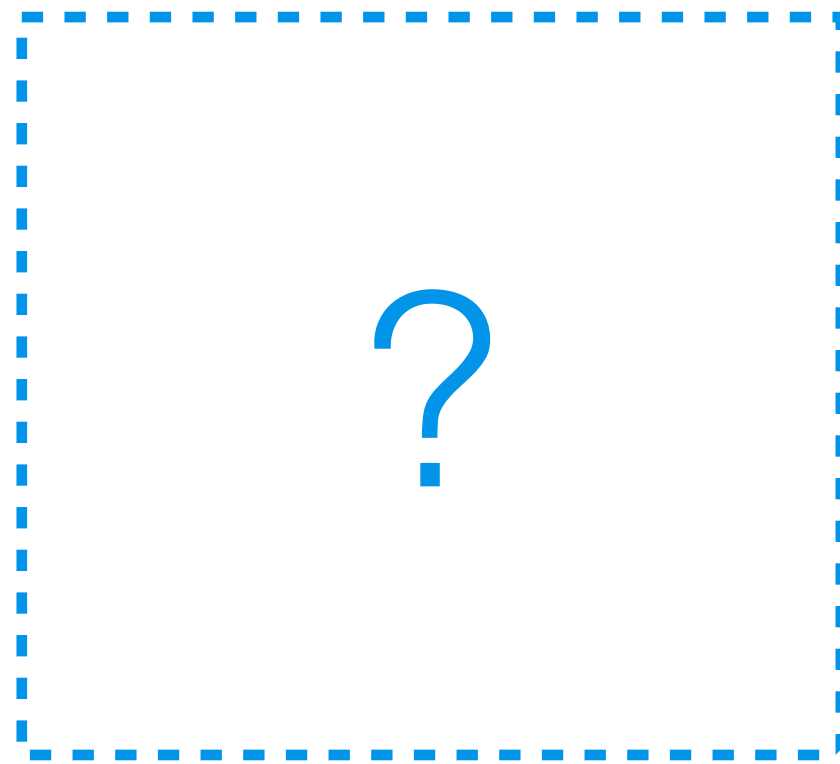
- 低复用
- 维护性差

biz DPL(s)
biz style

common DPL
common style

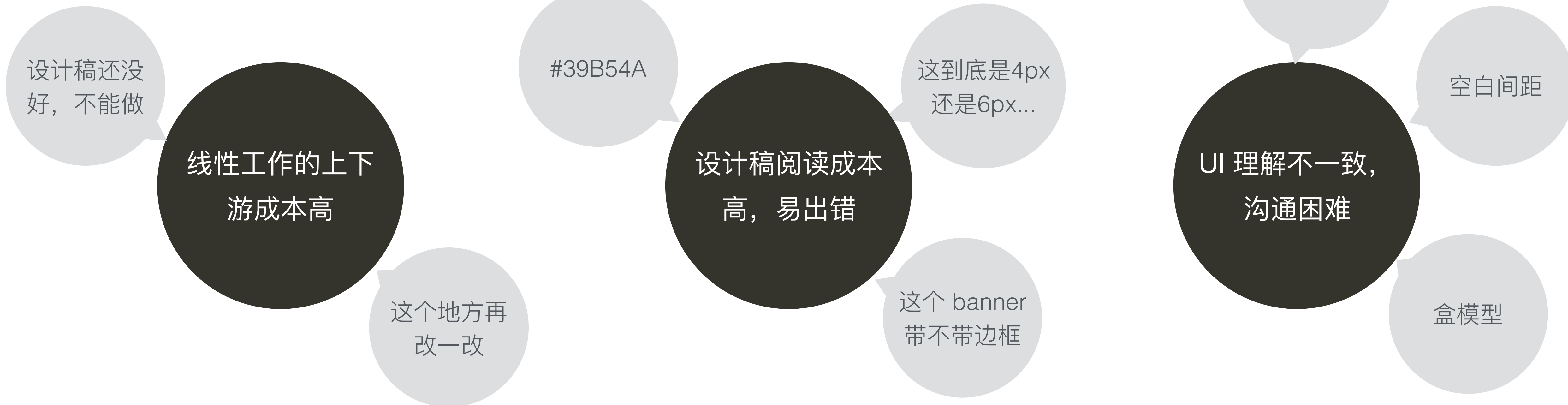
Bootstrap

- 多场景多品牌?
- 业务 UI 的更新迭代?



?

现象B 除了组件之外?



A业务线设计师



B业务线设计师



A业务线前端



B业务线前端

问题

总结一下

第一个问题

多品牌、多场景的 DPL 建设、迭代成本高的问题

第二个问题

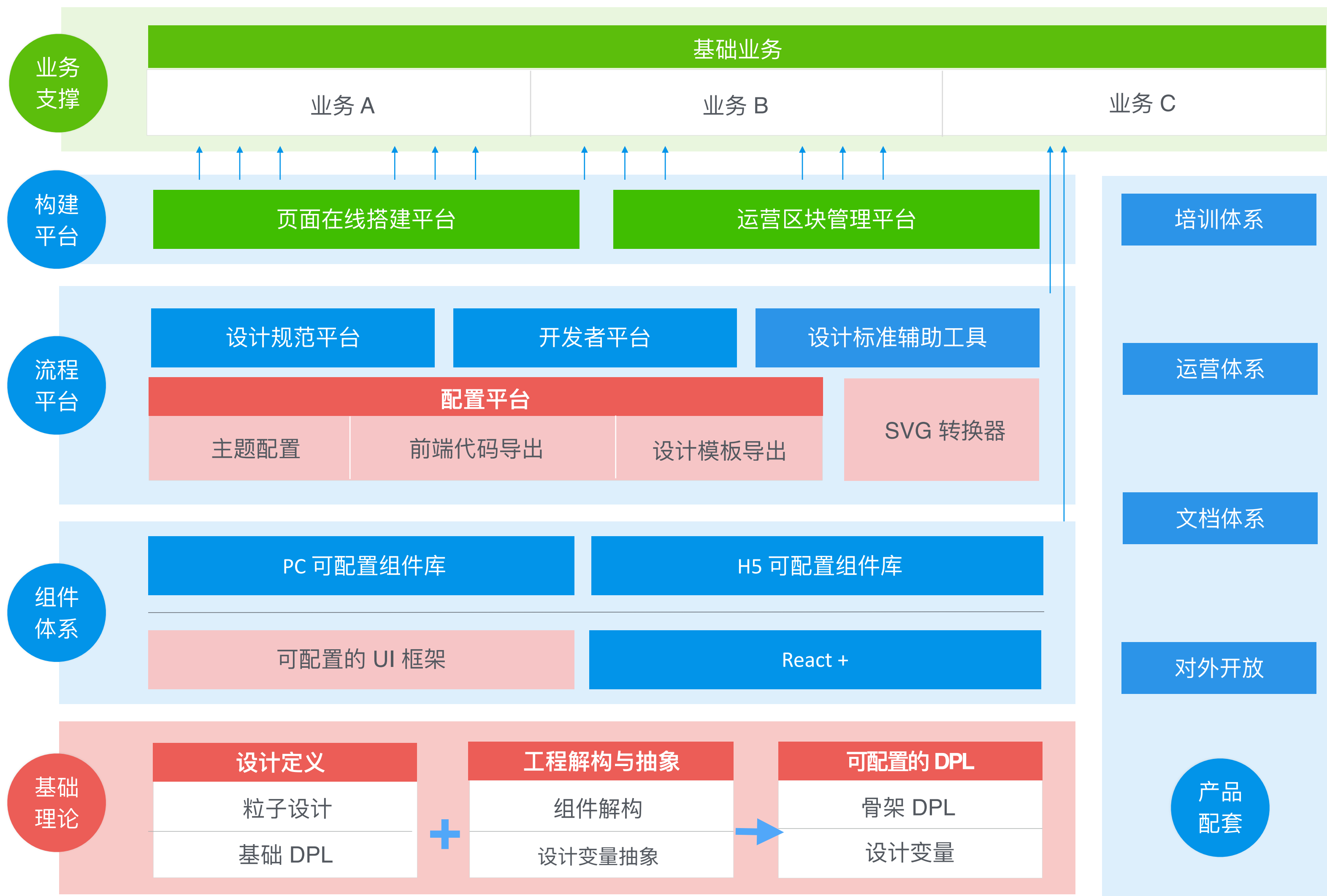
跨职能、跨团队的 UI 协作门槛高、成本高的问题

What inspired by fusion is: work smarter, yet not harder. What inspired by fusion is: work smarter, yet not harder. What inspired by fusion is: work smarter, yet not harder. What inspired by fusion is: work smarter, yet not harder. What inspired by fusion is: work smarter, yet not harder. What inspired by fusion is: work smarter, yet not harder. What inspired by fusion is: work smarter, yet not harder. What inspired by fusion is: work smarter, yet not harder. What inspired by fusion is: work smarter, yet not harder. What inspired by fusion is: work smarter, yet not harder.

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— 实现方案 —

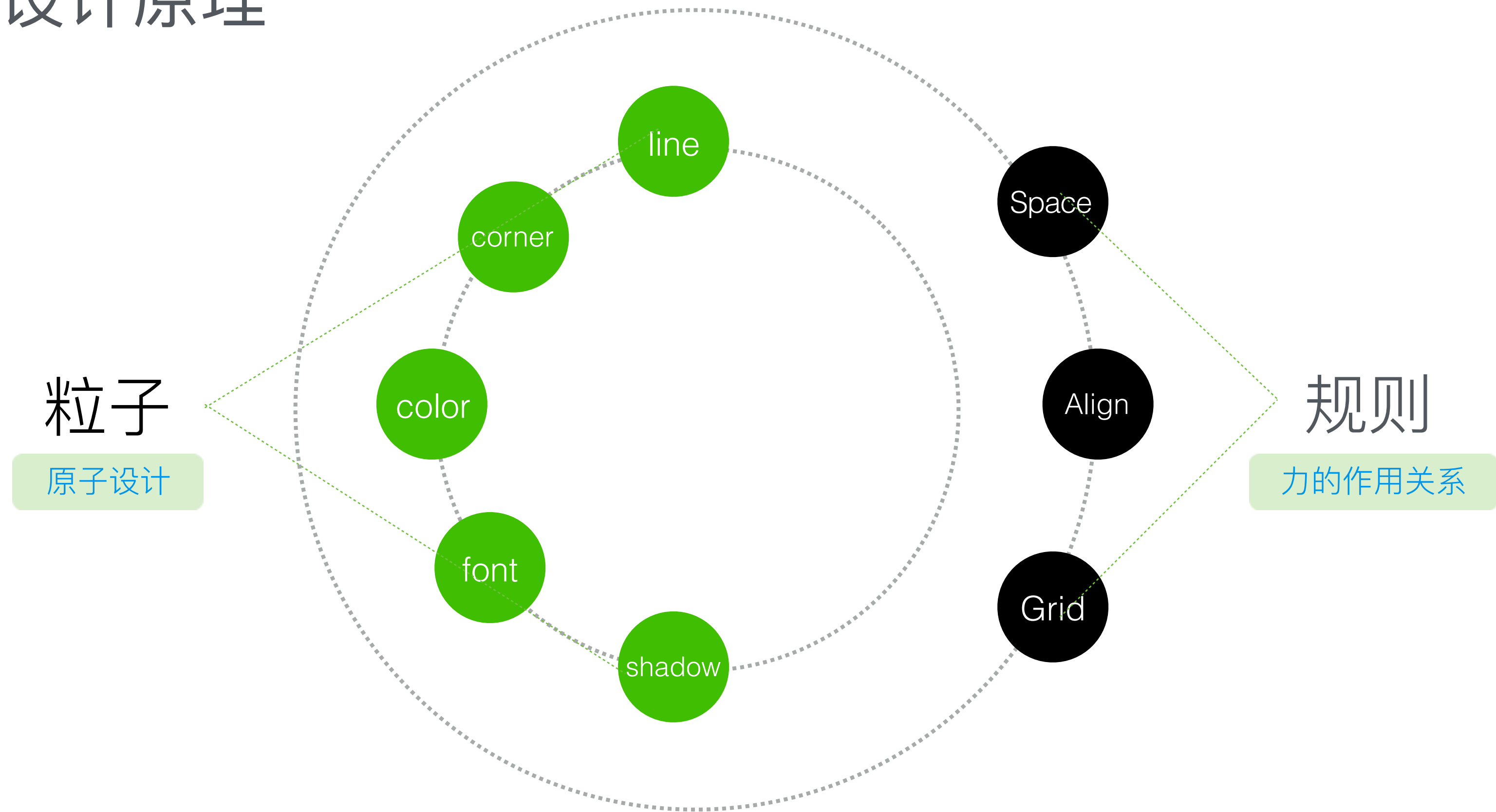
Fusion 产品大图



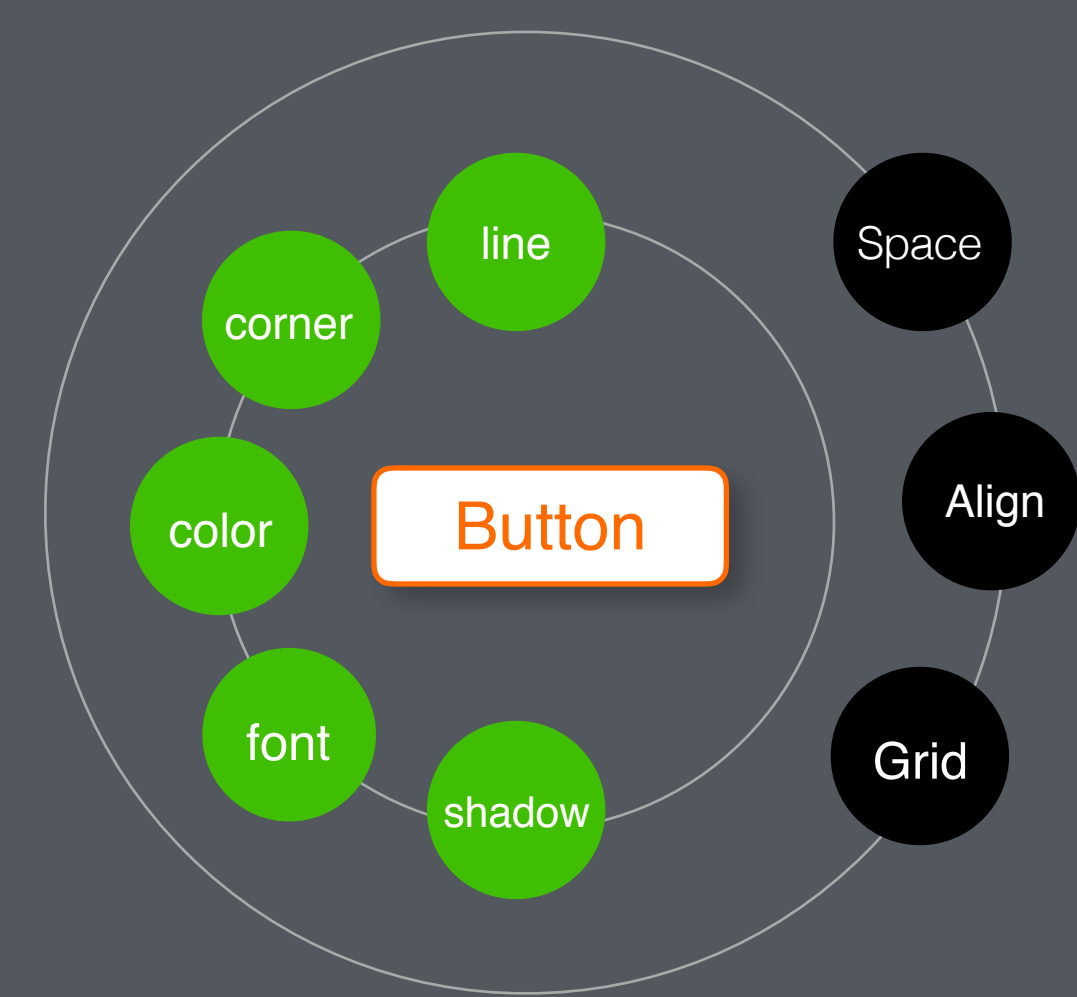
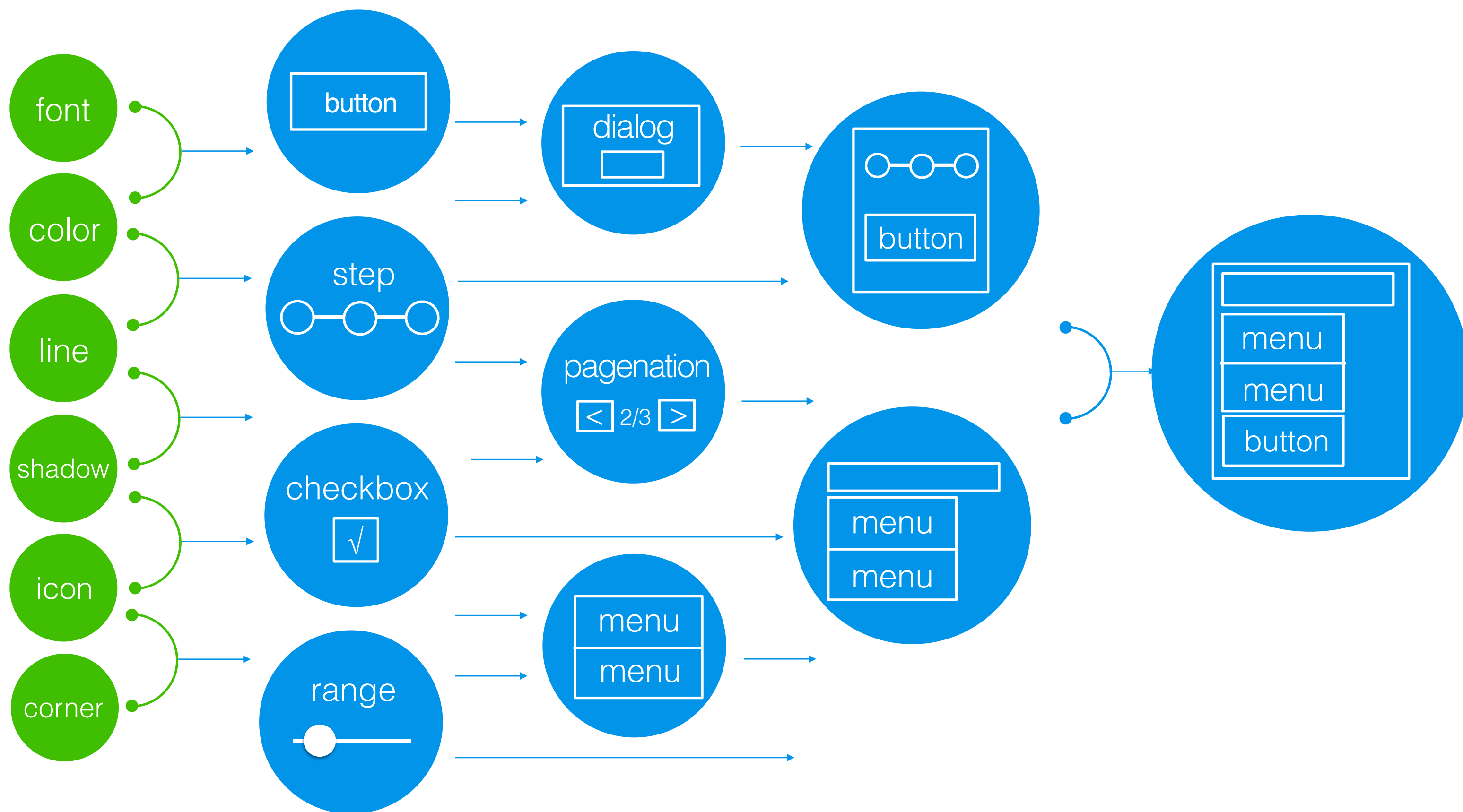
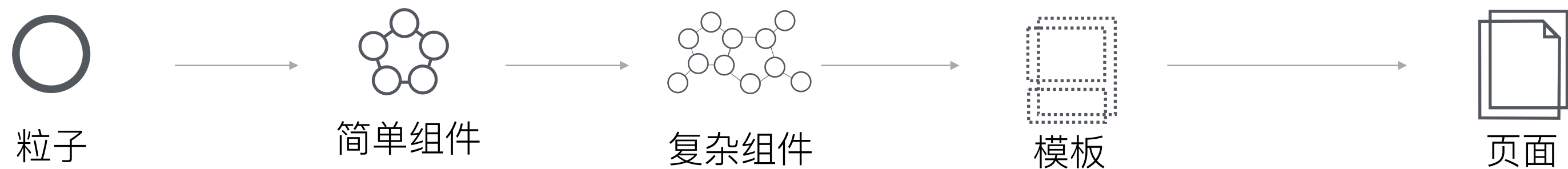
FUSION

— 基础理论 - 设计 —

基础理论 - 粒子设计原理



基础理论 - 粒子设计原理



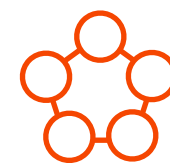
规则

- Layout
- Frame
- Grid
- Space
- Align
- Responsive

粒子设计



元素



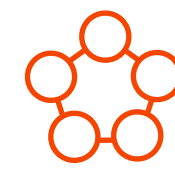
元件



粒子设计



元素

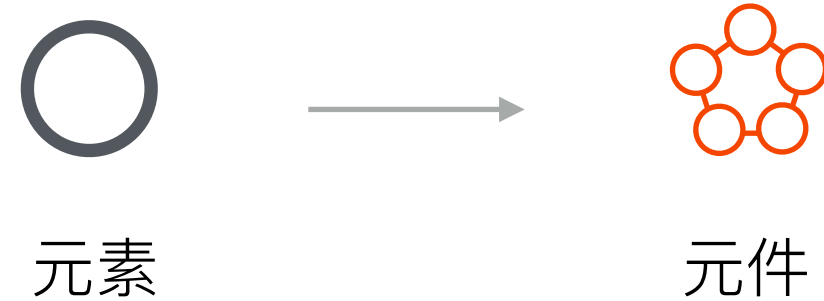


元件

样式的组合过后，依旧欠缺一些要素组合为元件



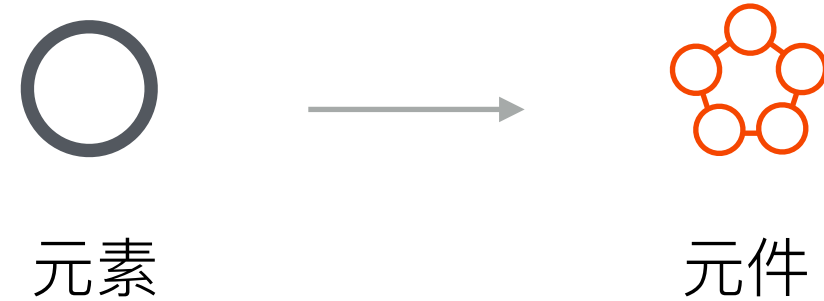
粒子设计



通过力的作用，组成元件



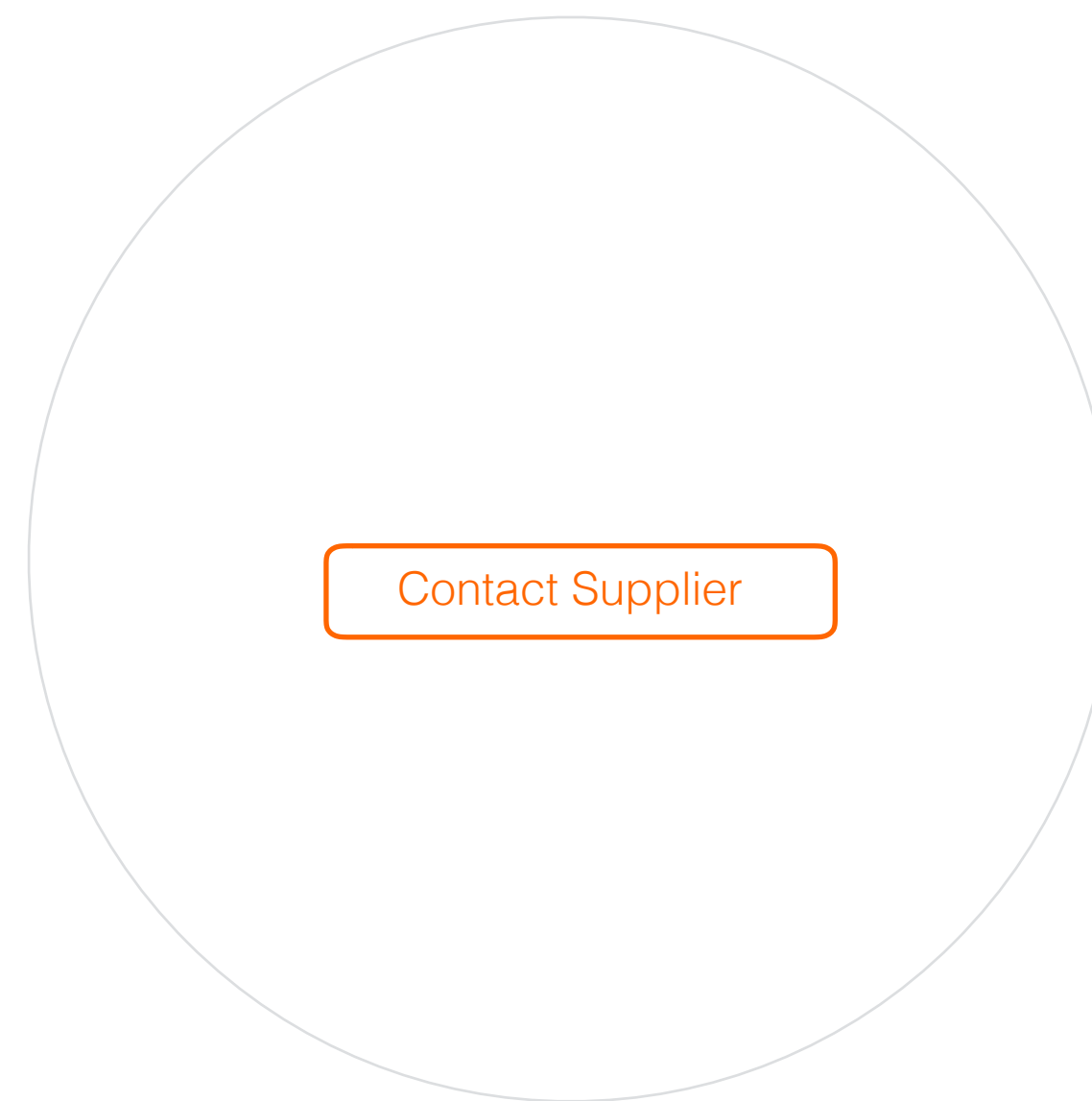
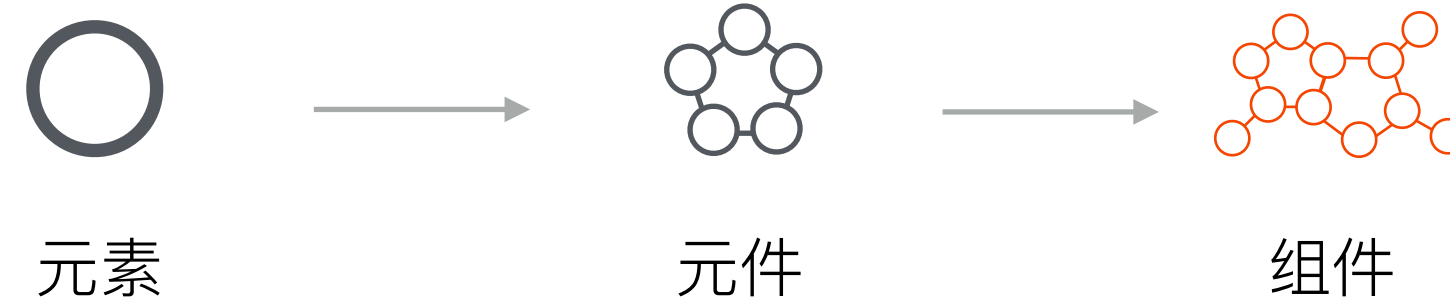
粒子设计



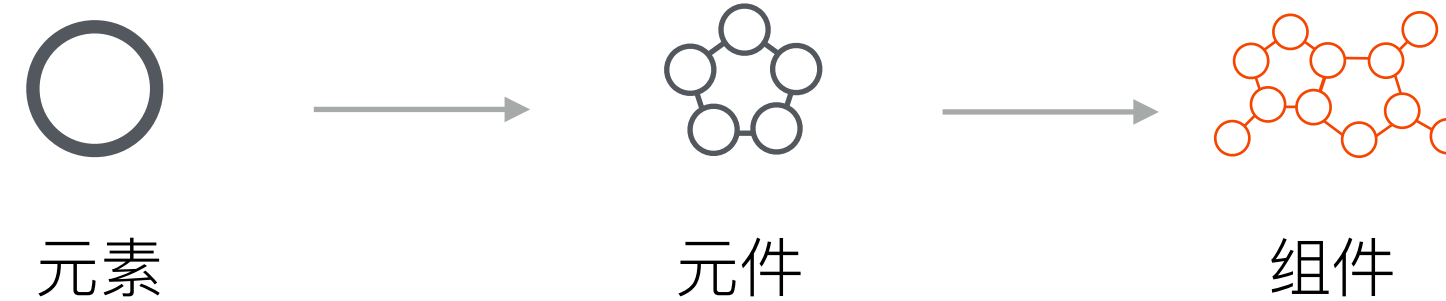
通过力的作用，组成元件



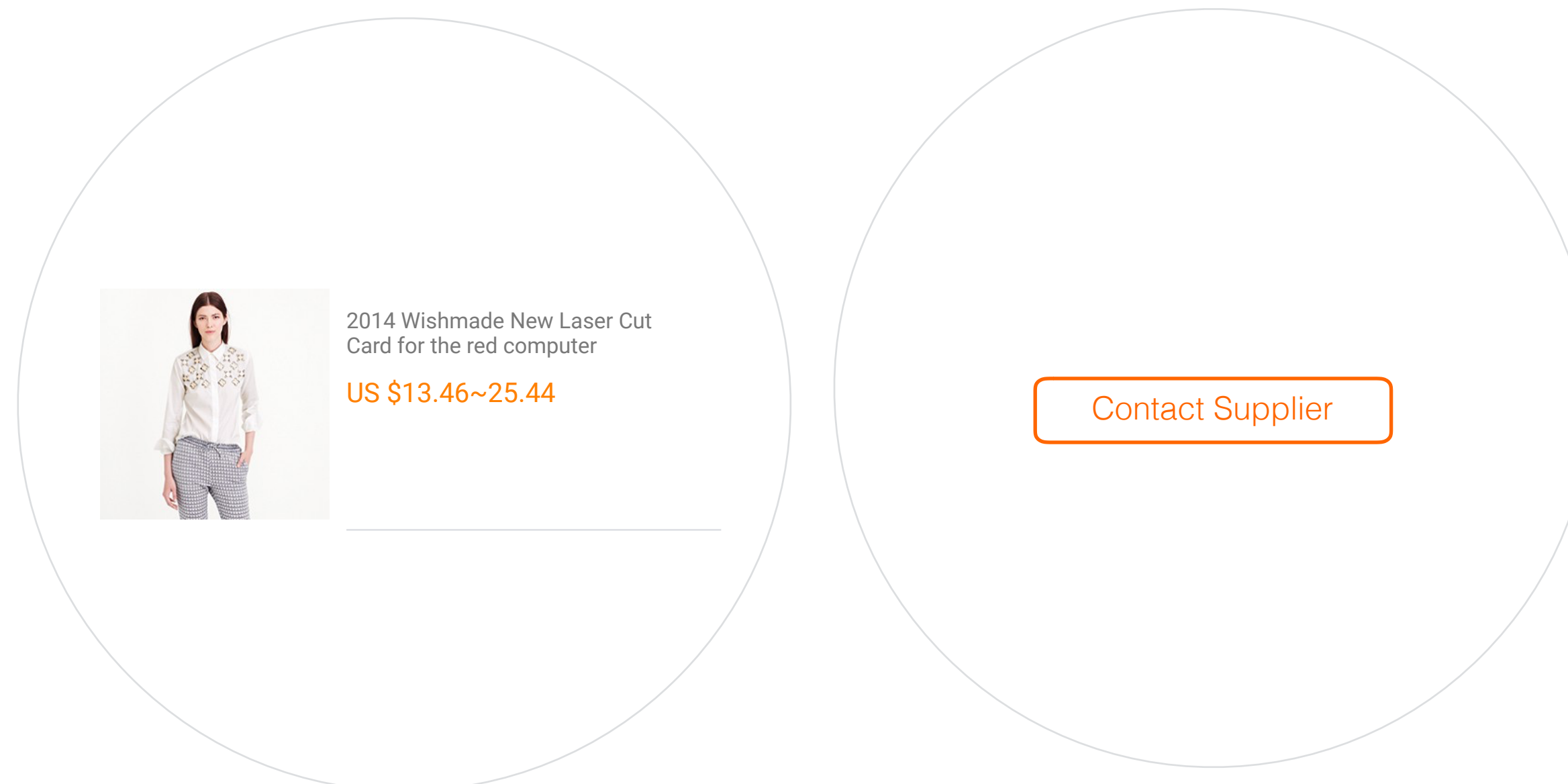
粒子设计



粒子设计



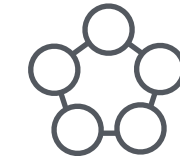
与其他元件组合



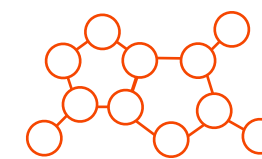
粒子设计



元素



元件



组件

与其他元件组合



2014 Wishmade New Laser Cut
Card for the red computer

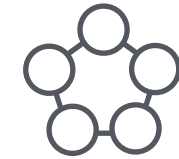
US \$13.46~25.44

Contact Supplier

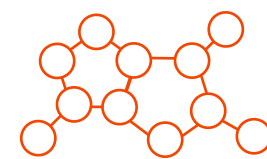
粒子设计



元素



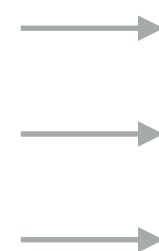
元件



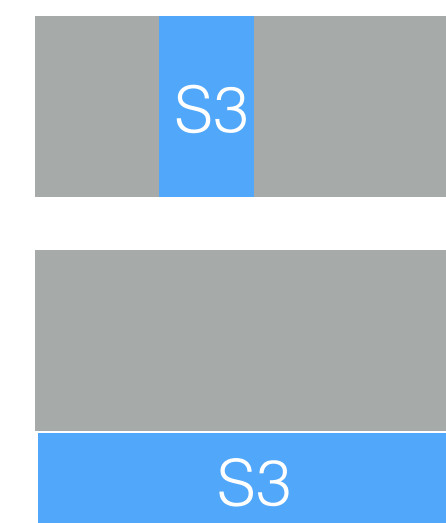
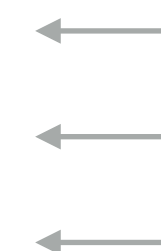
组件

通过力的作用

对齐：左对齐



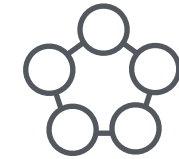
间距



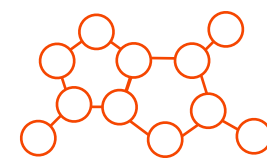
粒子设计



元素



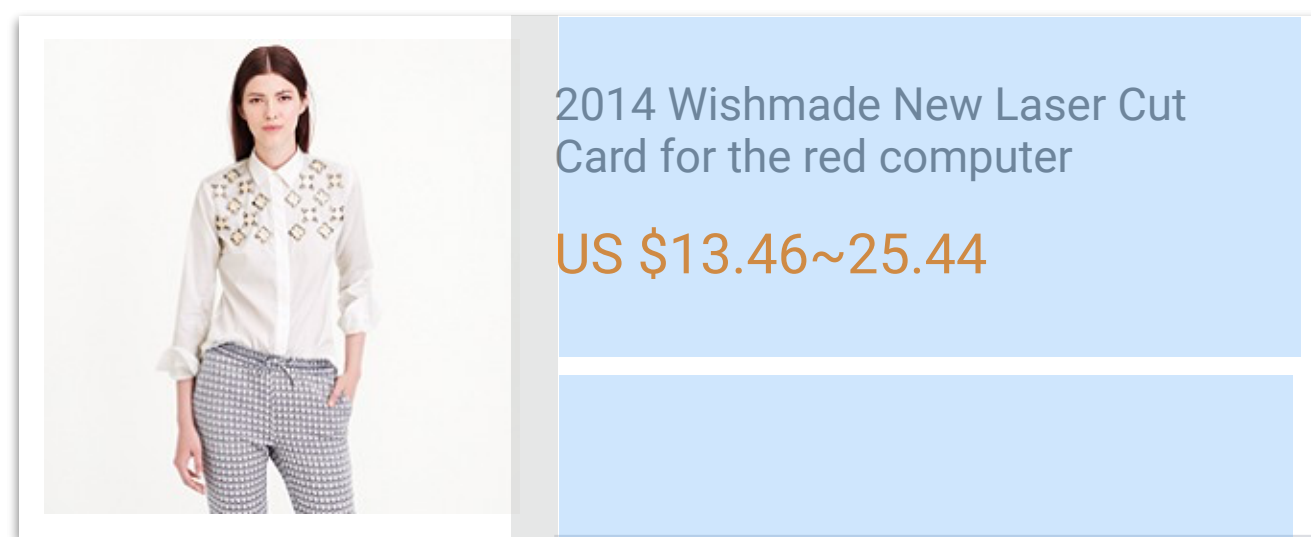
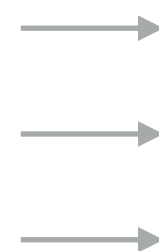
元件



组件

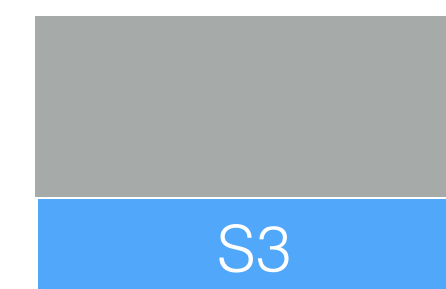
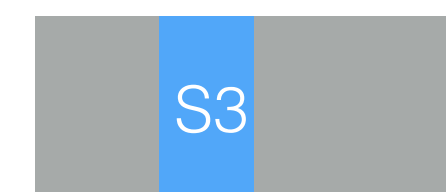
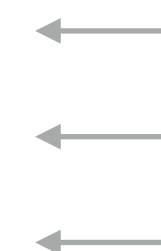
通过力的作用

对齐：左对齐



Contact Supplier

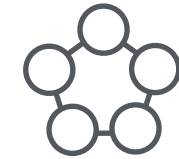
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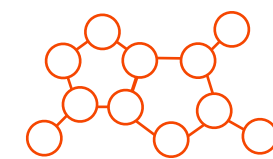
粒子设计



元素



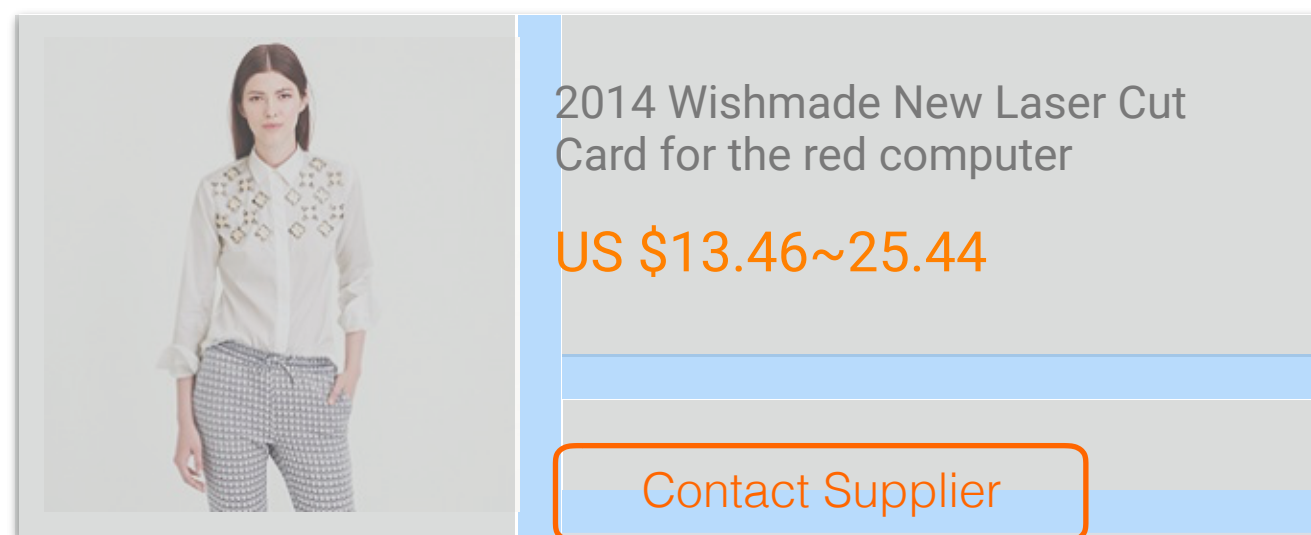
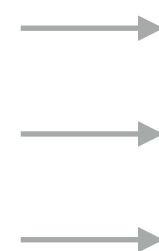
元件



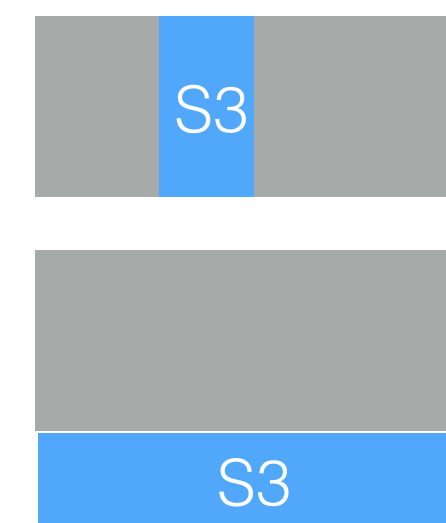
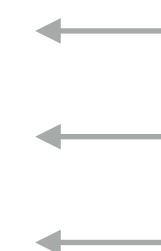
组件

通过力的作用，组合成为组件

对齐：左对齐



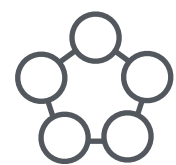
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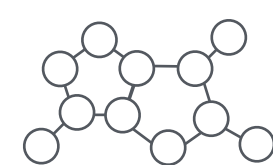
粒子设计



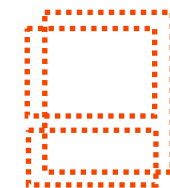
元素



元件



组件



模板

组合为模板



2014 Wishmade New Laser Cut Card for the red computer

US \$13.46~25.44

Contact Supplier



2014 Wishmade New Laser Cut Card for the red computer

US \$13.46~25.44

Contact Supplier



2014 Wishmade New Laser Cut Card for the red computer

US \$13.46~25.44

Contact Supplier



2014 Wishmade New Laser Cut Card for the red computer

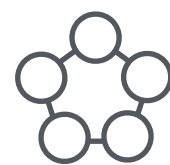
US \$13.46~25.44

Contact Supplier

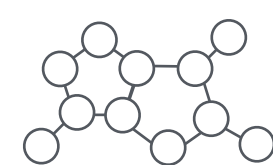
粒子设计



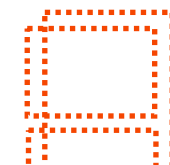
元素



元件



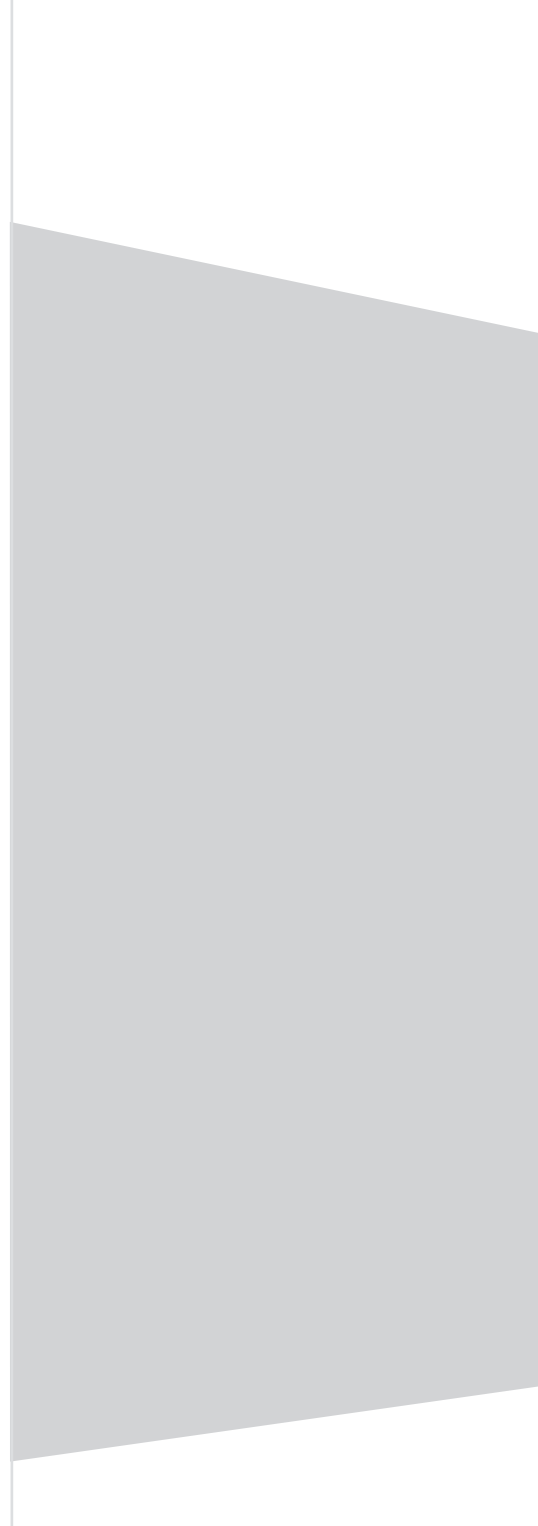
组件



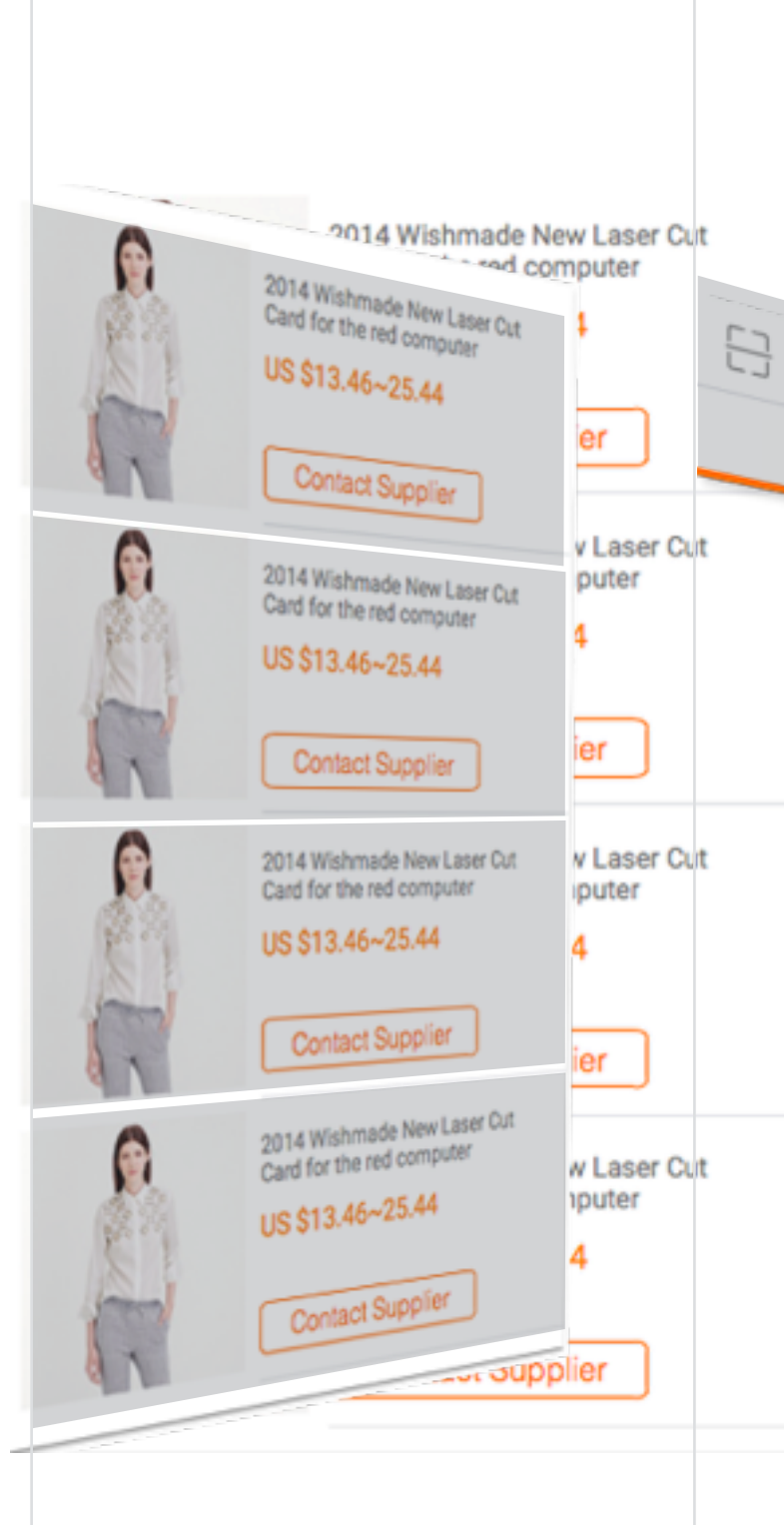
模板

通过框架的图纸结构指导

背景层



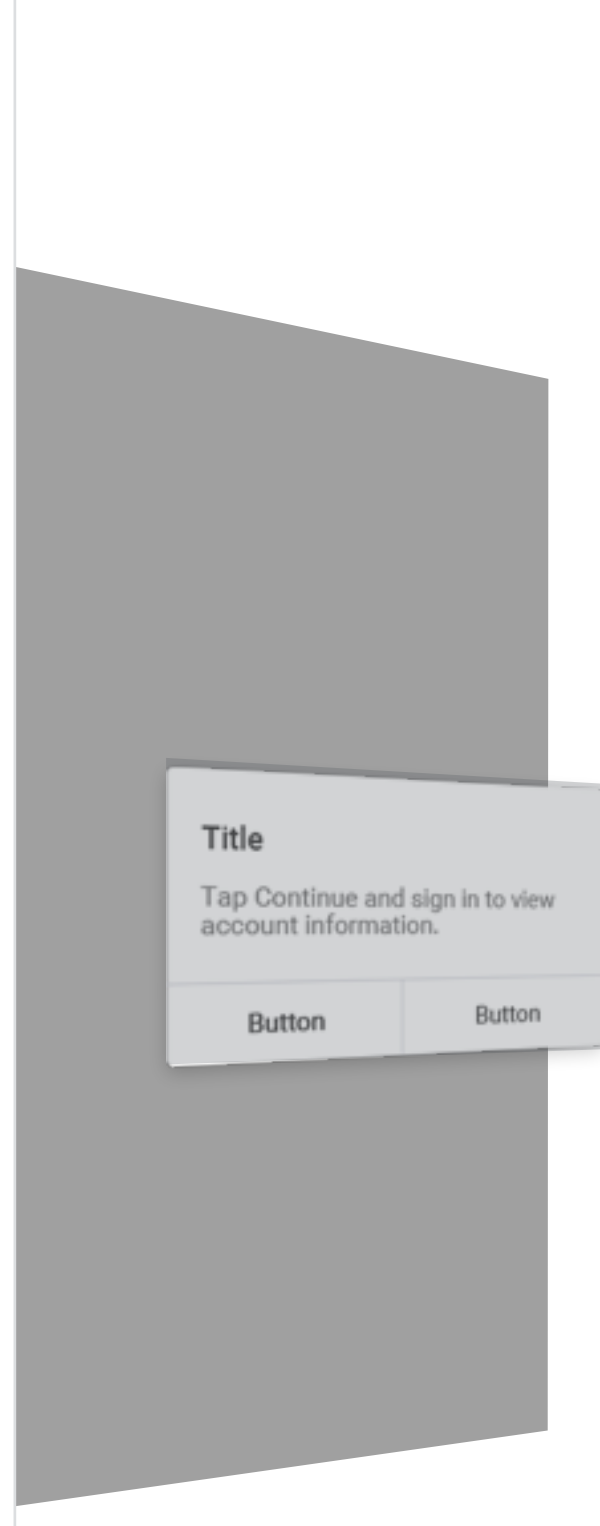
内容层



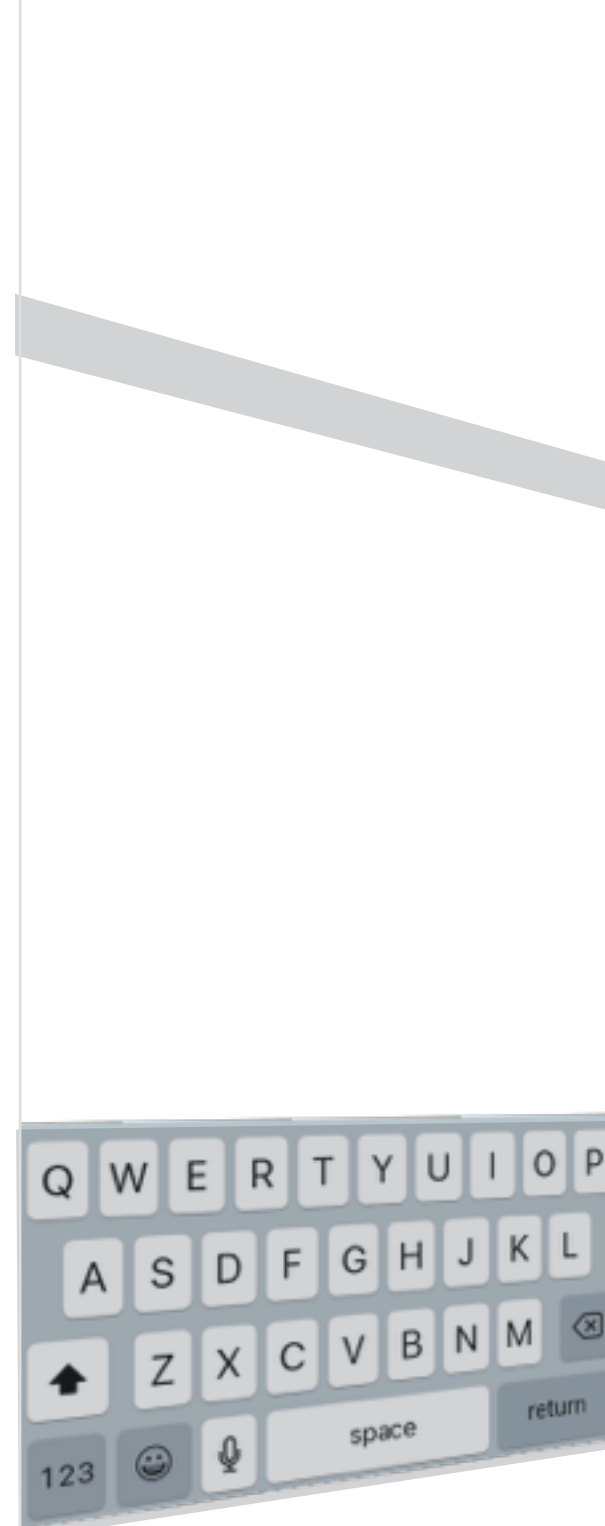
全局控制层



临时层



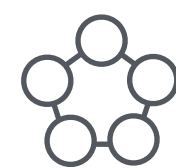
系统层



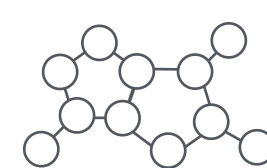
粒子设计



元素



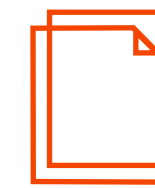
元件



组件



模板



页面

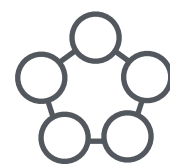
通过框架的图纸结构指导，组合为页面



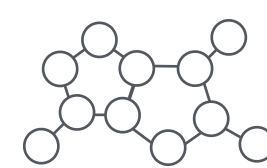
粒子设计



元素



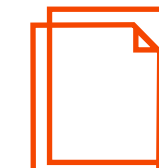
元件



组件



模板

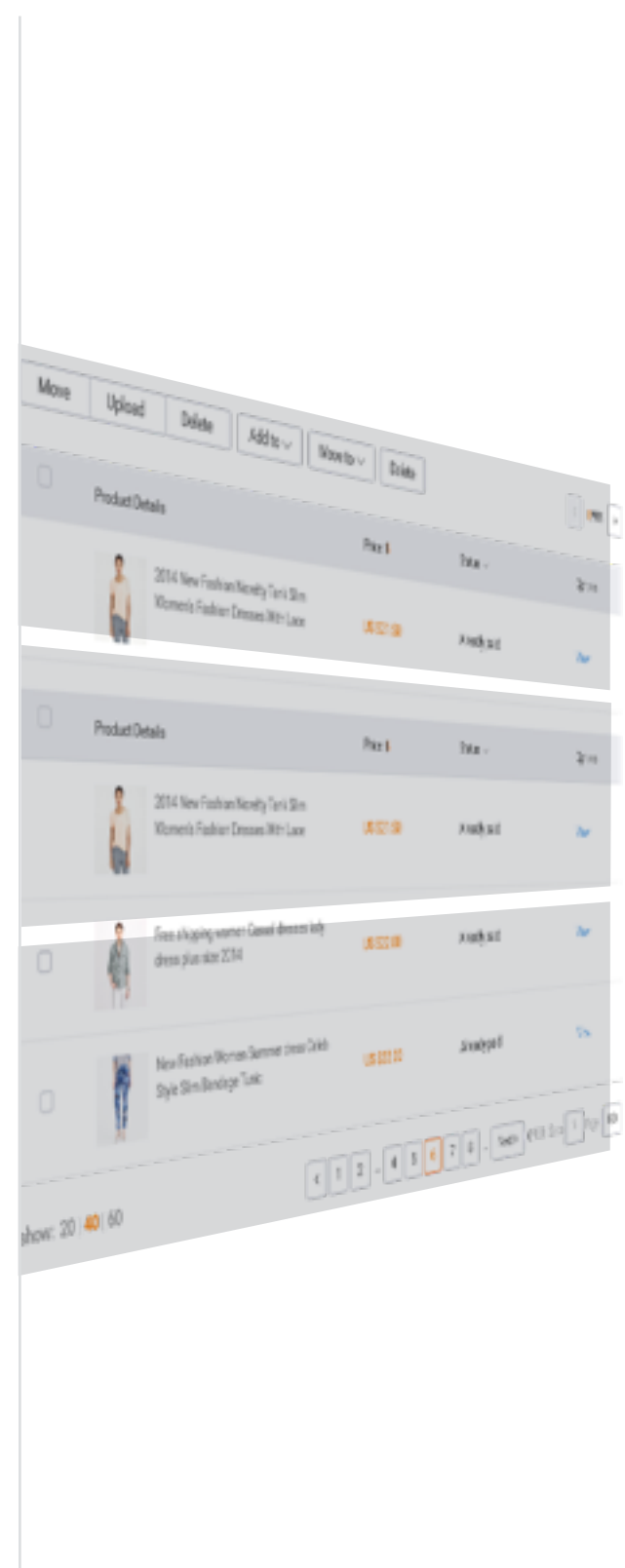


页面

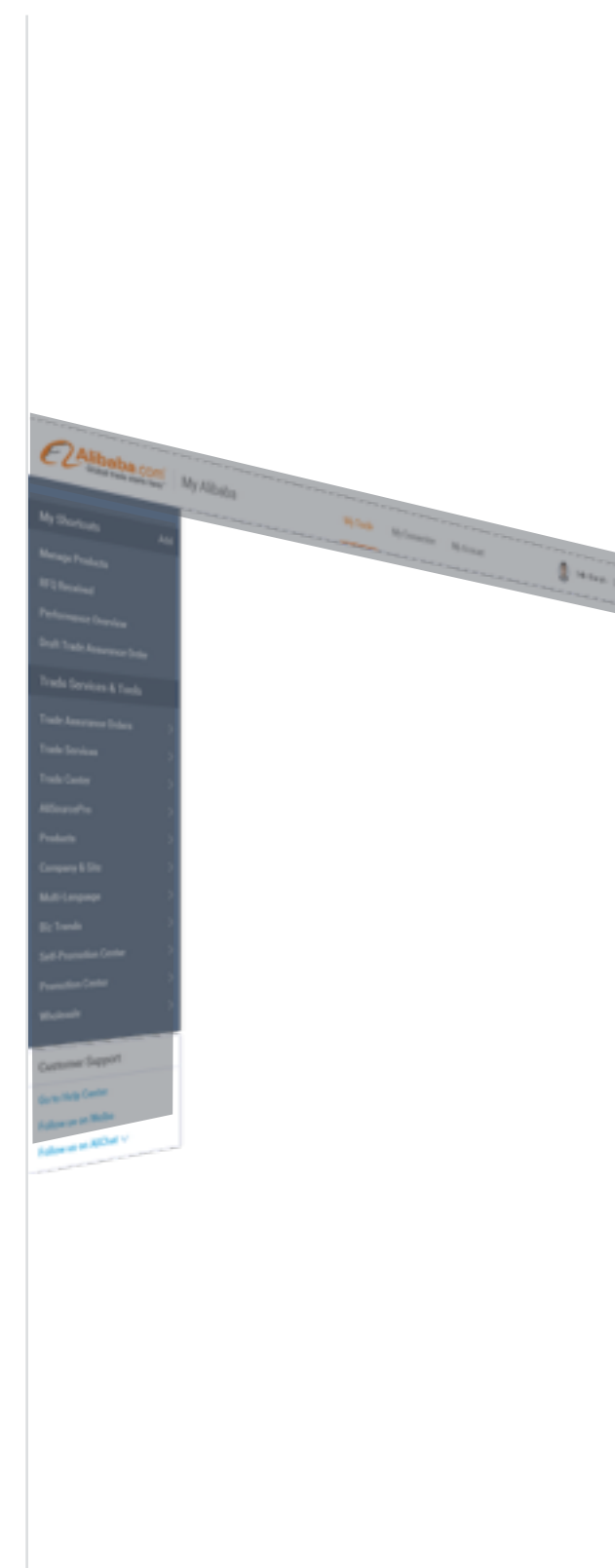
背景层



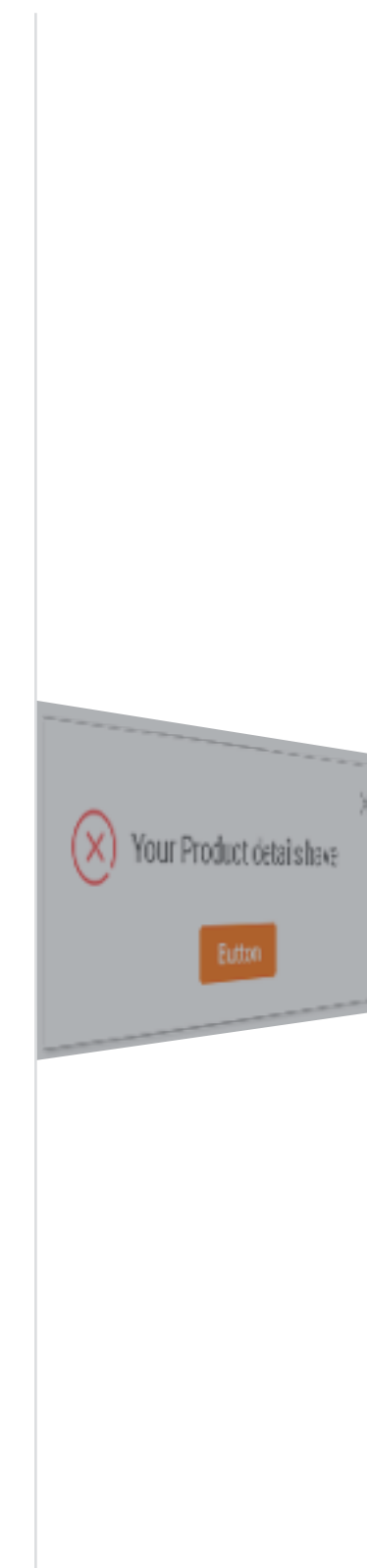
内容层



全局控制层



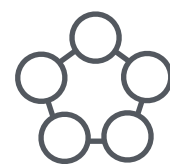
临时层



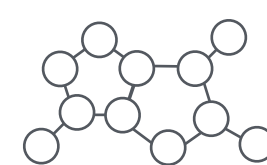
粒子设计



元素



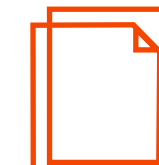
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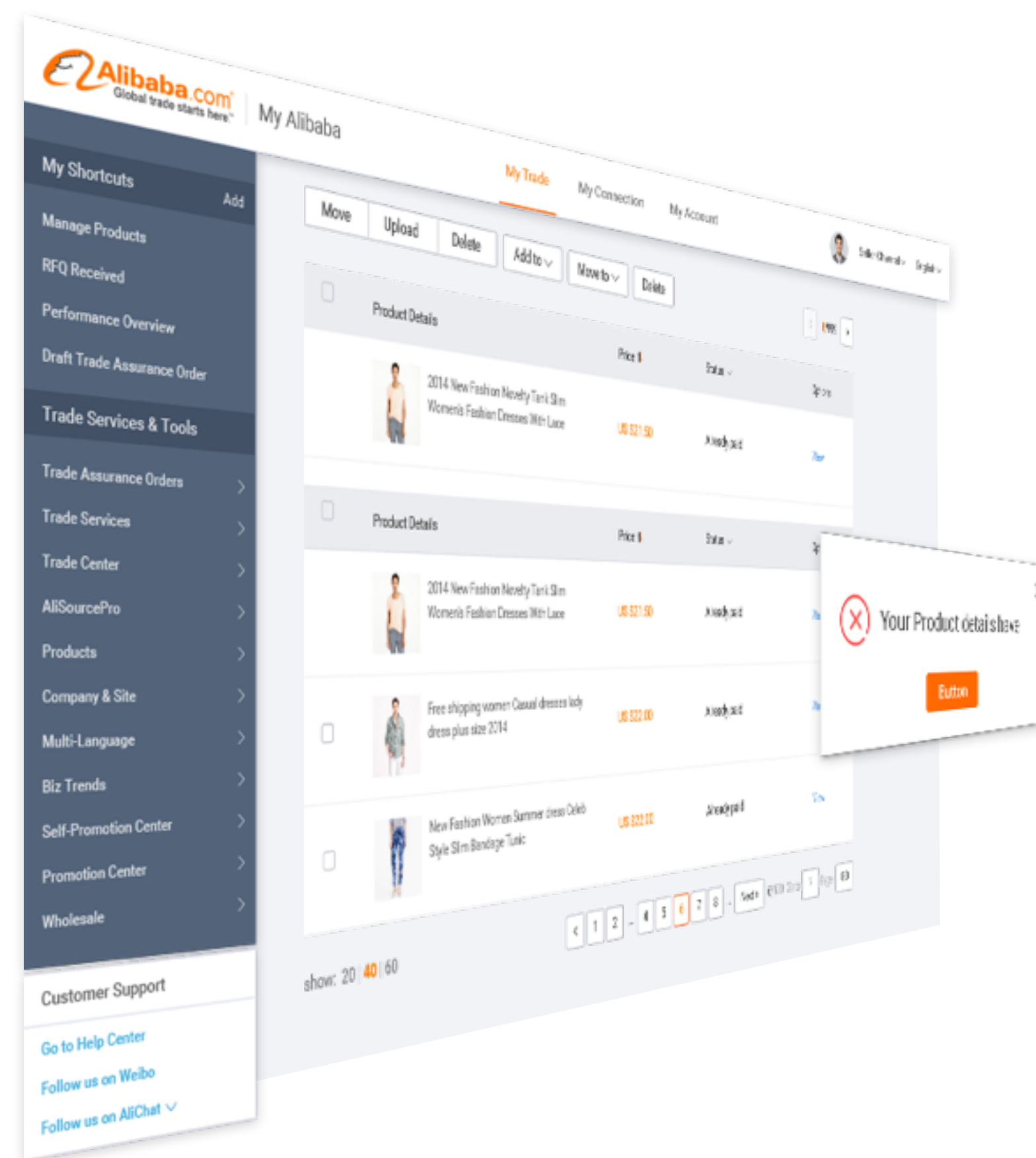
组件



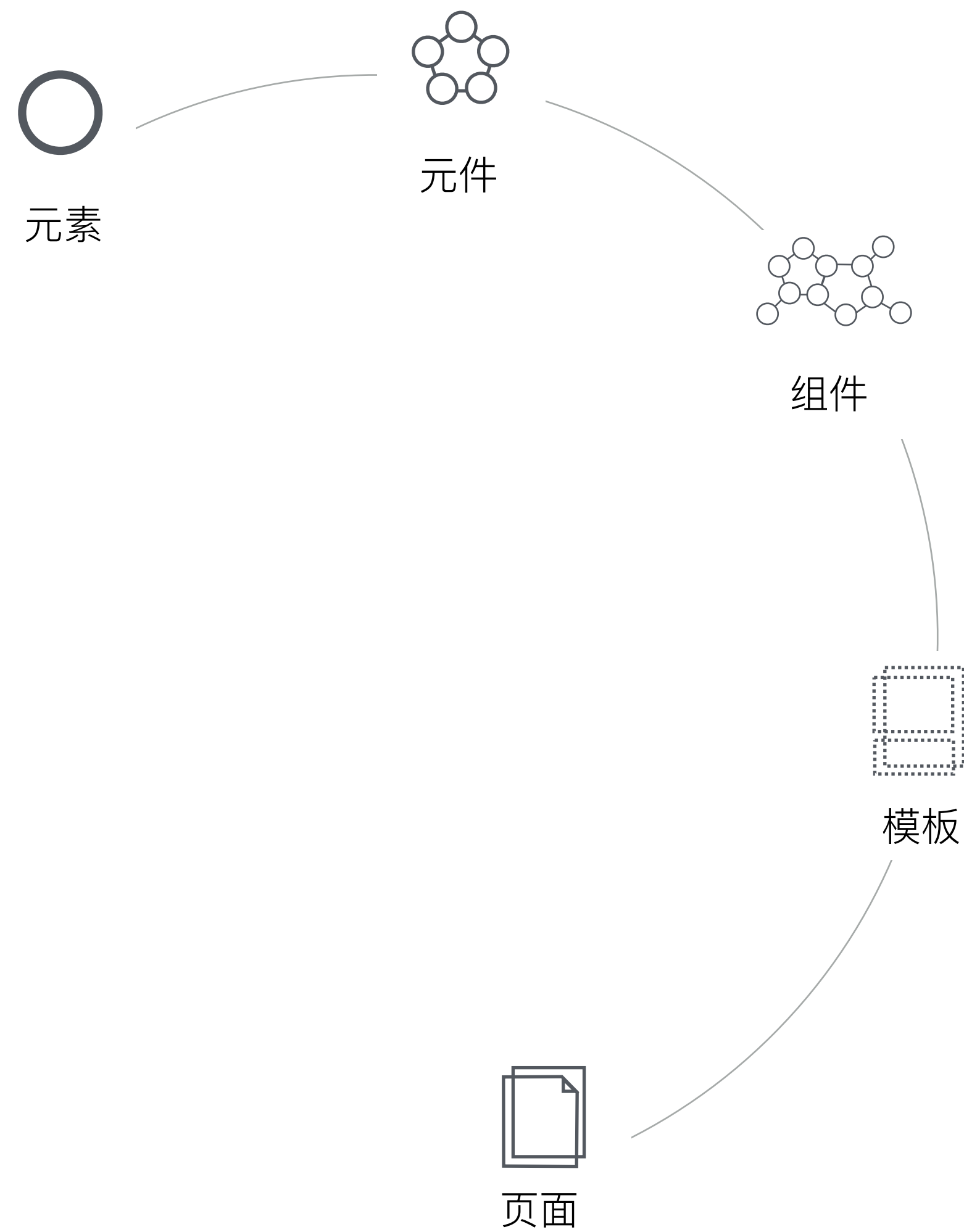
模板



页面



粒子设计



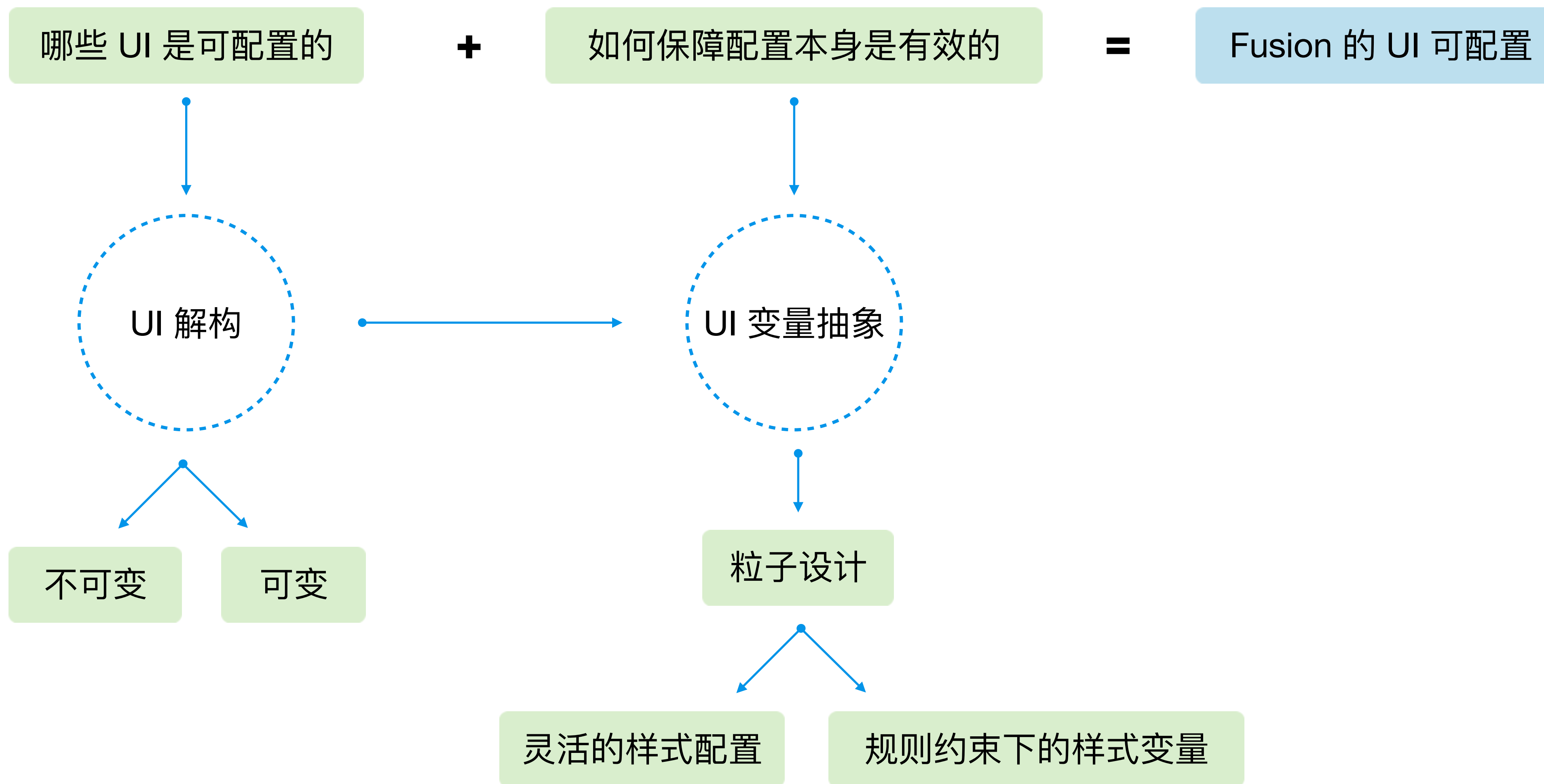
粒子设计



FUSION

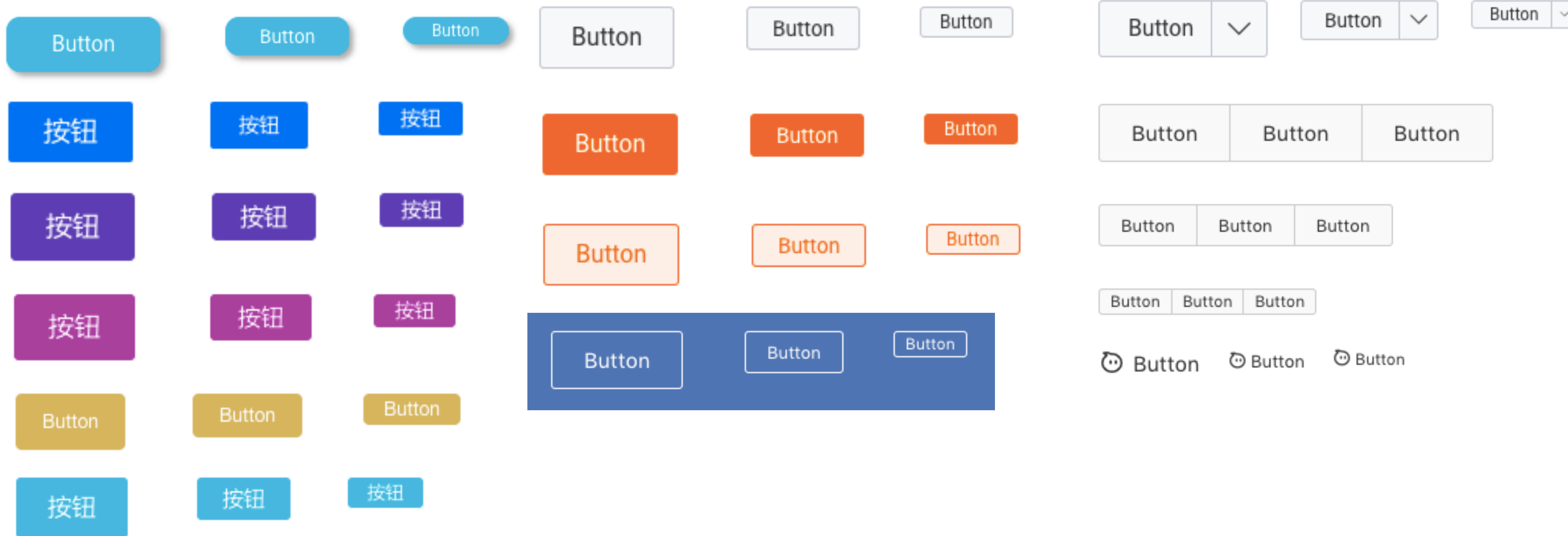
— 基础理论 - 工程 —

可配置的DPL 什么是可配置



解构

描述组件的构成关系

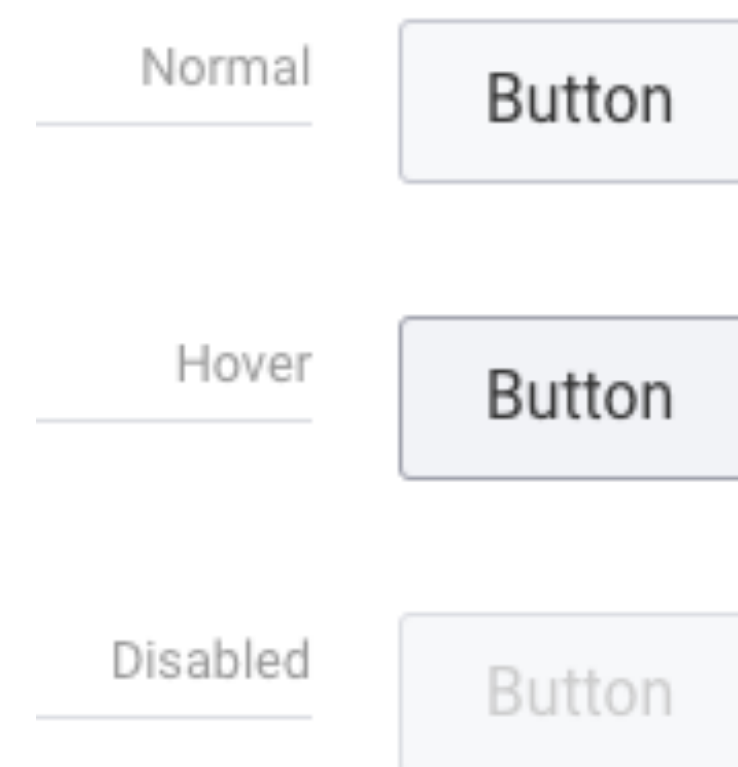


解构

描述组件的构成关系



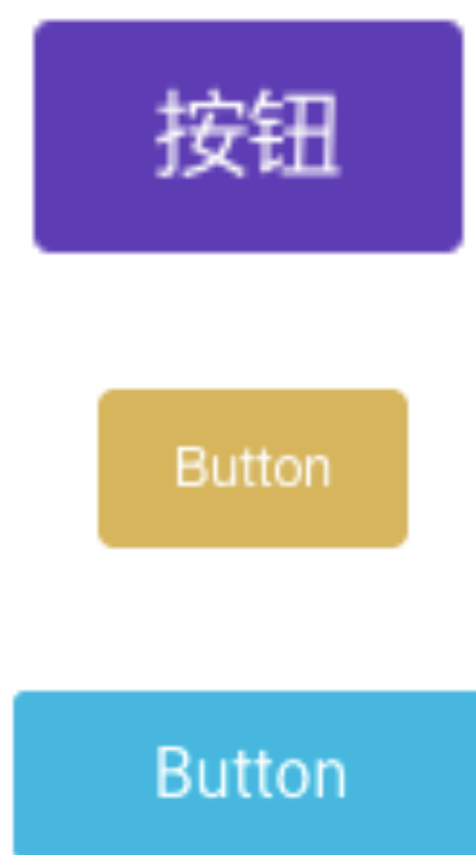
背景色是可变的



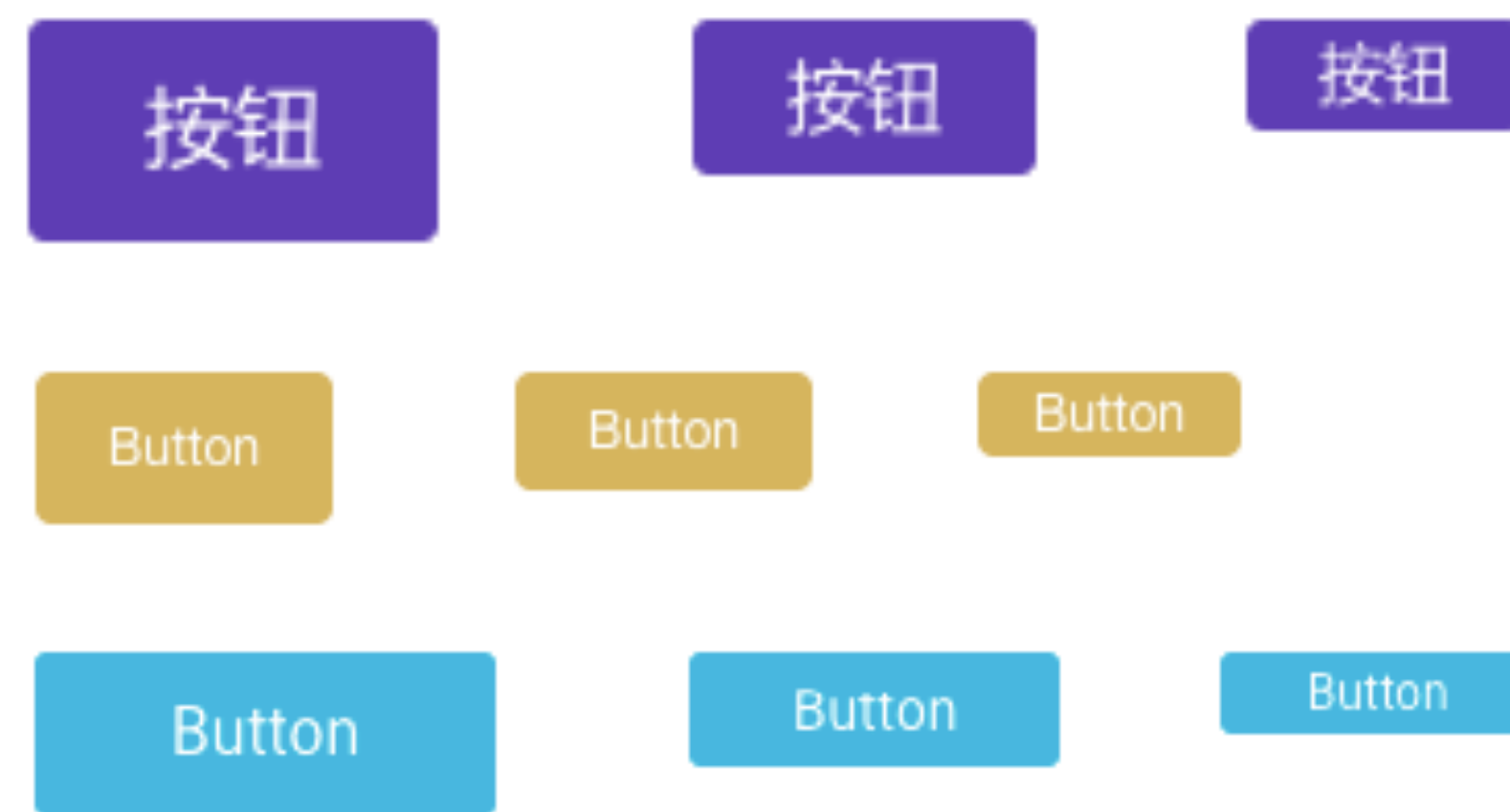
有三种状态是不变的

解构

描述组件的构成关系



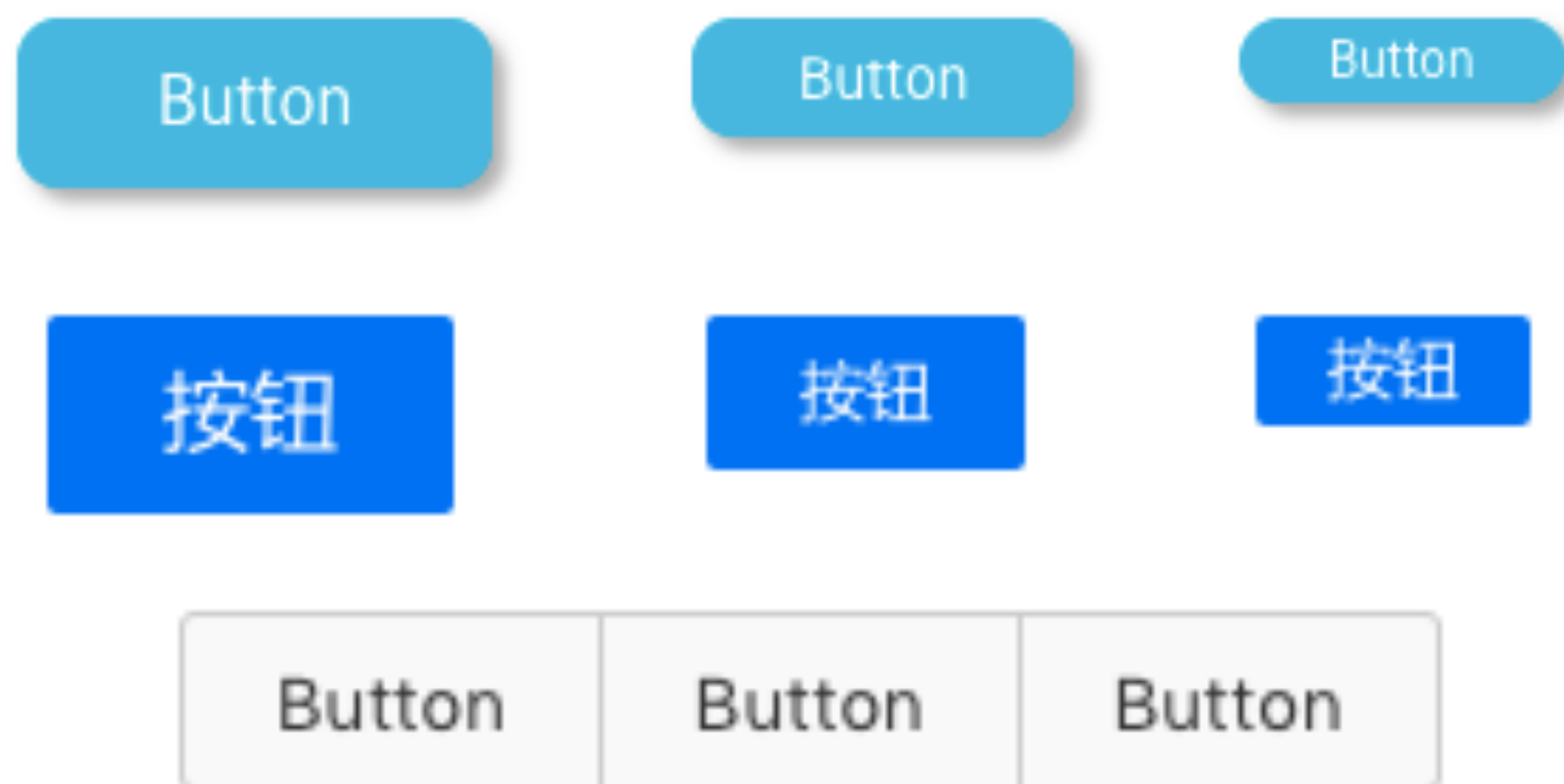
宽高是可变的



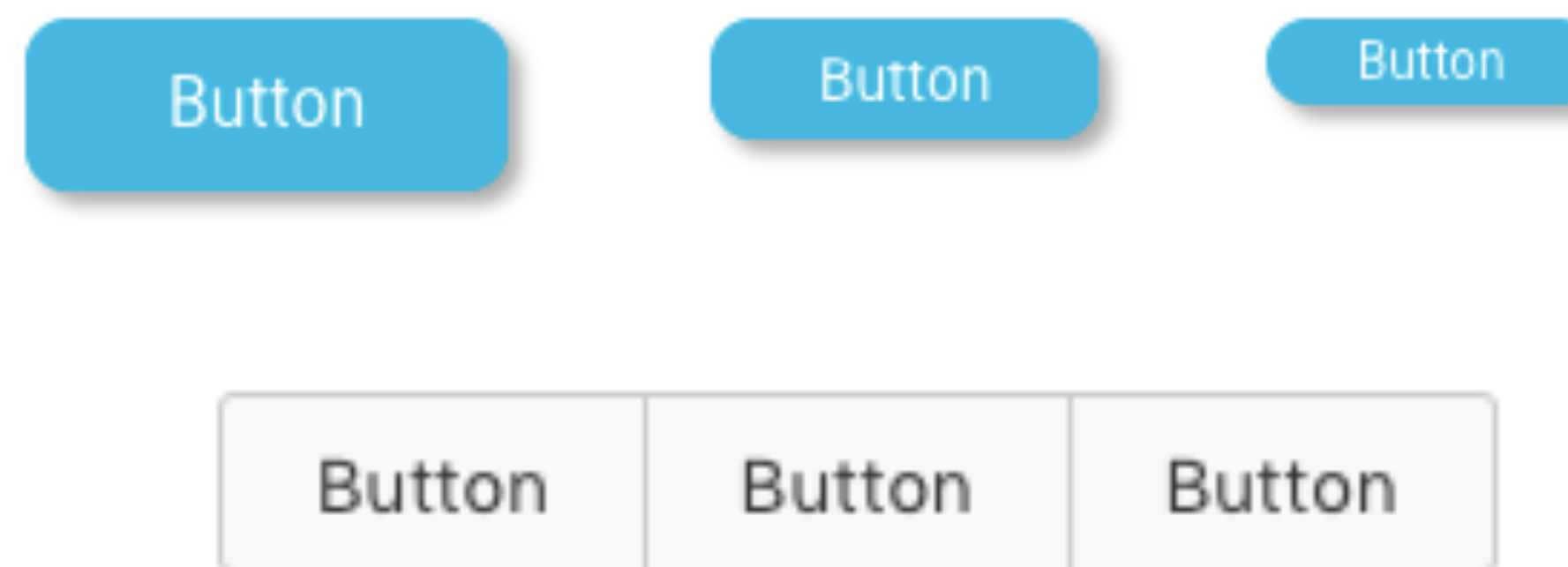
有三种尺寸是不变的

解构

描述组件的构成关系



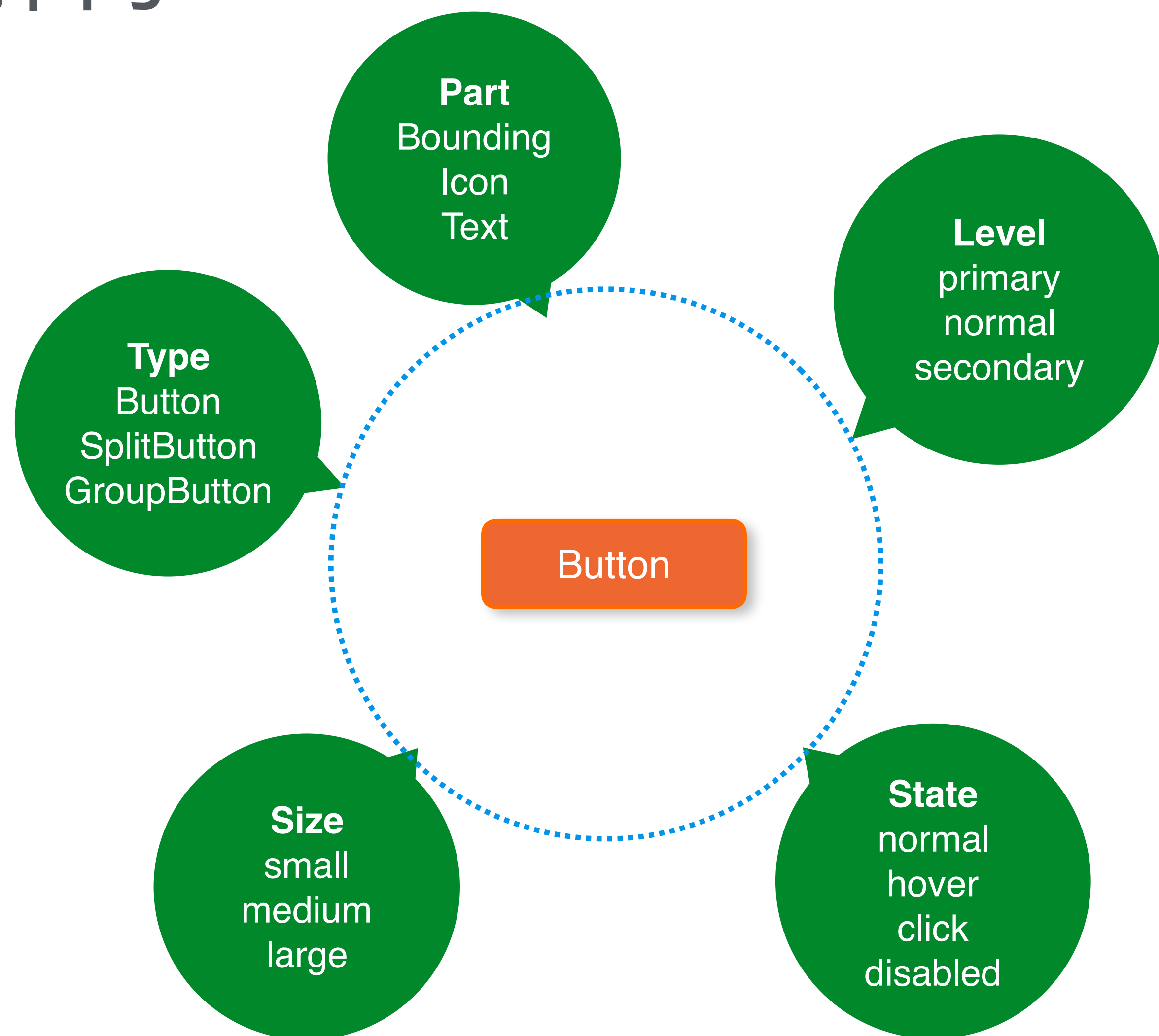
阴影和圆角是可变的



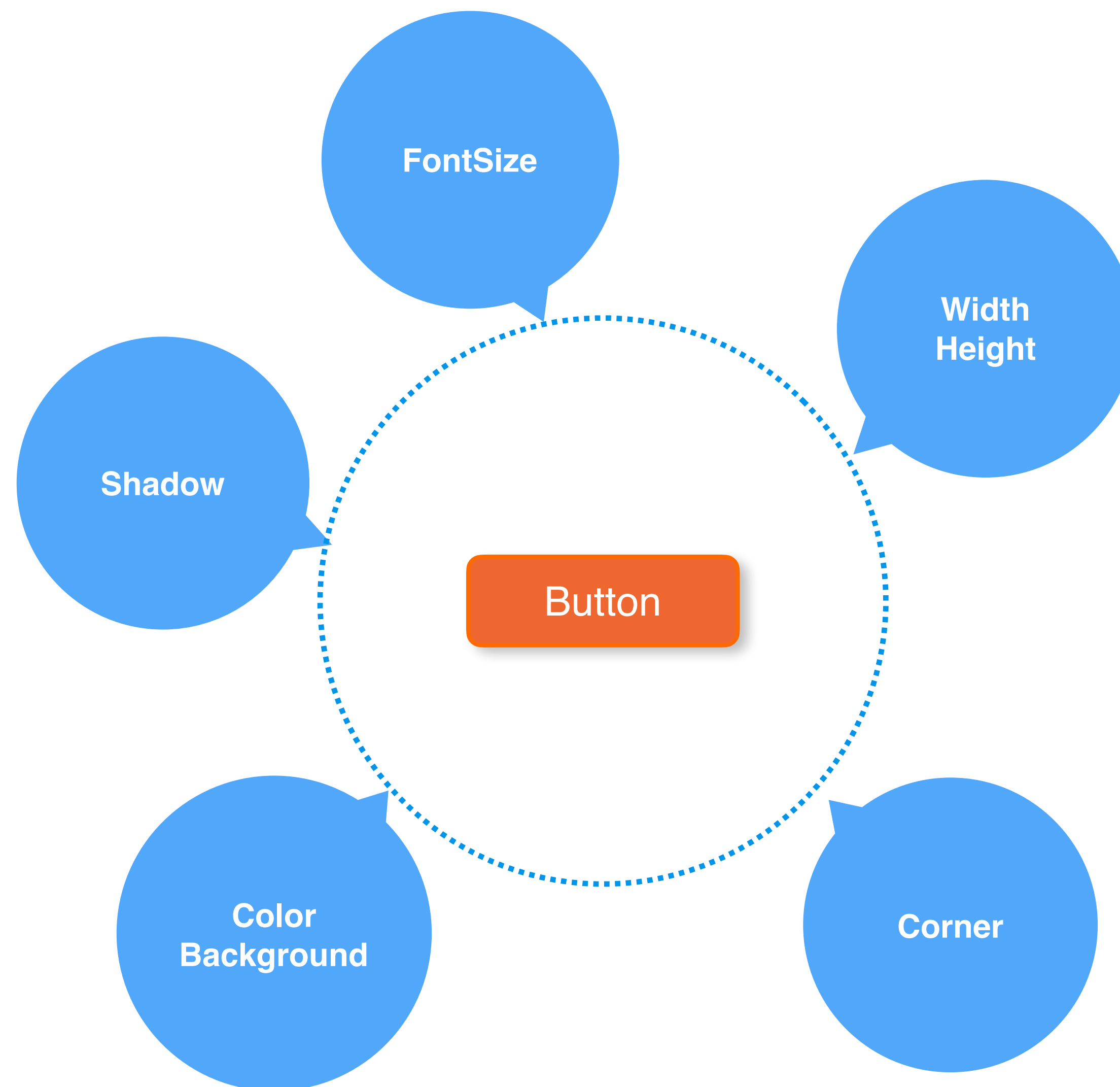
但 Button 类型是不可变的

解构

描述组件的构成关系



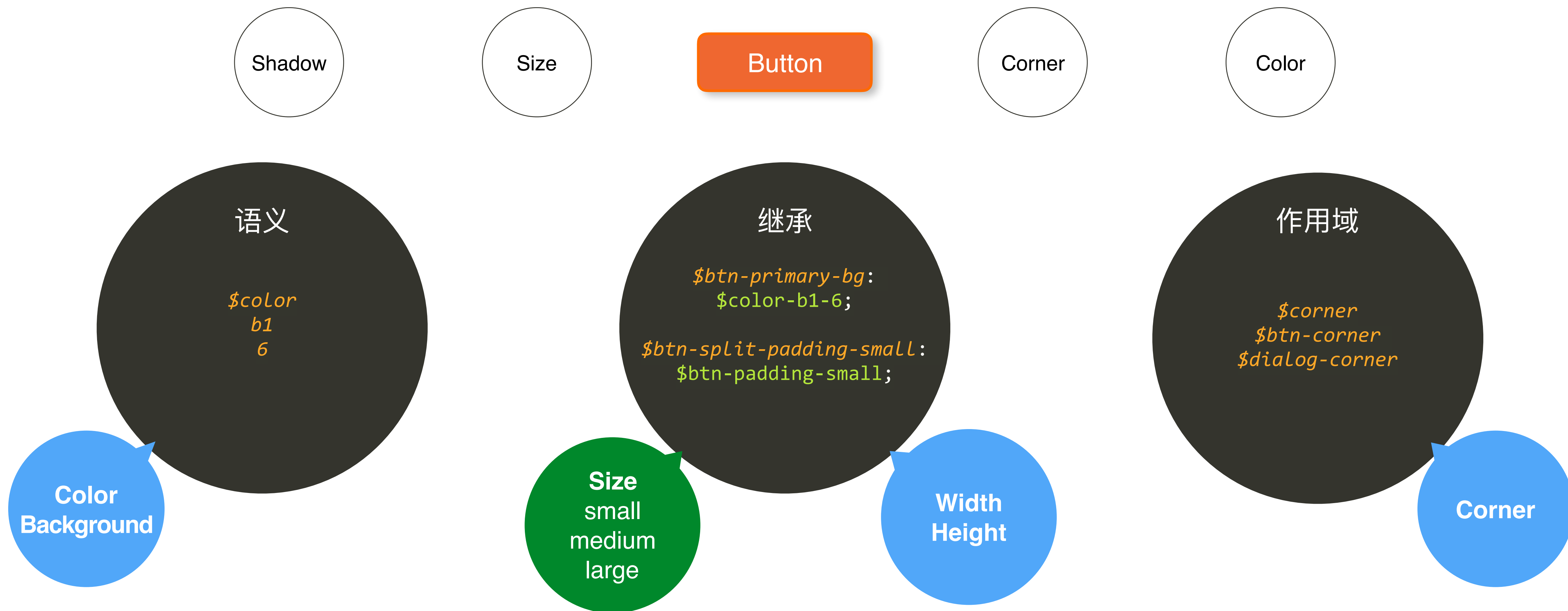
不可变的部分



可变的的部分

UI变量抽象

描述可变的设计规则，让优秀的设计变得有迹可循



设计规则是保障有效配置的关键

UI变量抽象

描述可变的设计规则，让优秀的设计变得有迹可循

全局变量

\$color-b1-6
\$corner-radius-base
\$shadow-elevation-sd1
\$line1
\$font-base
\$size-base

按钮

Button

Button

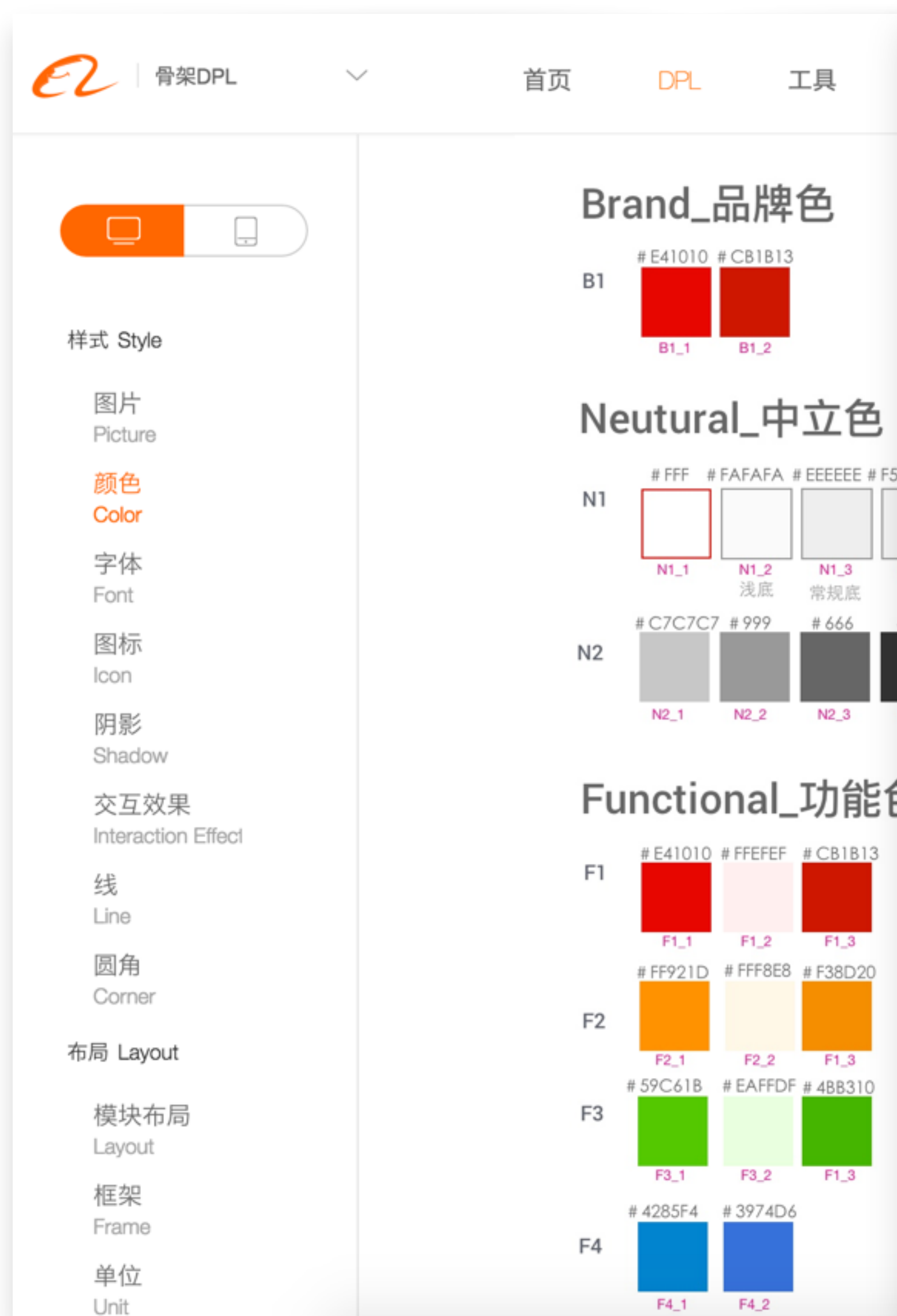
组件变量

\$btn-primary-color-bg
\$btn-border-color
\$btn-primary-font-color
\$btn-shadow
\$btn-size-font-small
\$btn-size-padding
\$btn-corner

配置的多样性是满足多品牌、多场景的关键

可配置的DPL

DPL 是一个设计工程



Display3

Regular 56 dp, line height 84

Display2

Regular 48 dp, line height 68

Display1

Regular 36 dp, line height 54

Headline

Medium 24 dp, line height 36

Title

Medium 20 dp, line height 30

Subhead

Regular 16 dp, line height 24

Body2

Medium 13 dp, line height 20

Body1

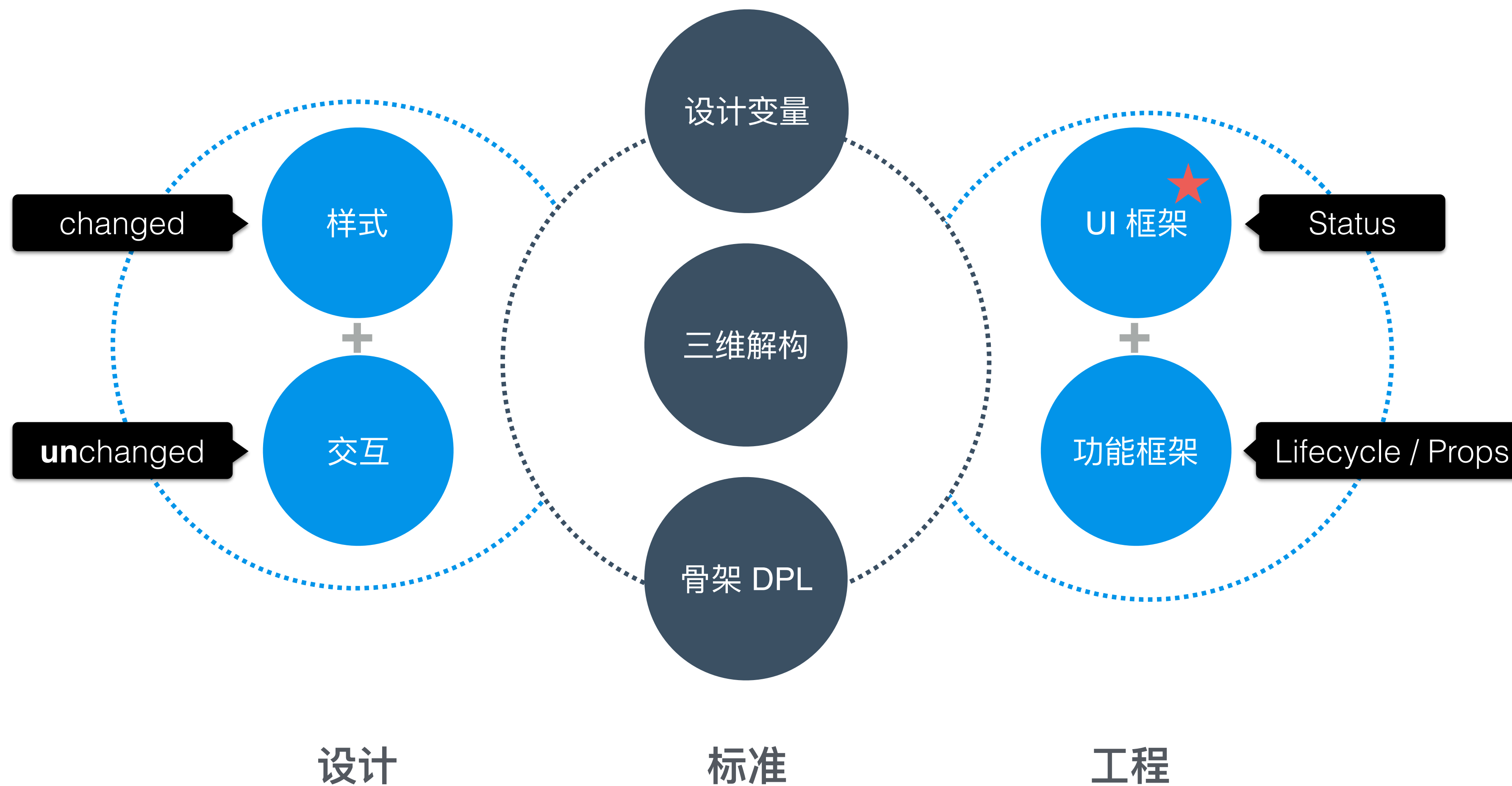
Regular 13 dp, line height 20

Caption

Regular 12 dp, line height 18

理论基础

工业化的标准

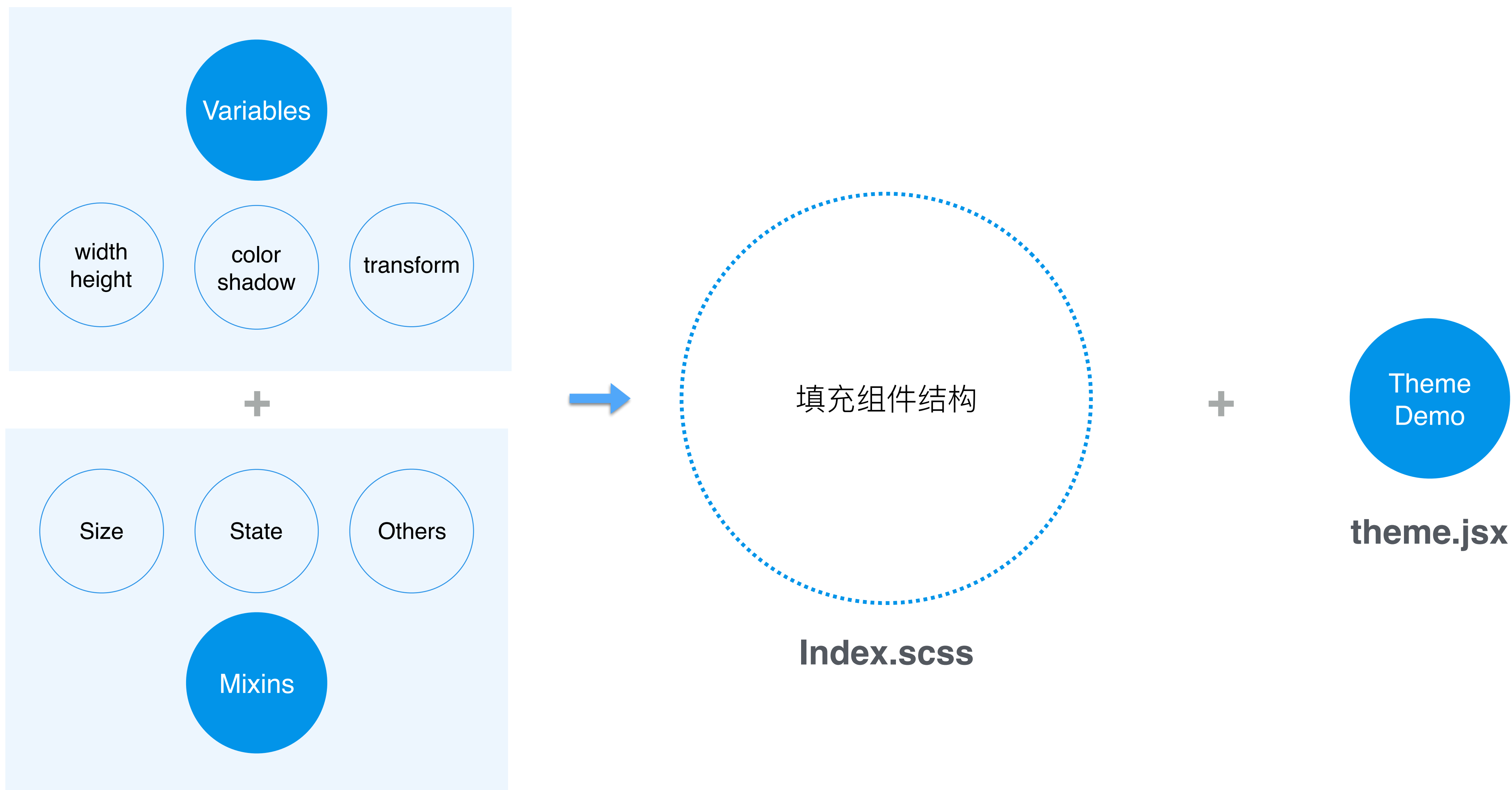


FUSION

— 框架与平台 —

可配置的UI框架

承接标准化、结构化、符合设计规则的组件描述和变量数据



可配置的UI框架

承接标准化、结构化、符合设计规则的组件描述和变量数据

```
1  ///
2  /// @module button: 按钮
3  /// @tag Button
4  /// @category component
5  /// @family button
6  /// @varPrefix $btn-
7  /// @classPrefix {prefix}-btn
8  ///
9
10 $btn-prefix: '.' + $css-prefix + 'btn';
11
12 $btn-icon-prefix: '.' + $css-prefix + 'icon';
13
14 // Normal
15 // -----
16
17 /// shadow
18 /// @namespace statement/normal
19 $btn-shadow: $shadow-sd0 !default;
20
21
22 /// corner
23 /// @namespace statement/normal
24 $btn-corner: $corner-radius-r1 !default;
25
26 /// text
27 /// @namespace statement/normal
28 $btn-normal-color: $color-n2-4 !default;
29
30 /// text
31 /// @namespace statement/hover
32 $btn-normal-color-hover: $color-n2-4 !default;
33
34 /// background
35 /// @namespace statement/normal
36 $btn-normal-bg: $color-n1-2 !default;
37
38 /// background
39 /// @namespace statement/hover
40 $btn-normal-bg-hover: $color-n1-3 !default;
41
42 /// border
43 /// @namespace statement/normal
44 $btn-normal-border-color: $color-n1-7 !default;
45
```

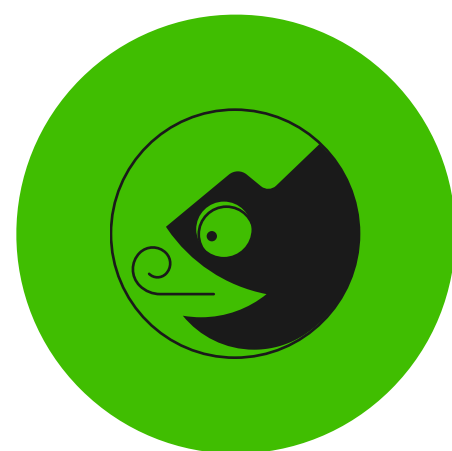
```
1  @mixin button-color(
2    $color,
3    $color-hover,
4    $bg-color,
5    $bg-color-hover,
6    $border-color: transparent,
7    $border-color-hover: transparent
8  ) {
9
10 }
11
12 @mixin button-size(
13   $margin,
14   $padding,
15   $height,
16   $font-size,
17   $border-width,
18   $icon-margin,
19   $icon-size
20 ) {
21   margin: $margin;
22   height: $height;
23   padding: 0 $padding;
24   font-size: $font-size;
25   line-height: $height - 2 * $border-width;
26   border-width: $border-width;
27
28   & > #{$btn-icon-prefix} {
29     margin: 0 $icon-margin;
30
31     &:before {
32       @include icon-size-handler($icon-size);
33     }
34   }
35
36   & > #{$btn-icon-prefix}-first {
37     margin-left: 0;
38   }
39
40   & > #{$btn-icon-prefix}-last {
41     margin-right: 0;
42   }
43
44   & > #{$btn-icon-prefix}-alone {
45     margin: 0;
46   }
47 }
48
```

```
1  #{$btn-prefix} {
2    & {
3
4     // 重要性维度
5     // -----
6
7     &-primary {
8       border-style: $btn-primary-border-style;
9
10      @include button-color(
11        $btn-primary-color,
12        $btn-primary-color-hover,
13        $btn-primary-bg,
14        $btn-primary-bg-hover,
15        $btn-primary-border-color,
16        $btn-primary-border-color-hover
17      );
18    }
19
20    &-secondary {
21
22    }
23
24    &-normal {
25
26    }
27
28    // 尺寸维度
29    // -----
30
31    &-small {
32      @include button-size(
33        $btn-size-s-margin,
34        $btn-size-s-padding,
35        $btn-size-s-height,
36        $btn-size-s-font,
37        $btn-size-s-border-width,
38        $btn-size-s-icon-margin,
39        $btn-size-s-icon-size
40      );
41    }
42
43    &-medium {
44
45    }
46
47    &-large {
48
49    }
50
51    // 形状维度
52    // -----
53
54    &-ghost {
55
56    }
57
58    &-warning {
59
60    }
61  }
62 }
```

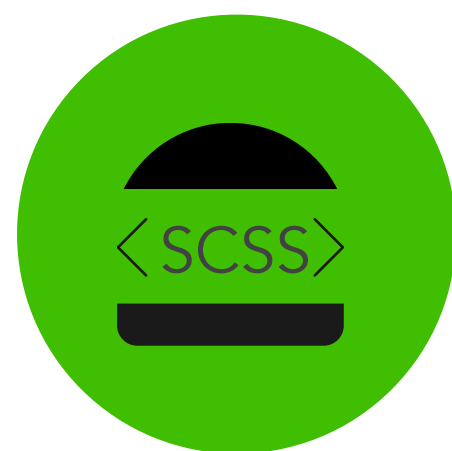


FUSION CONFIG

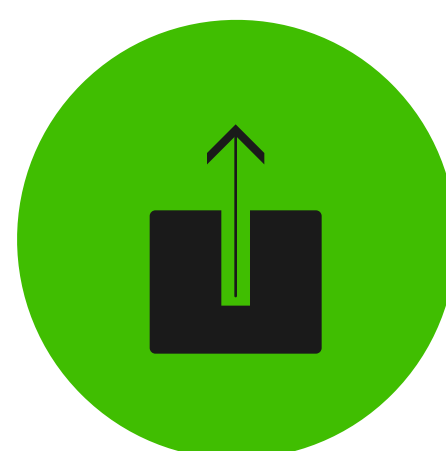
设计师与前端并行工作的核心



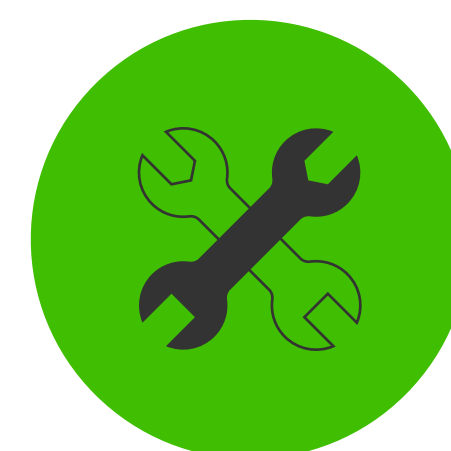
在线一键修改组件样式



自动生成主题包代码



快速导出sketch模板



轻松管理多套组件

一键修改组件外观

设计师只需动一动手指，就能轻松修改所有组件的视觉样式，再也不用改图改到手抽筋了。

The image displays a design tool interface for modifying component appearance. On the left is a style panel with the following sections:

- size**: dropdown menu
- bounding**: padding (S5), height (S10), margin (S0)
- text**: text (Body1 Size)
- border**: width (Line 1)
- statement**: dropdown menu
- normal**: border (\$color-f1-4), background (B1-6), text (N1-1), corner (R1), shadow (No Shadow)
- hover**: background (B1-9), border (\$color-f1-4), text (N1-1)

On the right are three preview panels:

- Alibaba.com**: Shows orange buttons in normal, hover, disabled, and with icon states for sizes L, M, and S. The M size button in the normal state is highlighted with a green border.
- 企业云**: Shows blue rounded buttons in normal, hover, and disabled states for sizes L, M, and S.
- 商家**: Shows pink buttons in normal, hover, and disabled states for size L.

At the top right, there is a panel labeled **做到** showing '按钮' (Button) in Chinese characters in normal, hover, disabled, and with icon states for size L.

Styles

颜色 Color

边角 Corner

字体 Font

图标 Icon

线条 Line

阴影 Shadow

Components

手风琴 Accordion

徽标数 Badge

气泡 Balloon

面包屑 Breadcrumb

按钮 Button

日历 Calendar

复选框 Checkbox

日期选择 Date-picker

对话框 Dialog

反馈 Feedback

表单 Form

输入框 Input

菜单 Menu

Home > Theme Market > Theme: next-flower > Config: button

按钮 Button

Button

	L	M	S
normal			
hover			
disabled			
with icon			

primary

	L	M	S
normal			
hover			

Select

Element

Component

size

bounding

height

S10

padding

S5

margin

S0

text

text

Body1 Size

border

width

Line 1

statement

normal

background

B2-6

border

Transparent

text

N1-1

corner

R1

shadow

No Shadow

hover

background

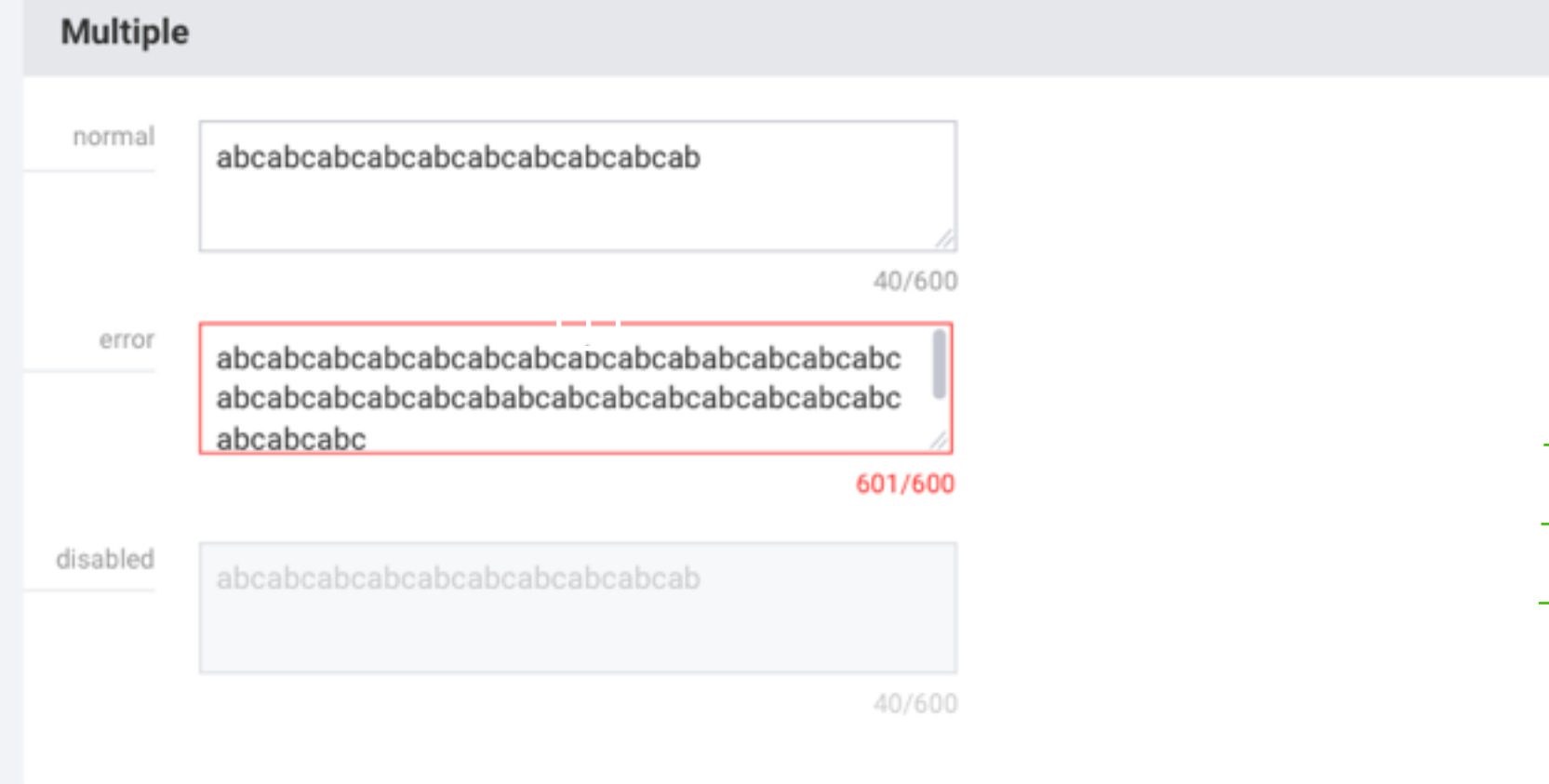
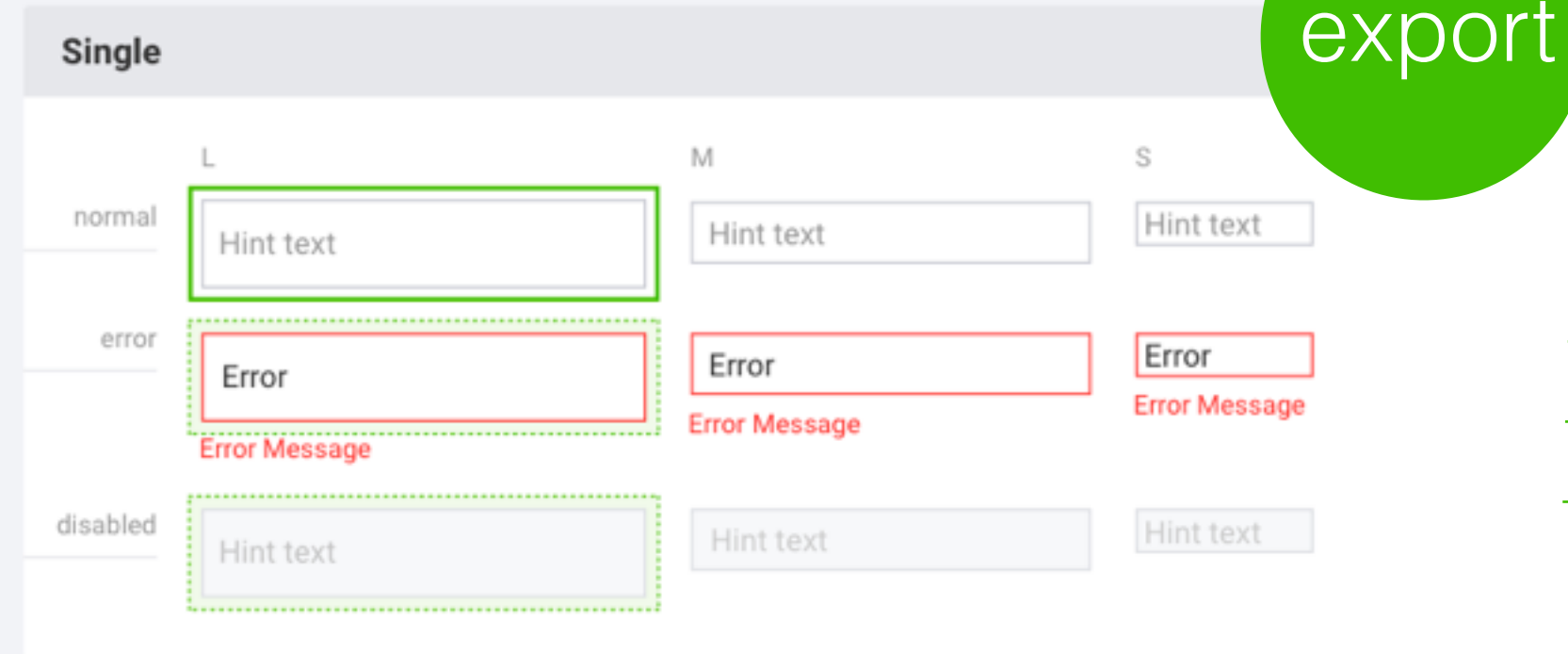
N1-3

重置

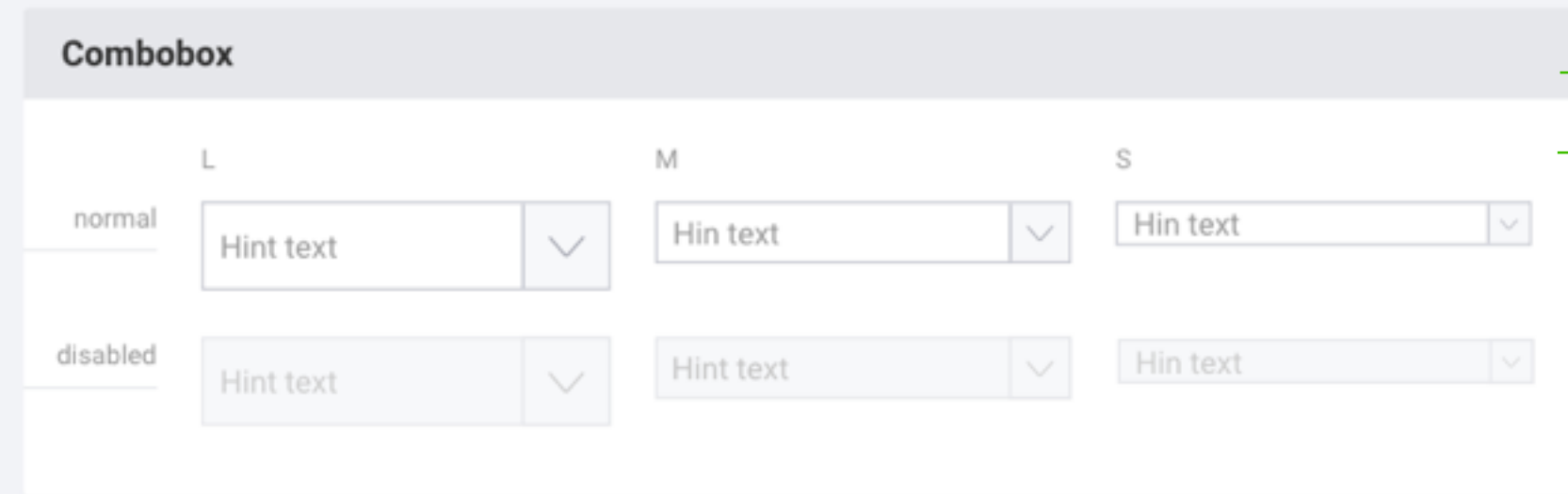
自动生成SCSS变量

前端可直接使用平台生成的代码，无需投入开发资源，开发GG们再也不用熬夜加班撸代码了。

文本框/Textfield



输入选择器/Combobox



export

```
/// text
/// @namespace statement/normal
$input-single-color: $color-n2-4 !
default;

/// text
/// @namespace statement/hint
$input-single-color-hint: $color-n2-2 !
default;

/// text
/// @namespace statement/disabled
$input-single-color-disabled: $color-
n2-1 !default;

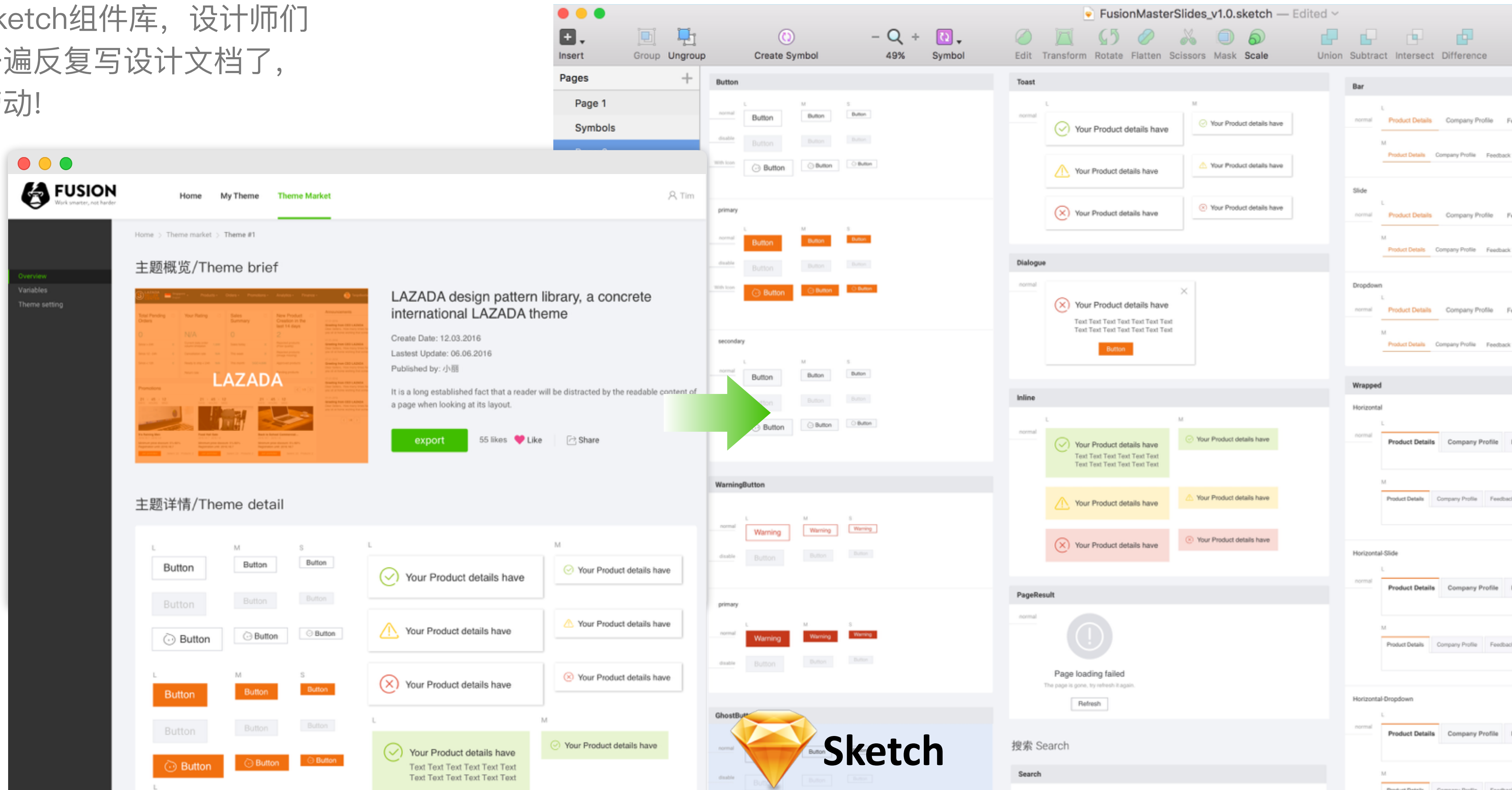
/// border
/// @namespace statement/normal
$input-single-color-border: $color-n1-7
!default;

/// border
/// @namespace statement/hover
$input-single-color-border-hover:
$color-n1-8 !default;

/// border
/// @namespace statement/focus
$input-single-color-border-focus:
$color-b2-6 !default;
```

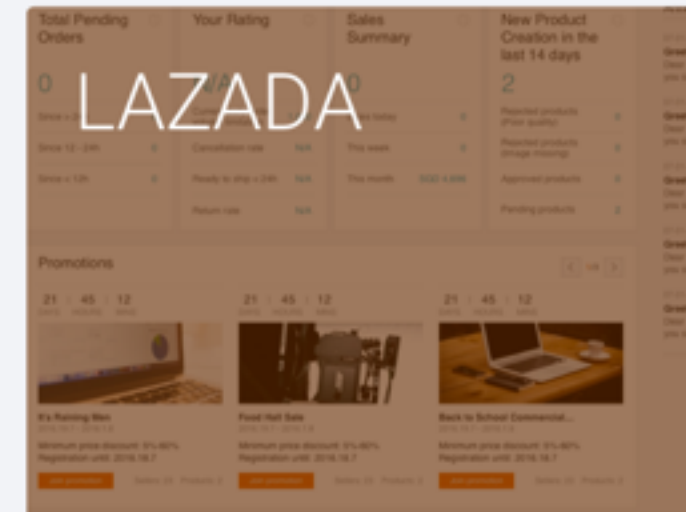
快速导出Sketch模版

支持快速导出Sketch组件库，设计师们再也不用一遍一遍反复写设计文档了，我们拒绝重复劳动！



Home > Theme Market

主题市场/Theme Market



LAZADA
by me 0 mm.dd.yyyy



企业云
by me 0 mm.dd.yyyy



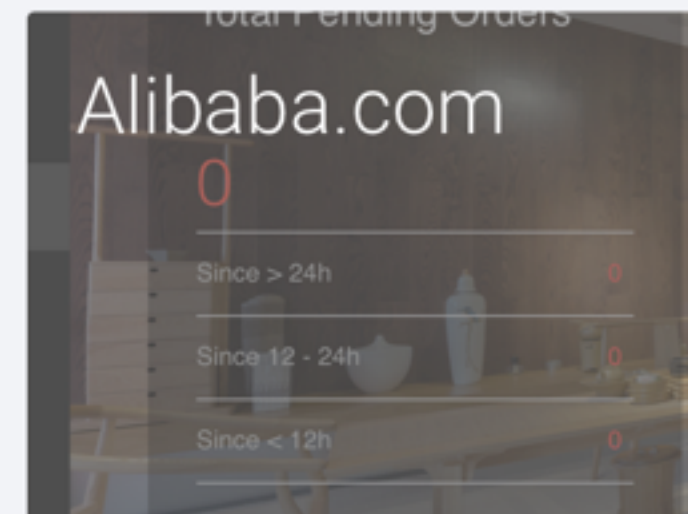
聚星台
by me 0 mm.dd.yyyy



Theme title
by me 0 mm.dd.yyyy



Theme title
by me 0 mm.dd.yyyy



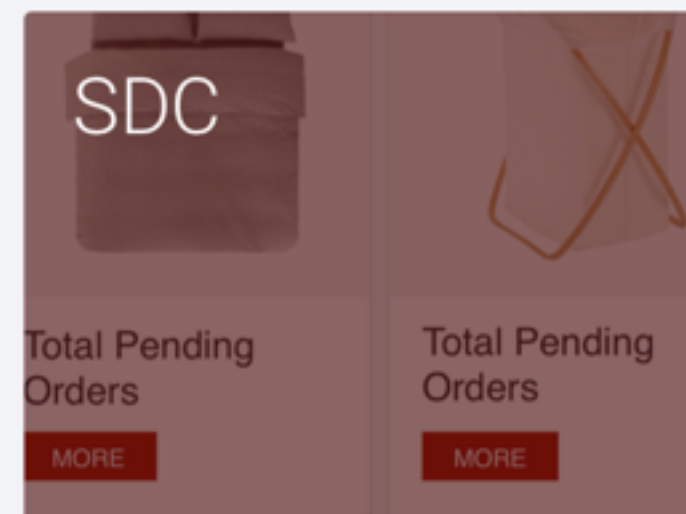
Theme title
by me 0 mm.dd.yyyy



Theme title
by me 0 mm.dd.yyyy



Theme title
by me 0 mm.dd.yyyy



商家 (服务)
by me 0 mm.dd.yyyy



商户中心
by me 0 mm.dd.yyyy



B2B移动端主题
by me 0 mm.dd.yyyy



Theme title
by me 0 mm.dd.yyyy

轻松管理多套组件

设计师一人便可轻松管理多套业务组件。其实，真的不需要那么多人，花这么多时间来做组件。

实时同步的核心

DOM - SVG 转换器

```
<div class="demo-item">
  <div class="next-dialog left" role="dialog" aria-labelledby="dialog-header-0" s
    "position: relative;"> == $0
    <div id="dialog-header-0" class="next-dialog-header">Welcome to Alibaba.com/<
    <div id="dialog-body-1" class="next-dialog-body">Start your business here by
    searching a popular product</div>
    <div id="dialog-footer-2" class="next-dialog-footer">...</div>
    <a href="javascript:;" class="next-dialog-close">...</a>
  </div>
  ::after
</div>
</td>
</tr>
<tr class="demo-group">...</tr>
<tr class="demo-group">...</tr>
</tbody>
```

DOM

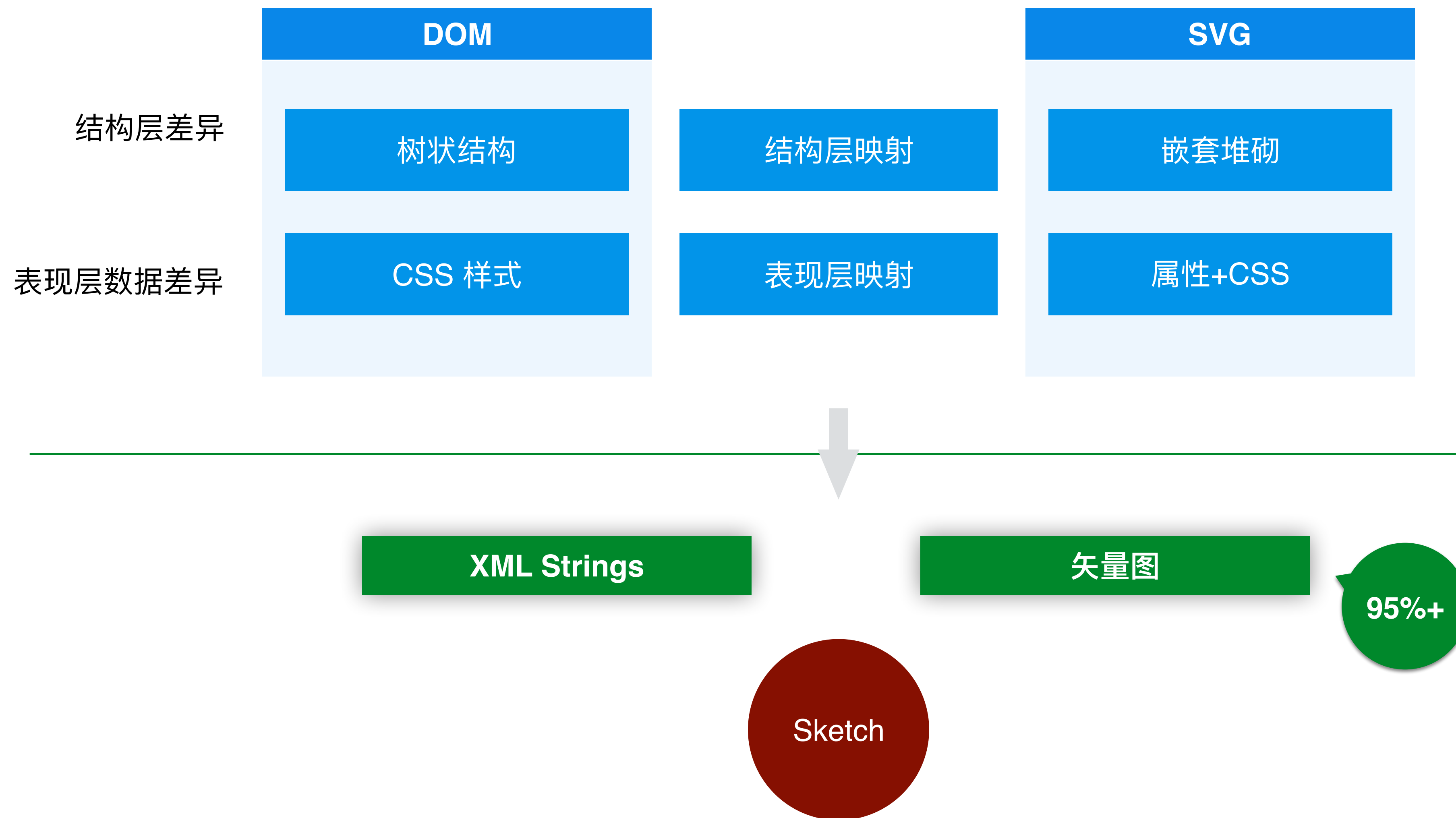


```
<svg overflow="visible" viewBox="-1 -1 388 153" width="388" height="153" version=
"1.1" xmlns="http://www.w3.org/2000/svg" xmlns:xlink="http://www.w3.org/1999/xlink">
  <g transform="translate(-91, -59) scale(1, 1)">
    <defs>...</defs>
    <path d="M 474.5 59.5 V 207.5 H 91.5 V 59.5 Z" style="fill:rgb(255, 255,
    255);fill-opacity:1;stroke:rgb(255, 255, 255);stroke-width:1;stroke-dasharray:
    none" filter="url(#filter-def-1)" id="el-2 $(shadow:rgba(0, 0, 0, 0.317647)
    1px 1px 3px 0px)"></path> == $0
    <rect x="92" y="80" width="382" height="21" style="fill:none" filter id="bg-
    el-3 $()"></rect>
    <text style="font-size:16px;font-weight:normal;font-style:normal;font-family:
    Roboto, 'Helvetica Neue', Helvetica, Tahoma, Arial, 'Microsoft YaHei', 'PingFang
    SC';text-decoration:none;-webkit-font-smoothing:antialiased;fill:rgb(51, 51, 51)
    ;stroke:none;fill-opacity:1" class>...</text>
    <path d="M 474 101 V 158 H 92 V 101 Z" style="fill:none;fill-opacity:1;
    stroke:none;stroke-width:0;stroke-dasharray:none" filter id="el-4 $()"></path>
    <text style="font-size:14px;font-weight:normal;font-style:normal;font-family:
    Roboto, 'Helvetica Neue', Helvetica, Tahoma, Arial, 'Microsoft YaHei', 'PingFang
    SC';text-decoration:none;-webkit-font-smoothing:antialiased;fill:rgb(51, 51, 51)
    ;stroke:none;fill-opacity:1" class>...</text>
    <rect x="92" y="158" width="382" height="29" style="fill:none" filter id="bg-
    el-5 $()"></rect>
    <defs>...</defs>
    <rect x="112" y="159" width="51" height="28" rx="3" ry="3" style="fill:
    rgb(221, 39, 39);fill-opacity:1;stroke:rgba(0, 0, 0);stroke-width:0;stroke-
    dasharray:none" filter="url(#filter-def-6)" id="el-7 $(shadow:rgb(255, 255,
    255) 0px 0px 0px 0px)"></rect>
    <text style="font-size:14px;font-weight:normal;font-style:normal;font-family:
```

SVG

实时同步的核心

DOM - SVG 转换器



FUSION

— 成果与未来 —

40+

Web组件

40+

无线组件

10

业务线

100+

项目

80%+

单测覆盖率

15k+

Downloads

整个阿里集团目前有

40% - 50%

业务线开始使用 Fusion

产品建设

建立从设计师到前端，覆盖 DPL 从设计，开发，构建，稿件分发，代码发布的一整套完整产品链，目前已趋于成熟。

基础理论：骨架 DPL；粒子设计；三维解构；变量抽象；

基础组件：Next 41+；Mext 41+；

DPL 设计：FusionUX；FusionConfig；

DPL 开发：FusionDev；FusionConfig；

稿件分发：FusionCool；FusionVector；

代码发布：FusionConfig；

需求管理：FusionIssue；

未来

开放&开源

服务化

最后

前端的初心就是前端的未来

链接商业、设计、计算能力，为用户提供专业的人机交互体验

献给在前端道路上不停折腾的同学们