FLEXBOX

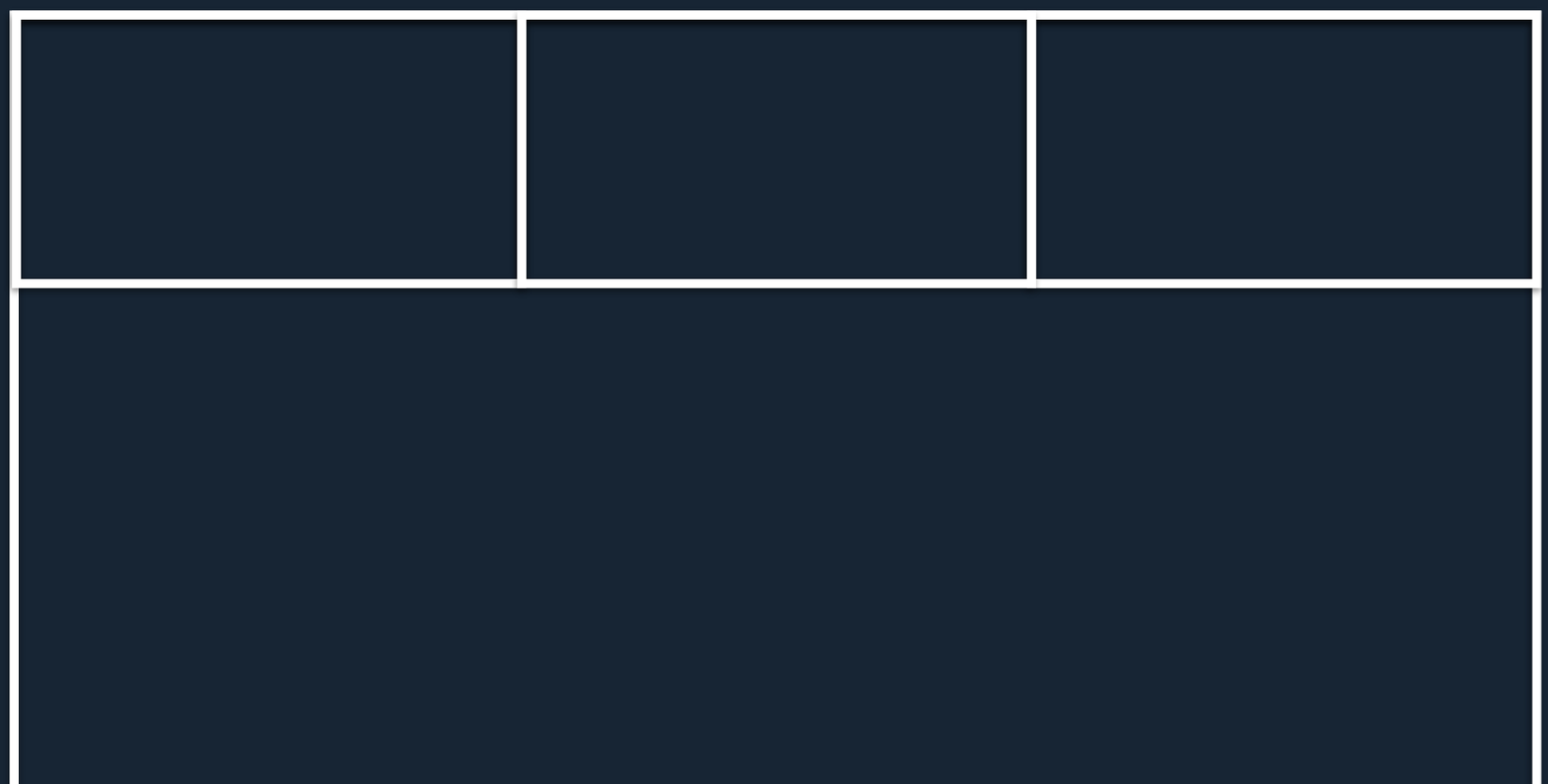
CHRIS SAUVE

LAYOUT STRATEGIES

TABLES

JUST DON’T.

ABSOLUTE POSITIONING

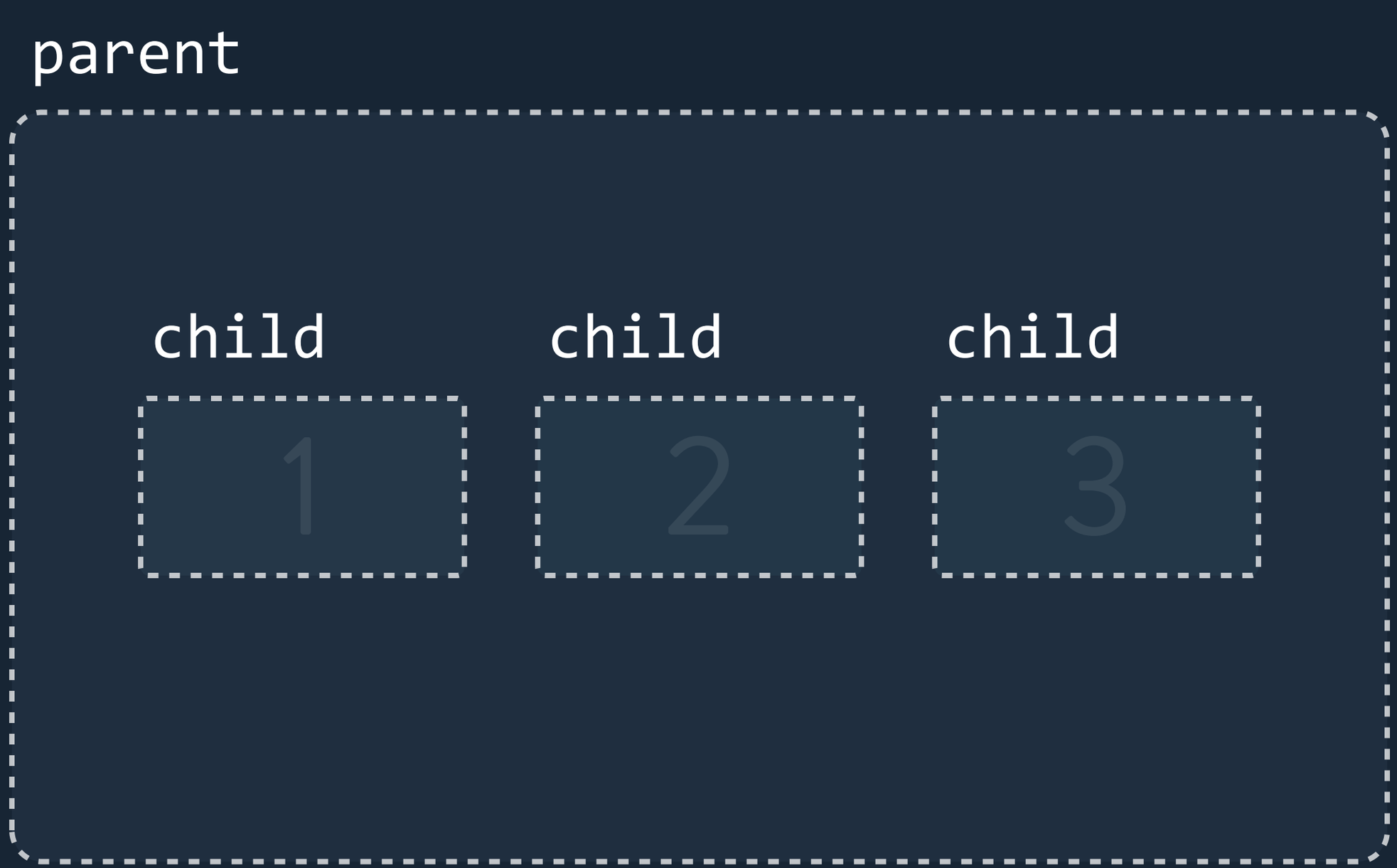


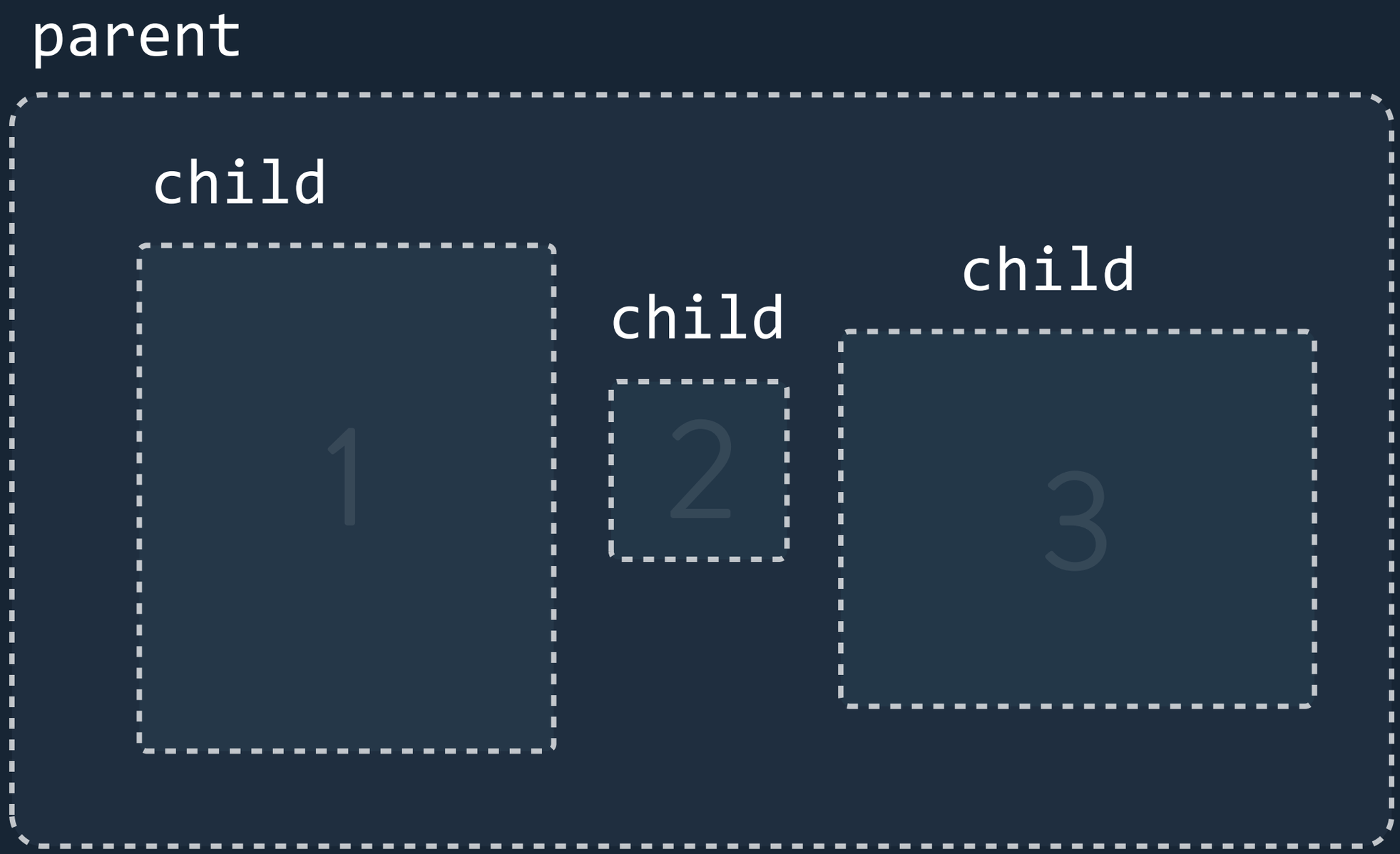
INLINE BLOCK

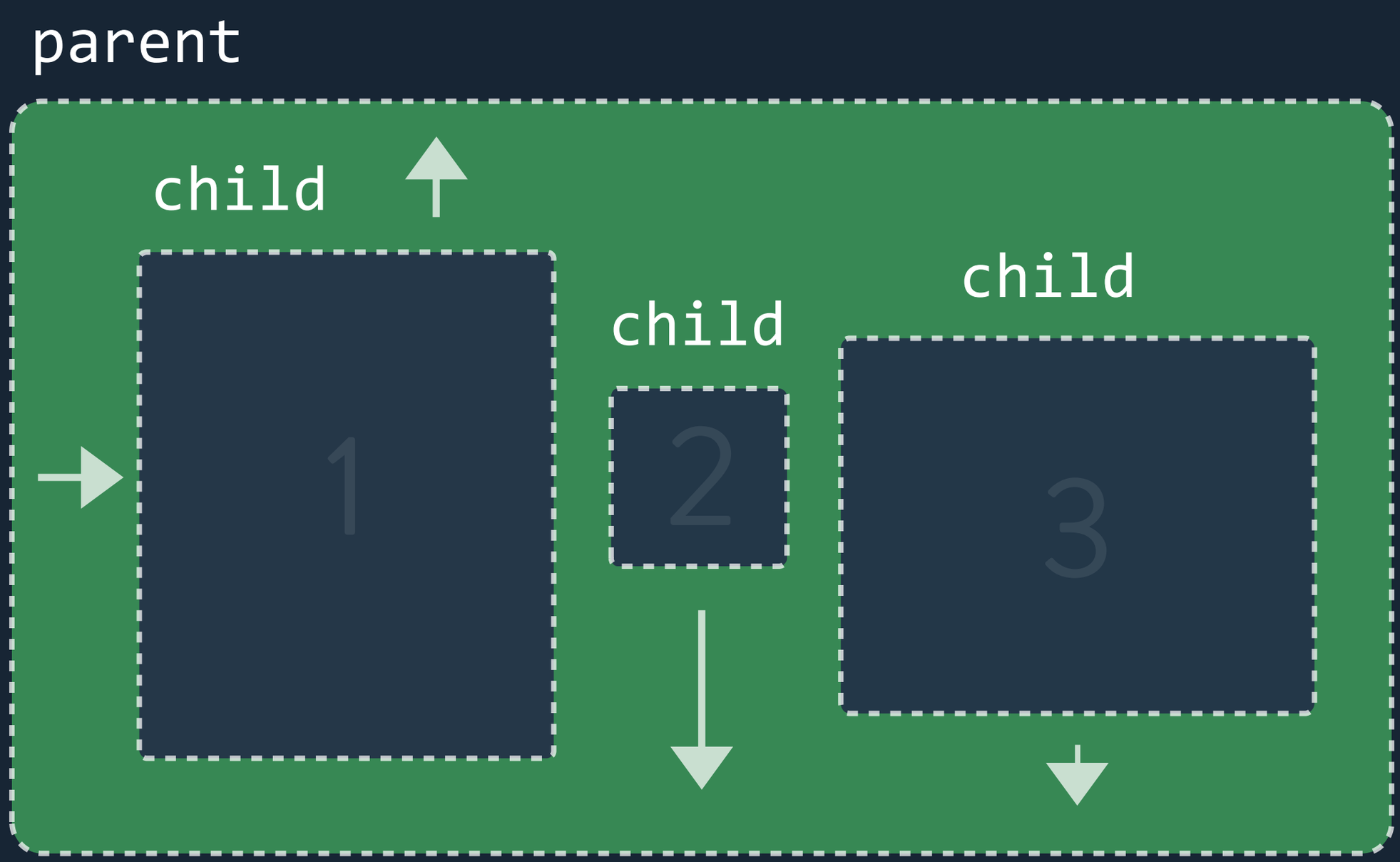
FLOATS

THINK DIFFERENT

CONTENT-OUT LAYOUT


parent
child
1
child
2
child
3


parent
child
1
child
2
child
3


parent
child
1
child
2
child
3

BROWSER SUPPORT

10+ only -ms in IE10	YES	YES	YES	YES even in Mini!

CAN I USE SAYS...

10+ only -ms in IE10

YES

YES

YES even in Mini!

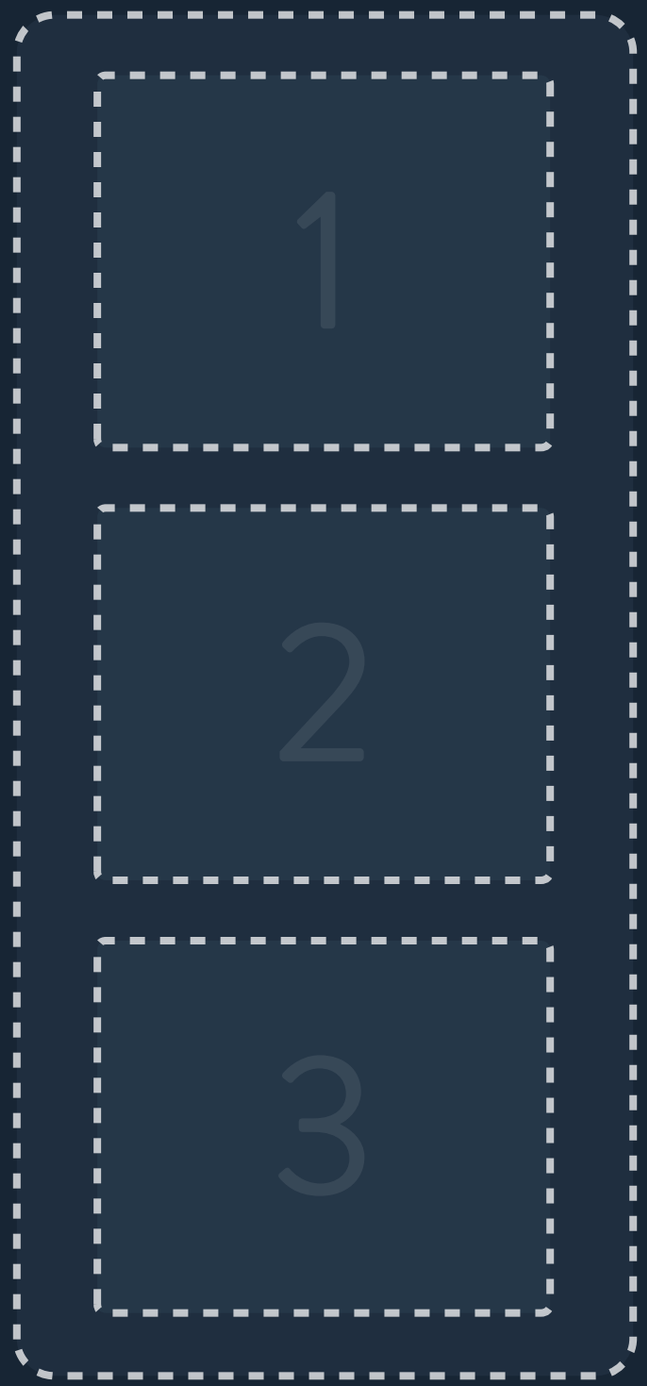
93.99%

PARENT RULES

```
display: flex; // or inline-flex
flex-direction: row; // or column
```

```
flex-direction: row;
```

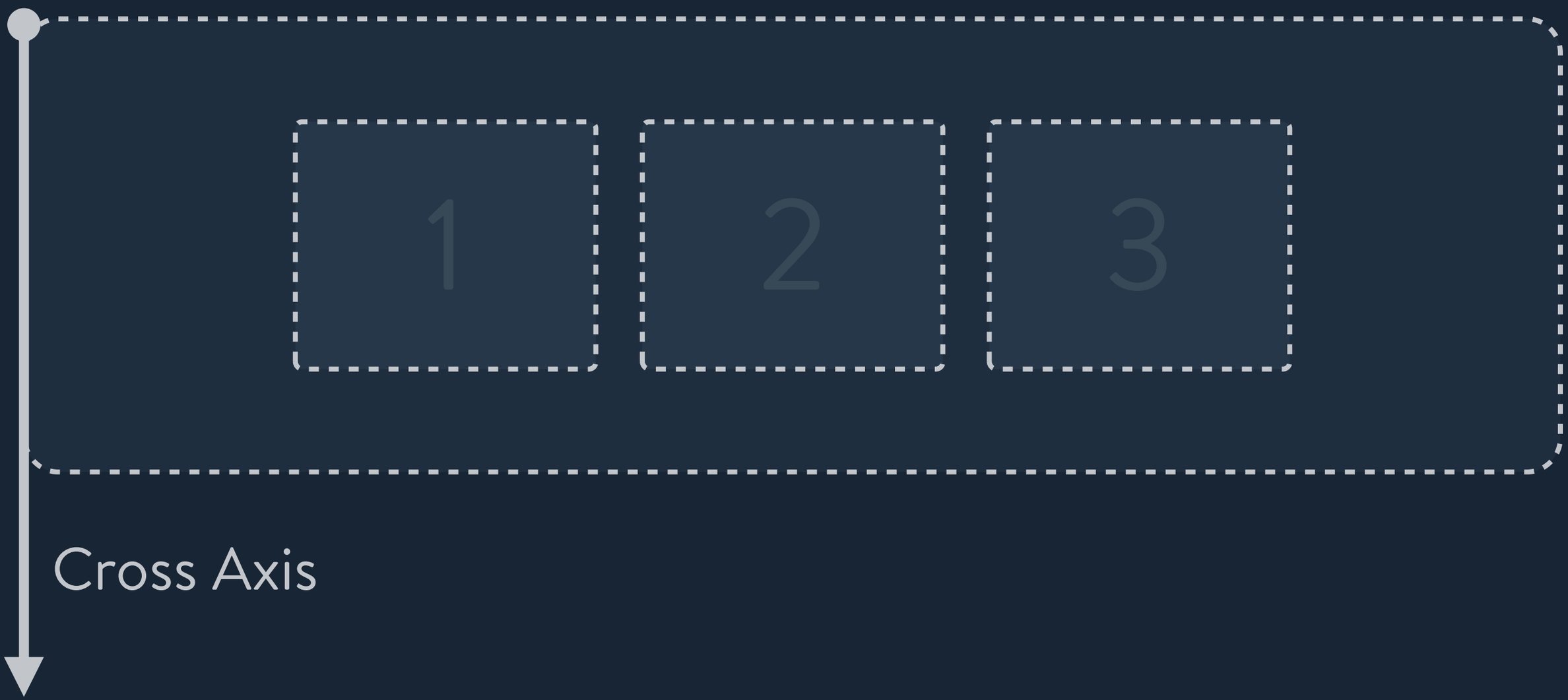
```
flex-direction: column;
```



```
display: flex; // or inline-flex
flex-direction: row; // or column
```

```
display: flex; // or inline-flex
flex-direction: row; // or column
align-items: stretch;
```

align-items



```
align-items: stretch; // default
```

```
align-items: center;
```

```
align-items: flex-start;
```

```
align-items: flex-end;
```

```
display: flex; // or inline-flex
flex-direction: row; // or column
align-items: stretch;
```

```
display: flex; // or inline-flex
flex-direction: row; // or column
align-items: stretch;
justify-content: center;
```

justify-content

```
justify-content: center;
```

```
justify-content: flex-start;
```

```
justify-content: flex-end;
```

```
justify-content: space-between;
```

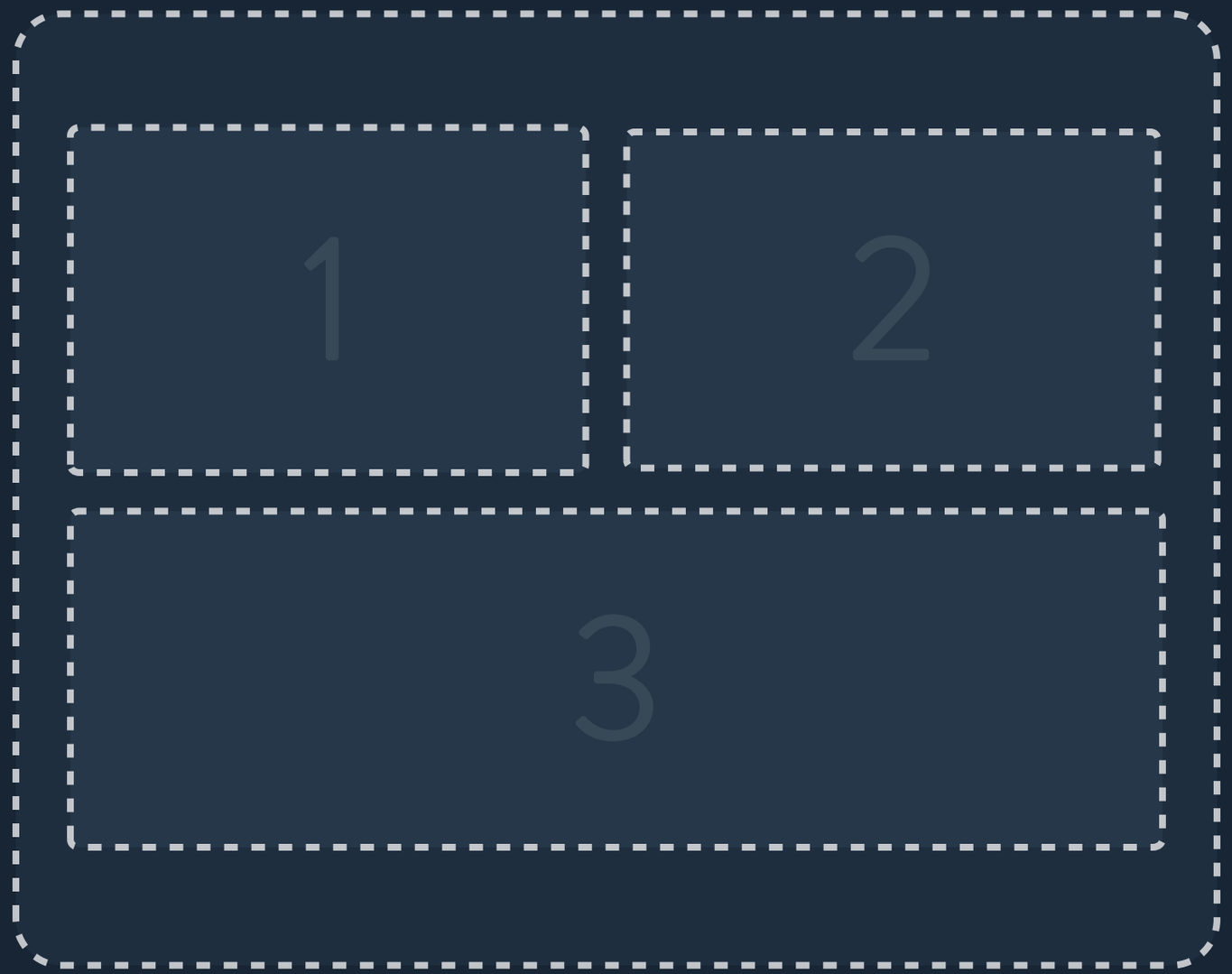
```
justify-content: space-around;
```

```
display: flex; // or inline-flex
flex-direction: row; // or column
align-items: stretch;
justify-content: center;
```

```
display: flex; // or inline-flex
flex-direction: row; // or column
align-items: stretch;
justify-content: center;
flex-wrap: nowrap;
```

```
flex-wrap: nowrap;
```

```
flex-wrap: wrap;
```



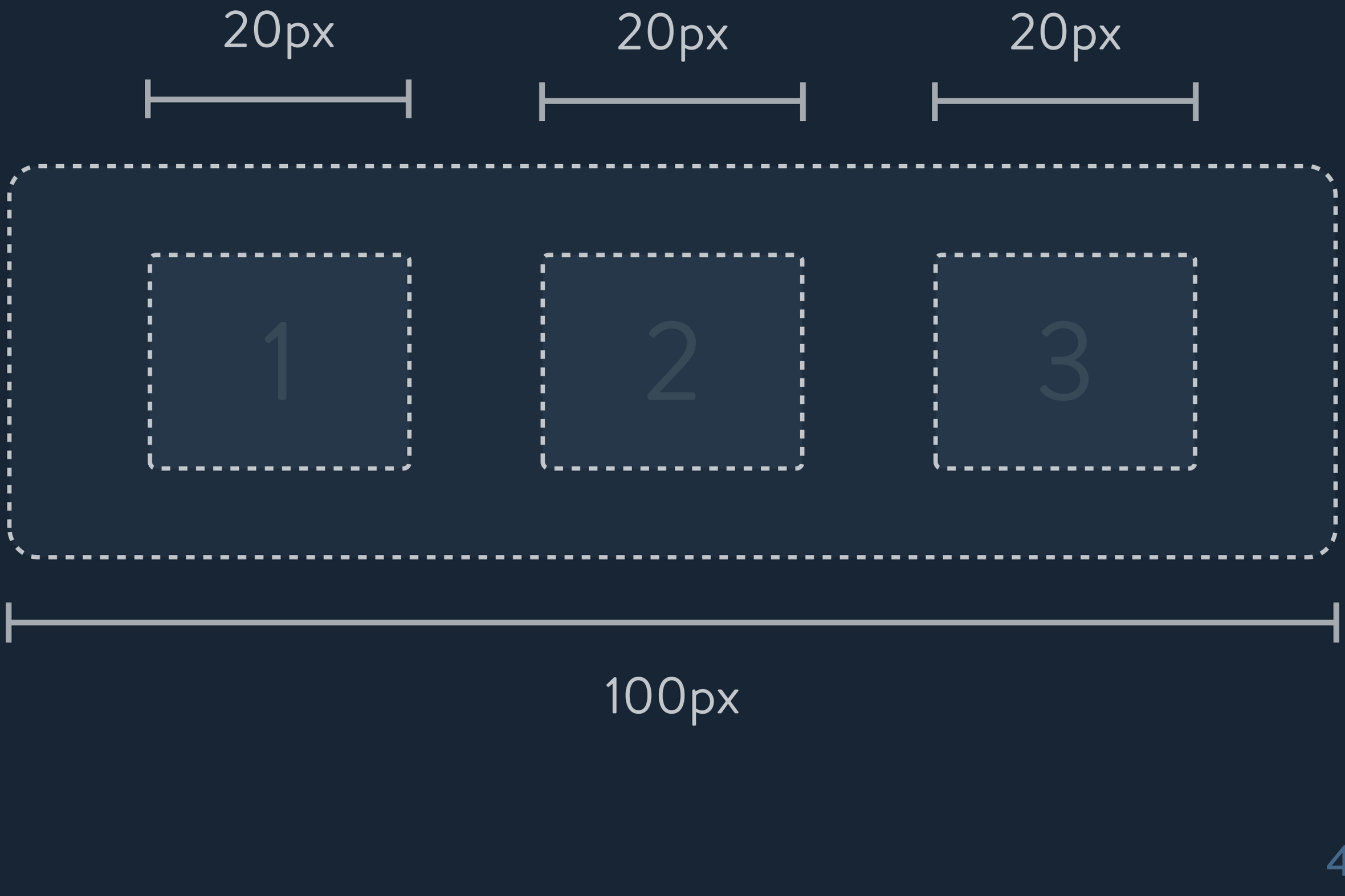
CHILD RULES

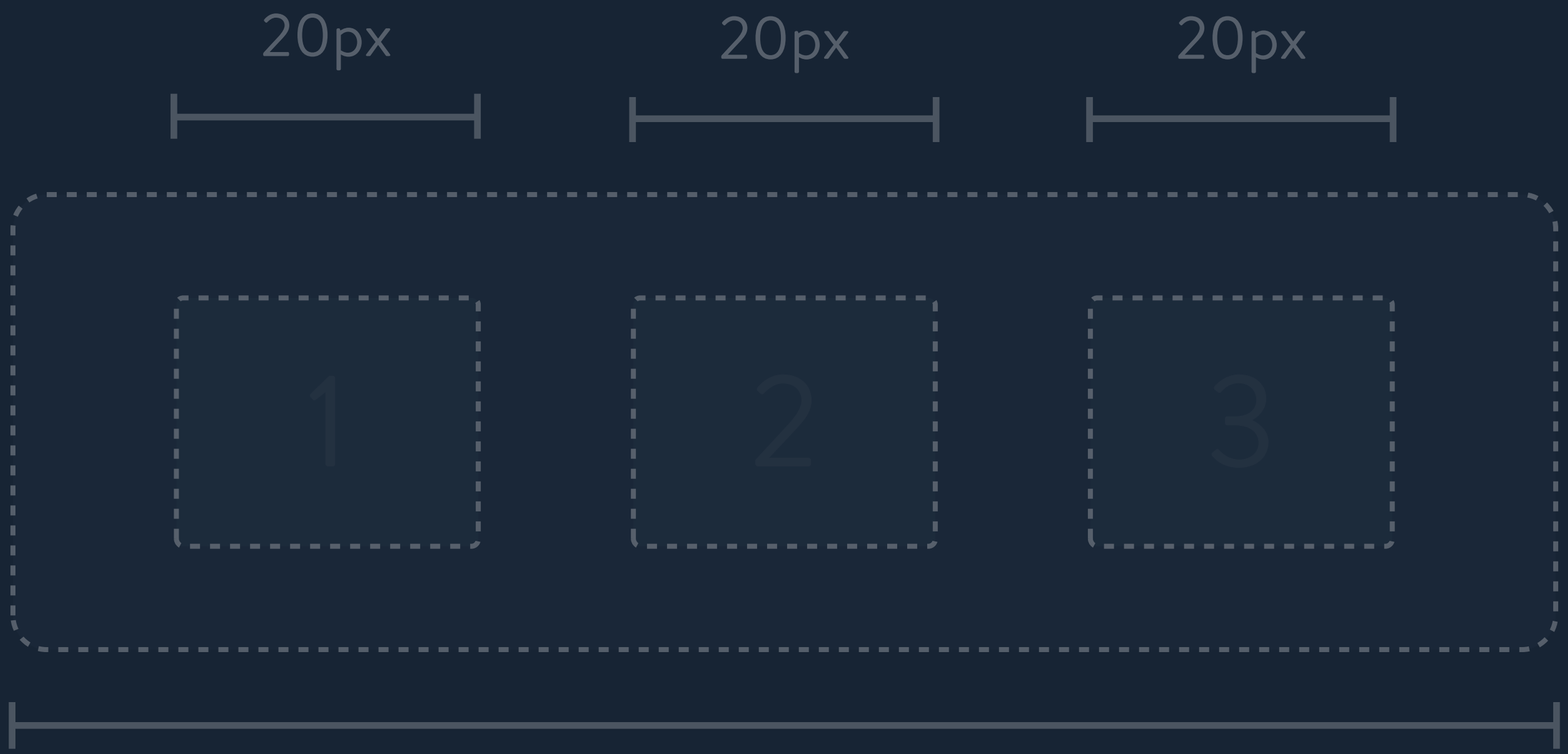
```
flex-grow: 0;
flex-shrink: 0;
flex-basis: auto;
```

```
flex-basis: <number>;
```

=

```
flex-basis: auto;
width: <number>;
```


20px
20px
20px
1
2
3
100px



40px of “growth” available

```
flex-grow: 0;    flex-grow: 0;    flex-grow: 0;
```

`flex-grow: 1;`

13px of growth

`flex-grow: 1;`

13px of growth

`flex-grow: 1;`

13px of growth

`flex-grow: 1;`

10px of growth

`flex-grow: 2;`

20px of growth

`flex-grow: 1;`

10px of growth

`flex-grow: 0;`

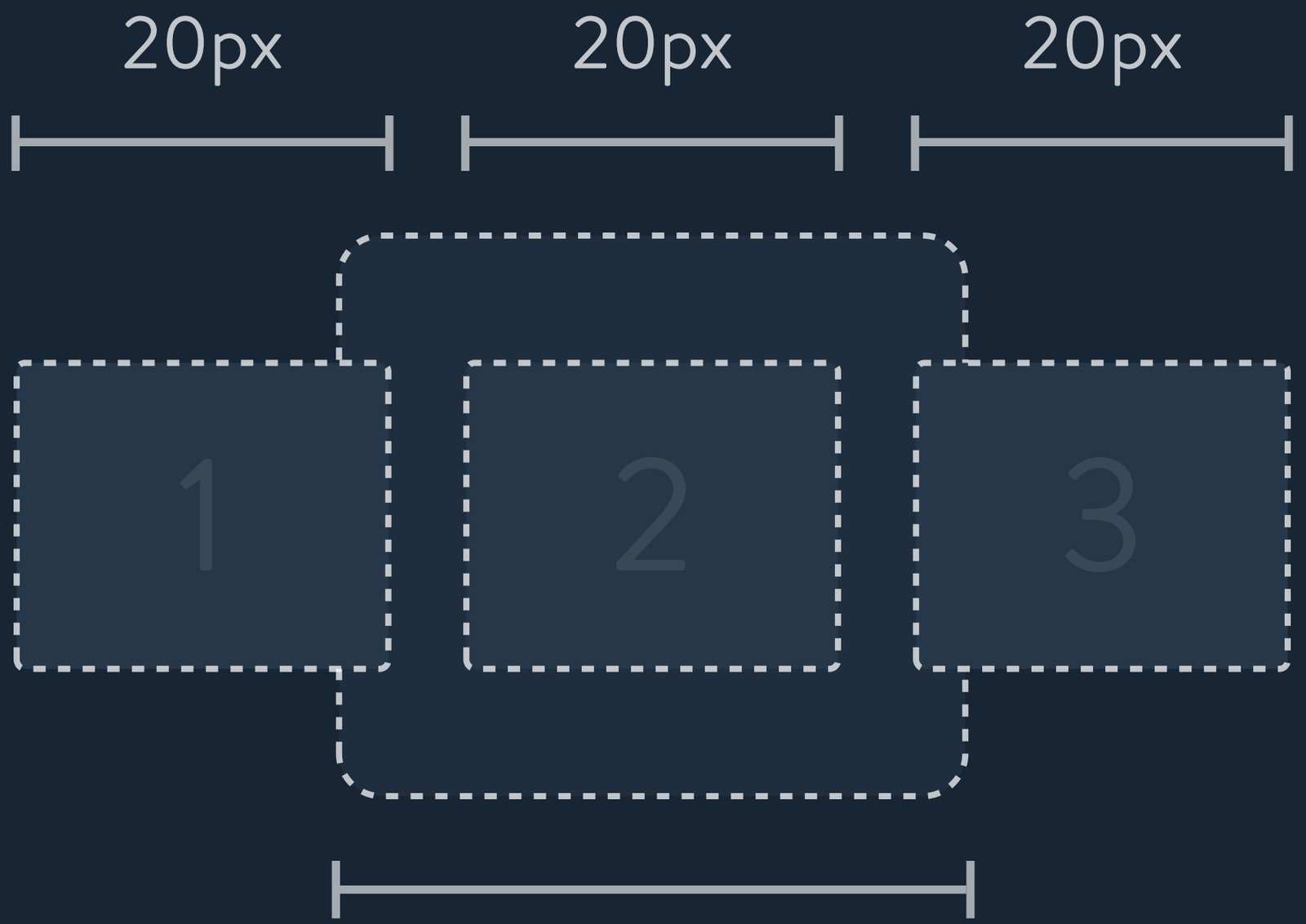
0px of growth

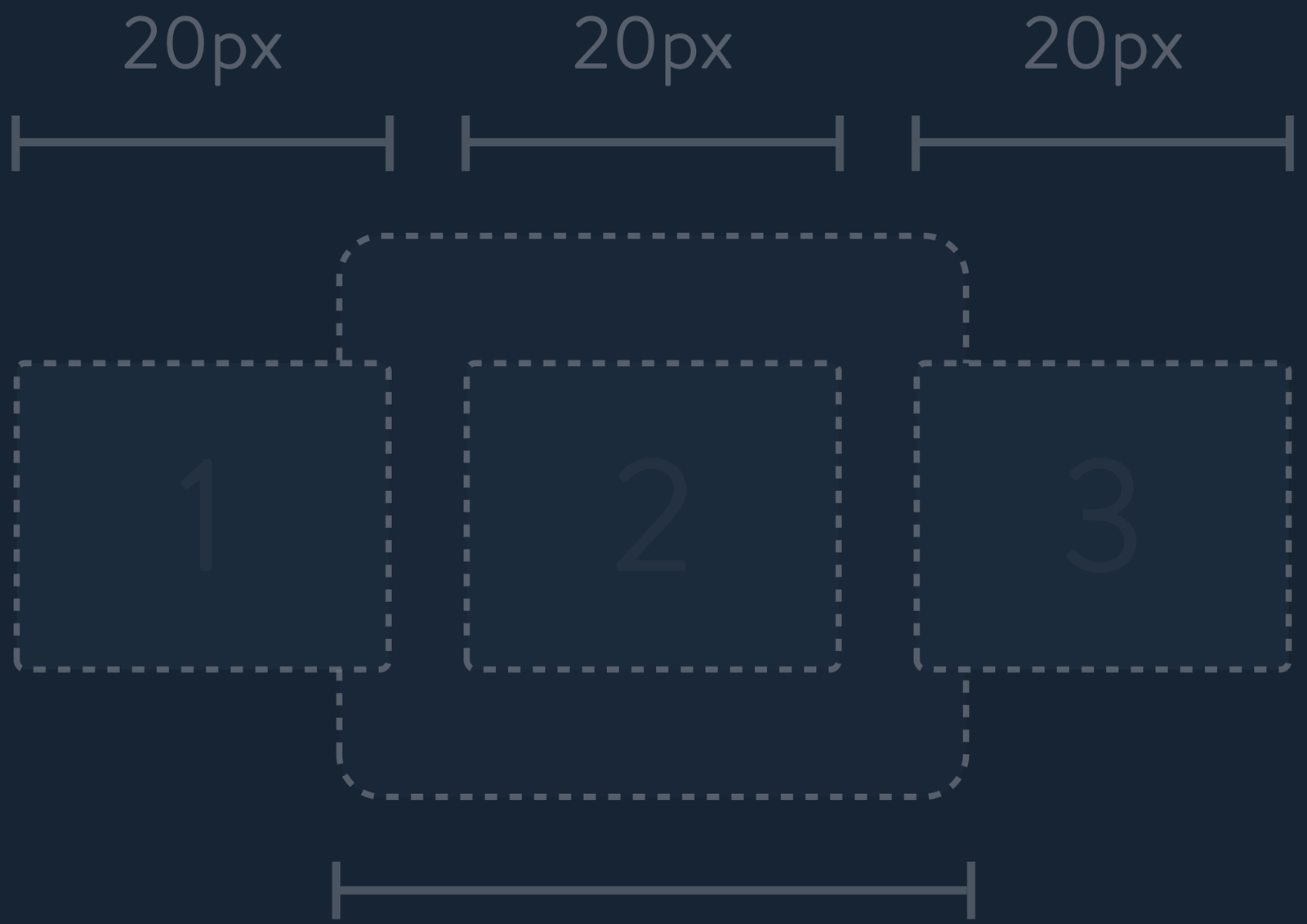
`flex-grow: 1;`

20px of growth

`flex-grow: 1;`

20px of growth


20px
20px
20px
1
2
3
40px



20px of “shrink” available

```
flex-shrink: 0;
```

```
flex-shrink: 0;
```

```
flex-shrink: 0;
```

`flex-shrink: 0;`

0px of shrink

`flex-shrink: 1;`

10px of shrink

`flex-shrink: 1;`

10px of shrink

NO SILVER BULLET

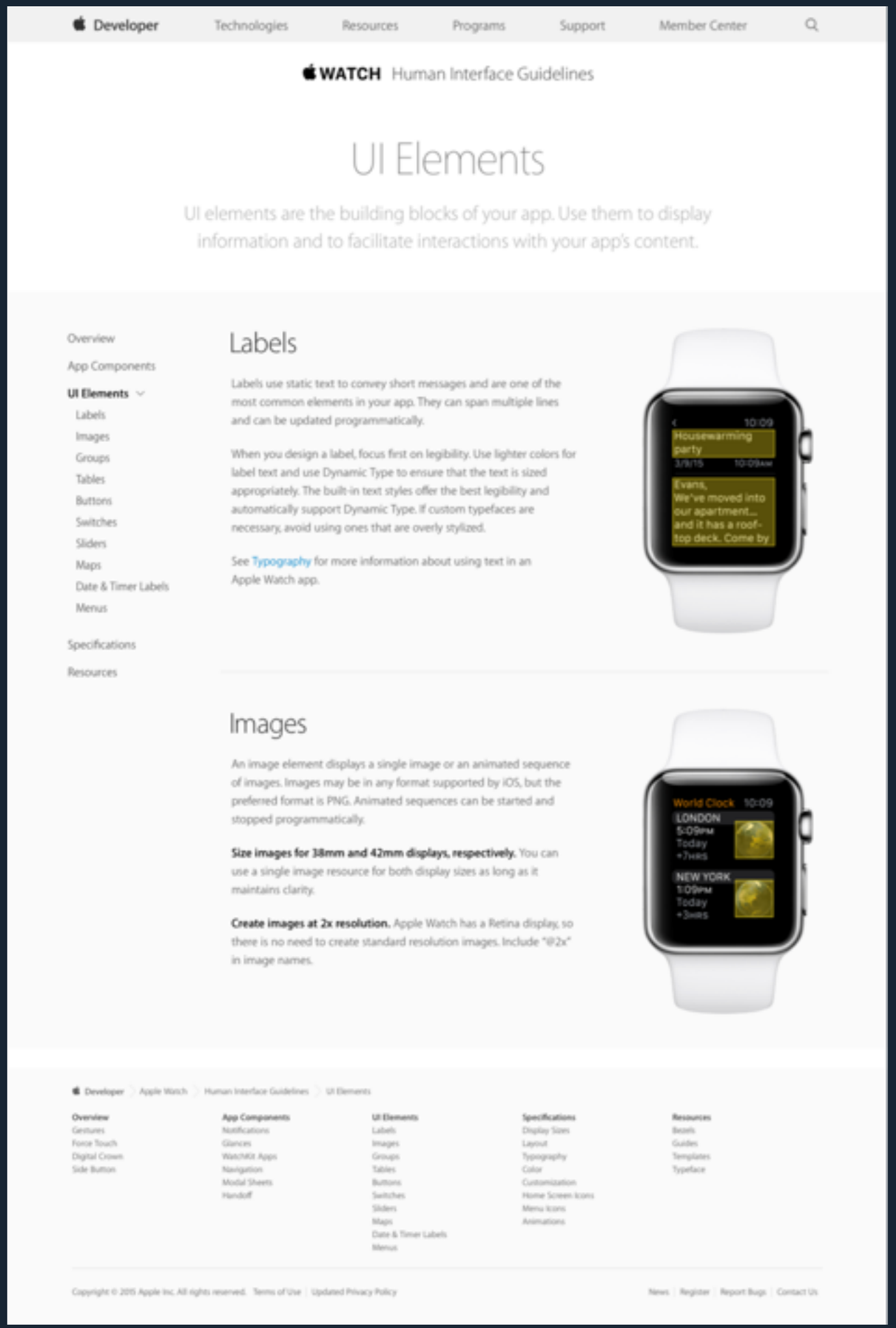
AWESOME EXAMPLES

PAGE LAYOUT

Play with the Codepen

codepen.io/lemonmade/pen/RNEpJR?editors=110

GOAL


Developer
Technologies
Resources
Programs
Support
Member Center
WATCH Human Interface Guidelines
UI Elements
UI elements are the building blocks of your app. Use them to display information and to facilitate interactions with your app's content.
Overview
App Components
UI Elements
Labels
Images
Groups
Tables
Buttons
Switches
Sliders
Maps
Date & Timer Labels
Menus
Specifications
Resources
Labels
Labels use static text to convey short messages and are one of the most common elements in your app. They can span multiple lines and can be updated programmatically.
When you design a label, focus first on legibility. Use lighter colors for label text and use Dynamic Type to ensure that the text is sized appropriately. The built-in text styles offer the best legibility and automatically support Dynamic Type. If custom typefaces are necessary, avoid using ones that are overly stylized.
See Typography for more information about using text in an Apple Watch app.
Housewarming party
Evans,
We've moved into our apartment... and it has a roof-top deck. Come by
Images
An image element displays a single image or an animated sequence of images. Images may be in any format supported by iOS, but the preferred format is PNG. Animated sequences can be started and stopped programmatically.
Size images for 38mm and 42mm displays, respectively. You can use a single image resource for both display sizes as long as it maintains clarity.
Create images at 2x resolution. Apple Watch has a Retina display, so there is no need to create standard resolution images. Include "@2x" in image names.
World Clock
LONDON
NEW YORK
Developer
Apple Watch
Human Interface Guidelines
UI Elements
Overview
Gestures
Force Touch
Digital Crown
Side Button
App Components
Notifications
Glances
WatchKit Apps
Navigation
Modal Sheets
Handoff
UI Elements
Labels
Images
Groups
Tables
Buttons
Switches
Sliders
Maps
Date & Timer Labels
Menus
Specifications
Display Sizes
Layout
Typography
Color
Customization
Home Screen Icons
Menu Icons
Animations
Resources
Bezels
Guides
Templates
Typeface
Copyright © 2015 Apple Inc. All rights reserved. Terms of Use | Updated Privacy Policy
News | Register | Report Bugs | Contact Us

GOAL

STEP 0

```
<div class="page">
  <header class="page__header">Header</header>
  <div class="page__content">
    <aside class="page__sidebar">Sidebar</aside>
    <main class="page__main">Content</section>
  </div>

  <footer class="page__footer">Footer</footer>
</div>
```

Header

Sidebar

Content

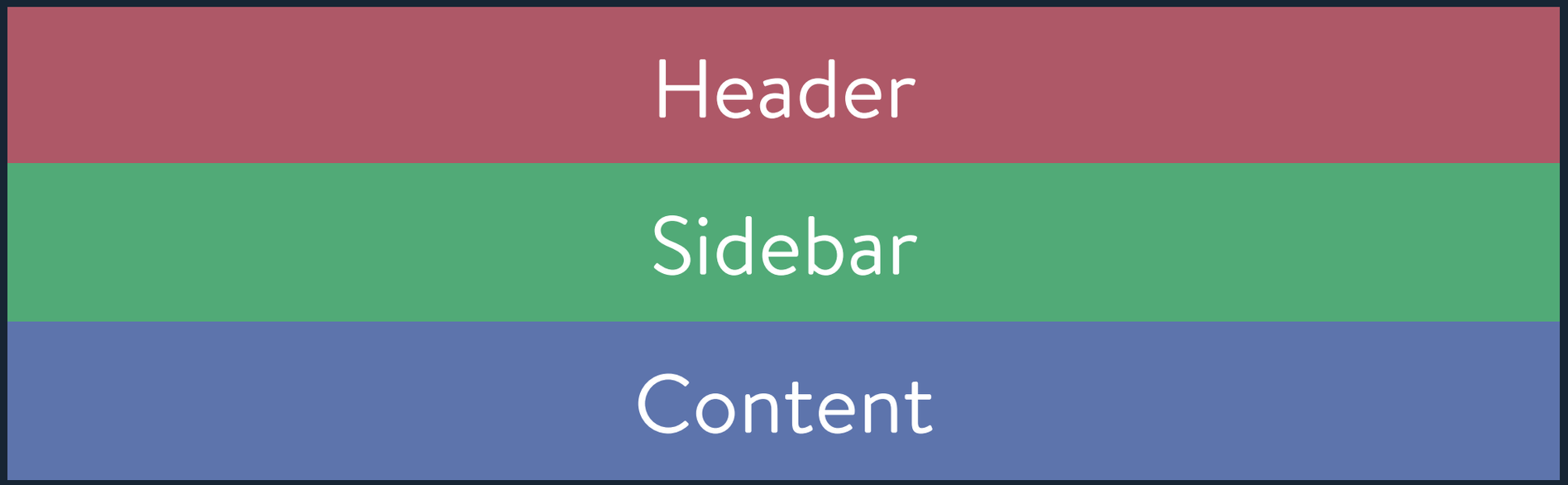
Footer

STEP 1

```
.page {
  min-height: 100vh;
  display: flex;
  flex-direction: column;
}
```

```
.page__header,
.page__footer {
  flex: 0 0 auto; // default, so you can just exclude
}

.page__content {
  flex: 1 0 auto;
}
```



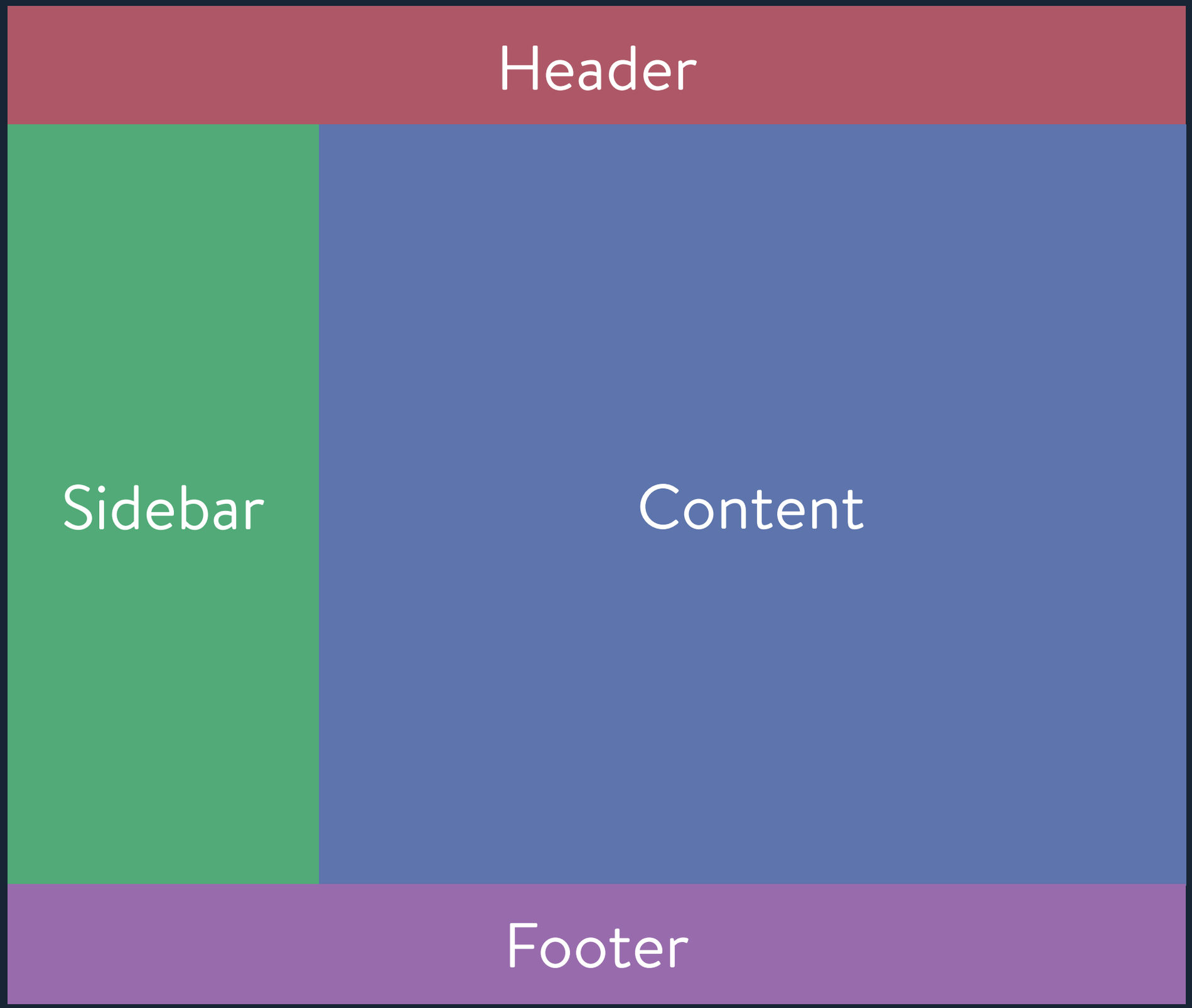
Footer

STEP 2

```
.page__content {
  display: flex;
}
```

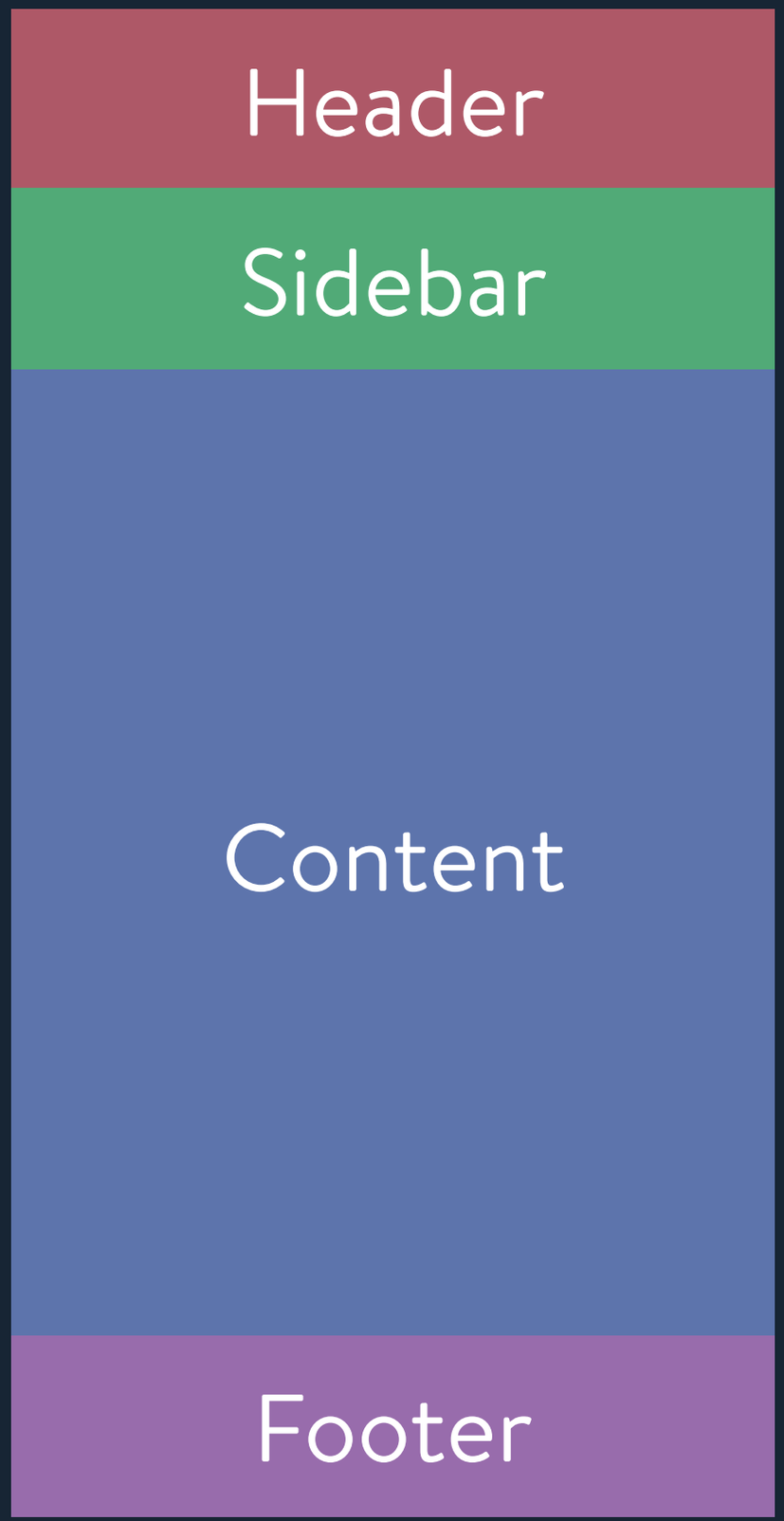
```
.page__sidebar {
  flex: 0 0 auto; // again, default, so safe to exclude
}

.page__main {
  flex: 1 1 auto;
}
```


Header
Sidebar
Content
Footer

STEP 3

```
@media screen and (max-width: 30rem) {
  .page__content {
    flex-direction: column;
  }
}
```

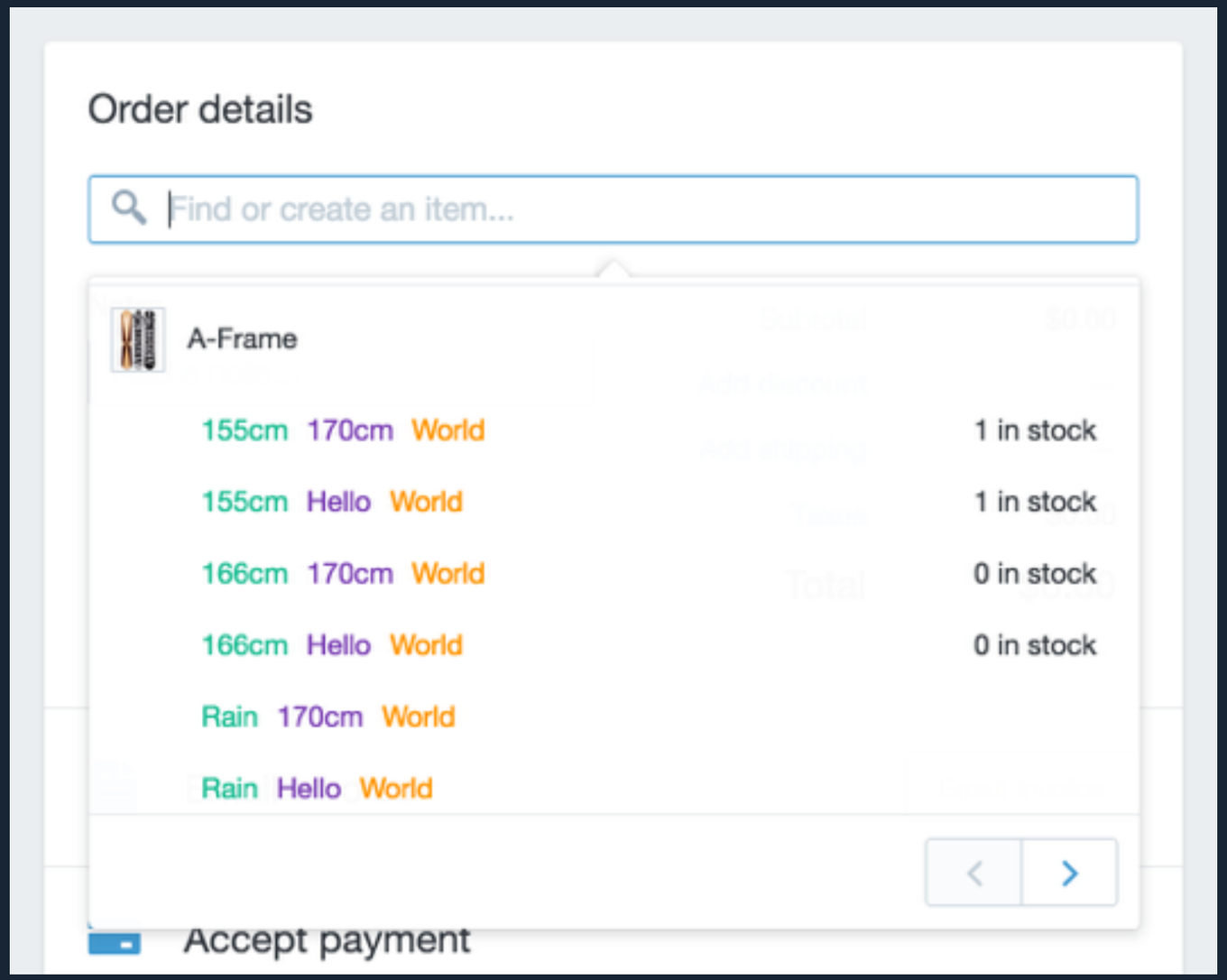

Header
Sidebar
Content
Footer

SMART POPOVERS

Play with the Codepen

codepen.io/lemonmade/pen/XJobem?editors=110

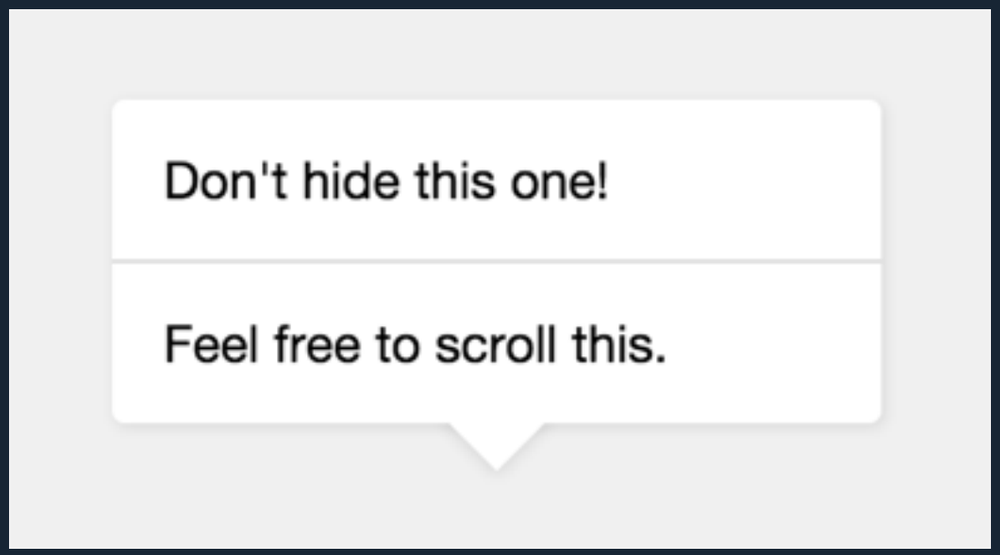
GOAL


Order details
Find or create an item...
A-Frame
155cm 170cm World
1 in stock
155cm Hello World
1 in stock
166cm 170cm World
0 in stock
166cm Hello World
0 in stock
Rain 170cm World
Rain Hello World
Accept payment

STEP 0

```
<div class="popover">
  <div class="popover__content">
    <div class="popover__pane popover__pane--
fixed">Don't hide this one!</div>

    <div class="popover__pane">
      <p>Feel free to scroll this.</p>
    </div>
  </div>
</div>
```


Don't hide this one!
Feel free to scroll this.

Don't hide this one!

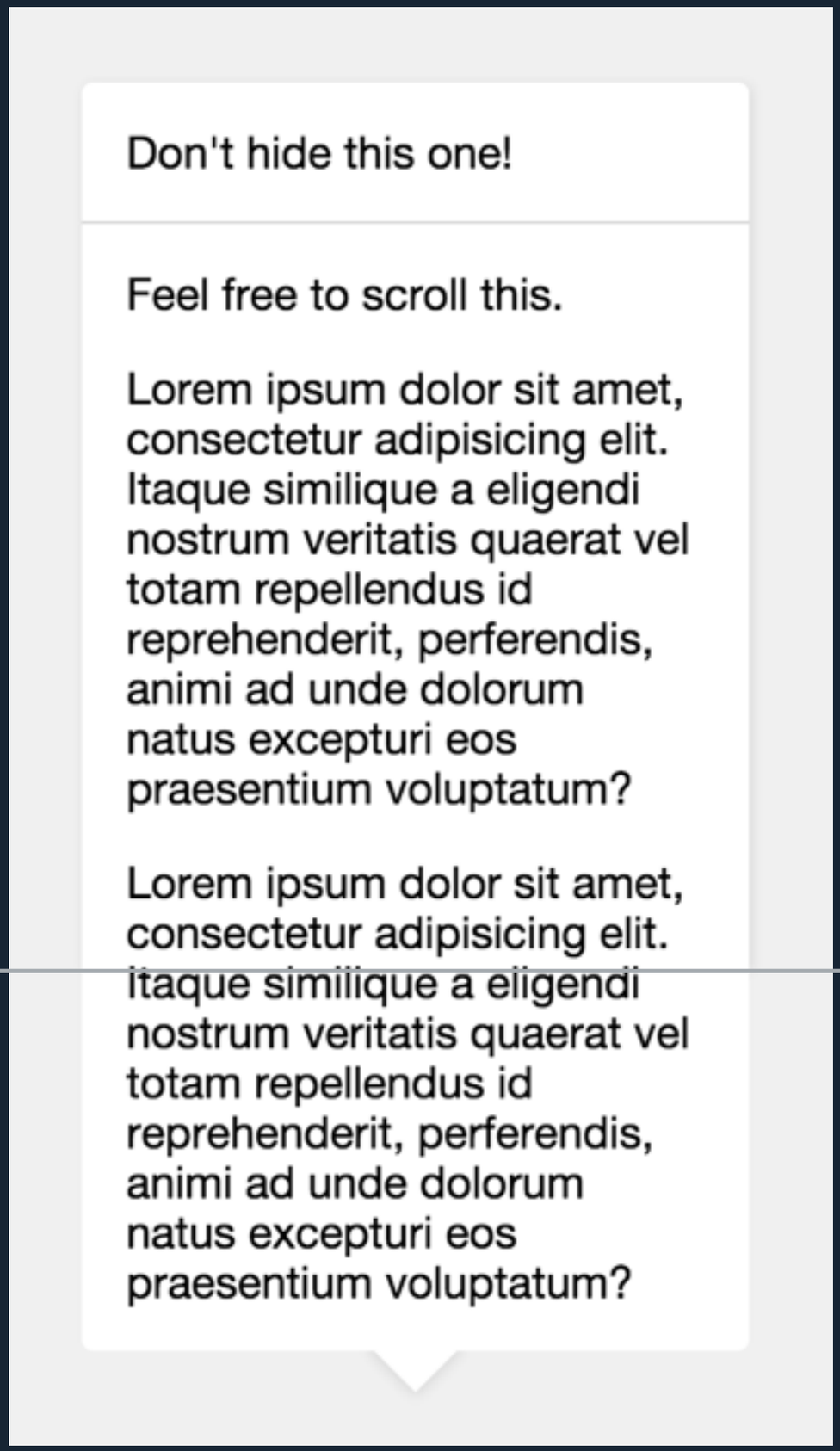
Feel free to scroll this.

Lorem ipsum dolor sit amet, consectetur adipisicing elit. Itaque similique a eligendi nostrum veritatis quaerat vel totam repellendus id reprehenderit, perferendis, animi ad unde dolorum natus excepturi eos praesentium voluptatum?

Lorem ipsum dolor sit amet, consectetur adipisicing elit. Itaque similique a eligendi nostrum veritatis quaerat vel totam repellendus id reprehenderit, perferendis, animi ad unde dolorum natus excepturi eos praesentium voluptatum?

JavaScript says:

Please Stop Here



STEP 1

```
.popover {
  display: flex;
}
```

Don't hide this one!

Feel free to scroll this.

Lorem ipsum dolor sit amet, consectetur adipisicing elit. Itaque similique a eligendi nostrum veritatis quaerat vel totam repellendus id reprehenderit, perferendis, animi ad unde dolorum natus excepturi eos praesentium voluptatum?

Lorem ipsum dolor sit amet, consectetur adipisicing elit.

STEP 2

```
.popover__content {
  display: flex;
  flex-direction: column;
}
```

```
.popover__pane {
  flex: 1 1 auto;
  overflow: auto;
}

.popover__pane--fixed {
  flex: 0 0 auto;
}
```

Don't hide this one!

consectetur adipisicing elit. Itaque similique a eligendi nostrum veritatis quaerat vel totam repellendus id reprehenderit, perferendis, animi ad unde dolorum natus excepturi eos praesentium voluptatum?

Lorem ipsum dolor sit amet, consectetur adipisicing elit. Itaque similique a eligendi nostrum veritatis quaerat vel totam repellendus id reprehenderit, perferendis,

STEP 3

Don't hide this one!

Woops, needed some more text in this one!

itaque similique a eligendi nostrum veritatis quaerat vel totam repellendus id reprehenderit, perferendis, animi ad unde dolorum natus excepturi eos praesentium voluptatum?

Lorem ipsum dolor sit amet, consectetur adipisicing elit.

Don't hide this one!

(really)

RESPONSIVE BUTTONS

Play with the Codepen

codepen.io/lemonmade/pen/GgPJEx?editors=110

STEP 0

```
<div class="button__container">
  <button class="button">Button the first</button>
  <button class="button">Button the second,
junior</button>
</div>

<p class="type type--paragraph">Lorem ipsum dolor
sit amet...</p>
```

Button the first Button the second, junior

Lorem ipsum dolor sit amet, consectetur adipisicing elit. Accusantium odio rerum soluta laborum? Nemo laboriosam blanditiis nostrum molestias, a, eius cum nulla provident similique adipisci, natus culpa expedita eum ex.

STEP 1

```scss
$default-spacing: 1rem;

.button-container {
  display: flex;
  margin-right: (-1 * $default-spacing);
  margin-bottom: (-1 * $default-spacing);
}

.button {
  margin: 0 $default-spacing $default-spacing 0;
}
```

Button the first

Button the second, junior

Lorem ipsum dolor sit amet, consectetur adipisicing elit. Accusantium odio rerum soluta laborum? Nemo laboriosam blanditiis nostrum molestias, a, eius cum nulla provident similique adipisci, natus culpa expedita eum ex.

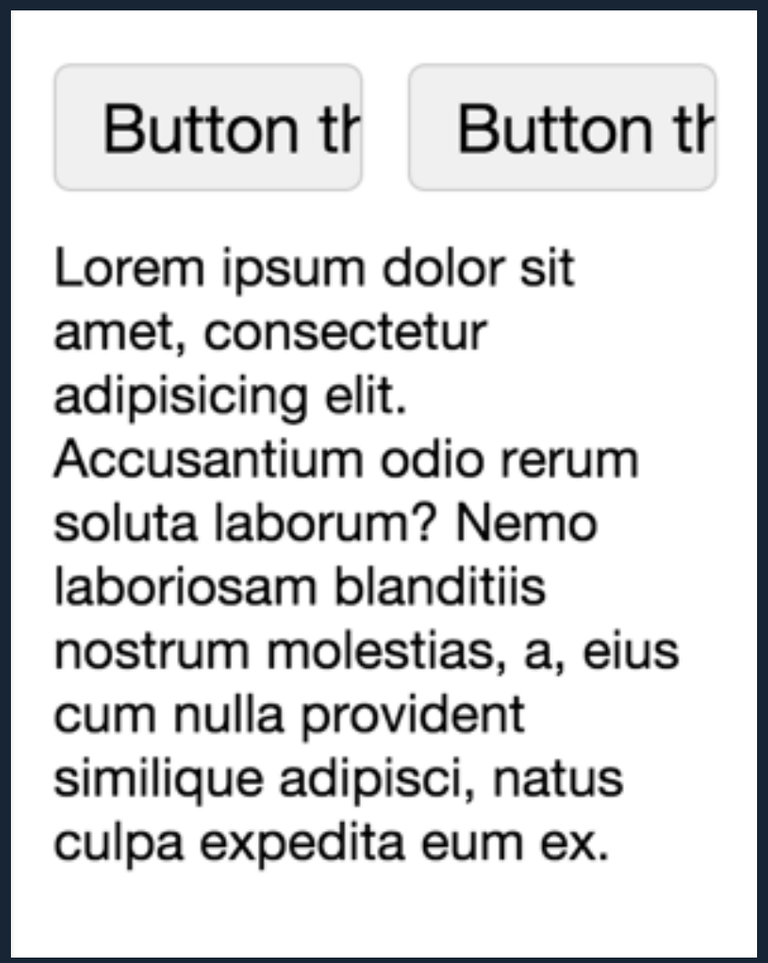
STEP 2

```
.button {
  flex: 1 1 0px;
}
```

Button the first

Button the second, junior

Lorem ipsum dolor sit amet, consectetur adipisicing elit. Accusantium odio rerum soluta laborum? Nemo laboriosam blanditiis nostrum molestias, a, eius cum nulla provident similique adipisci, natus culpa expedita eum ex.


Button th
Button th
Lorem ipsum dolor sit amet, consectetur adipisicing elit. Accusantium odio rerum soluta laborum? Nemo laboriosam blanditiis nostrum molestias, a, eius cum nulla provident similique adipisci, natus culpa expedita eum ex.

COULD TRY...

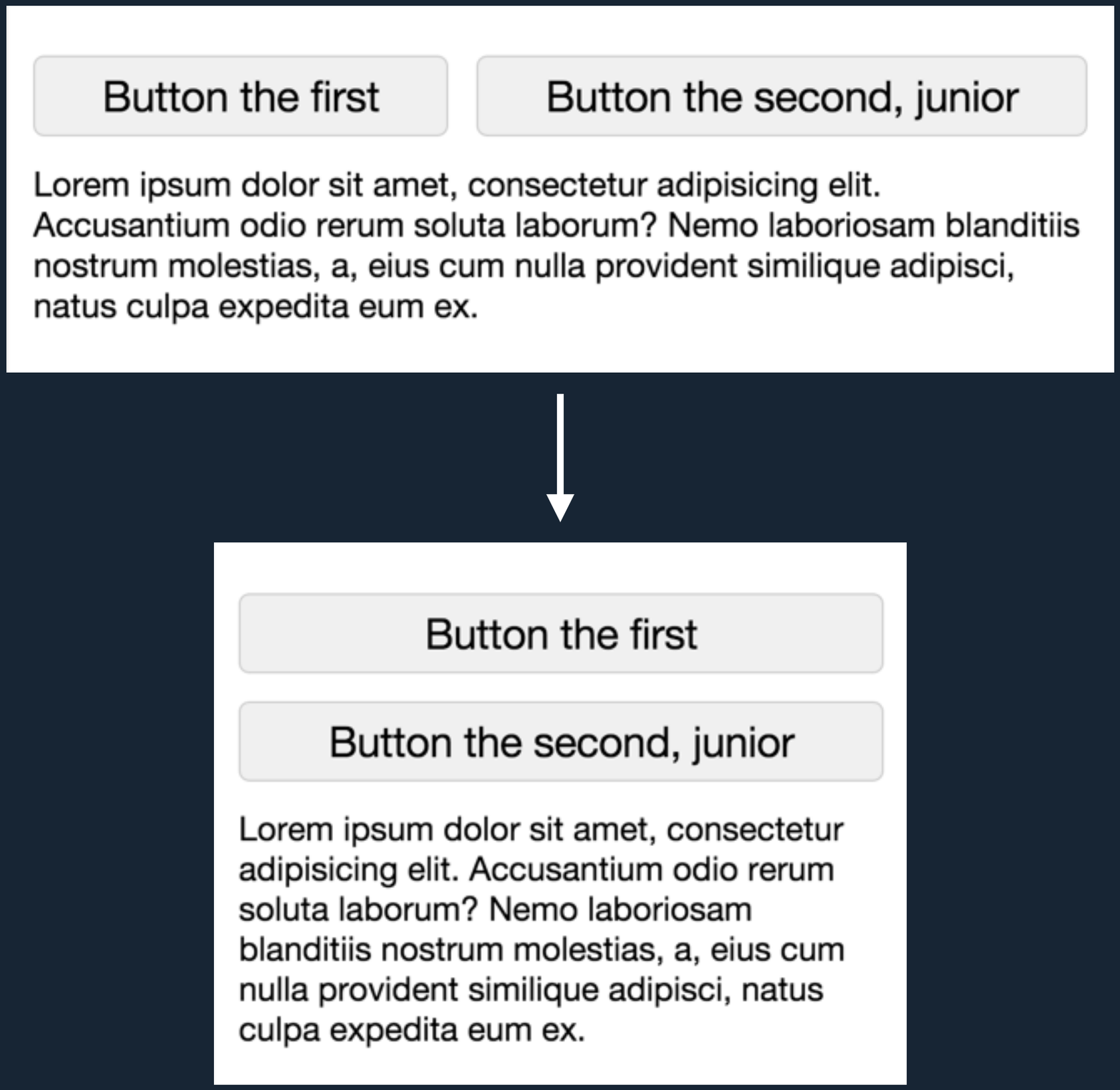
```
@media screen and (max-width: $some-magic-number) {
  .button-container {
    display: block;
  }

  .button {
    width: 100%;
  }
}
```

BETTER

```
.button-container {
  flex-wrap: wrap;
}

.button {
  flex: 1 0 auto;
}
```


Button the first
Button the second, junior
Lorem ipsum dolor sit amet, consectetur adipisicing elit. Accusantium odio rerum soluta laborum? Nemo laboriosam blanditiis nostrum molestias, a, eius cum nulla provident similique adipisci, natus culpa expedita eum ex.
Button the first
Button the second, junior
Lorem ipsum dolor sit amet, consectetur adipisicing elit. Accusantium odio rerum soluta laborum? Nemo laboriosam blanditiis nostrum molestias, a, eius cum nulla provident similique adipisci, natus culpa expedita eum ex.

BEST

```
.button-container {
  flex-wrap: wrap;
}
```

```
.button {
  flex: 1 0 0px;
  min-width: min-content;
}
```

Button the first

Button the second, junior

Lorem ipsum dolor sit amet, consectetur adipisicing elit. Accusantium odio rerum soluta laboruм? Nemo laboriosam blanditiis nostrum molestias, a, eius cum nulla provident similique adipisci, natus culpa expedita eum ex.

Button the first

Button the second, junior

Lorem ipsum dolor sit amet, consectetur adipisicing elit. Accusantium odio rerum soluta laborum? Nemo laboriosam blanditiis nostrum molestias, a, eius cum nulla provident similique adipisci, natus culpa expedita eum ex.

Button the first

Button the second, junior

Lorem ipsum dolor sit amet, consectetur adipisicing elit. Accusantium odio rerum

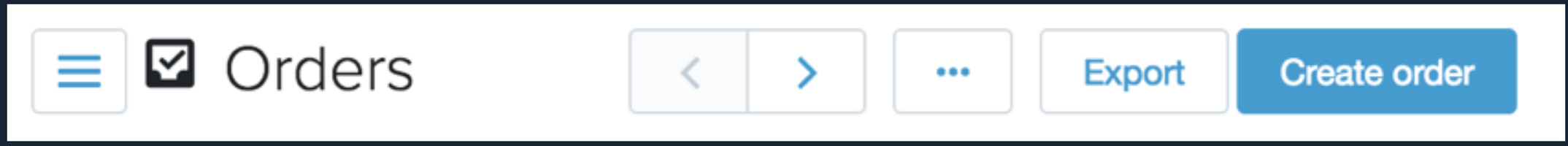
REFLOWING HEADER

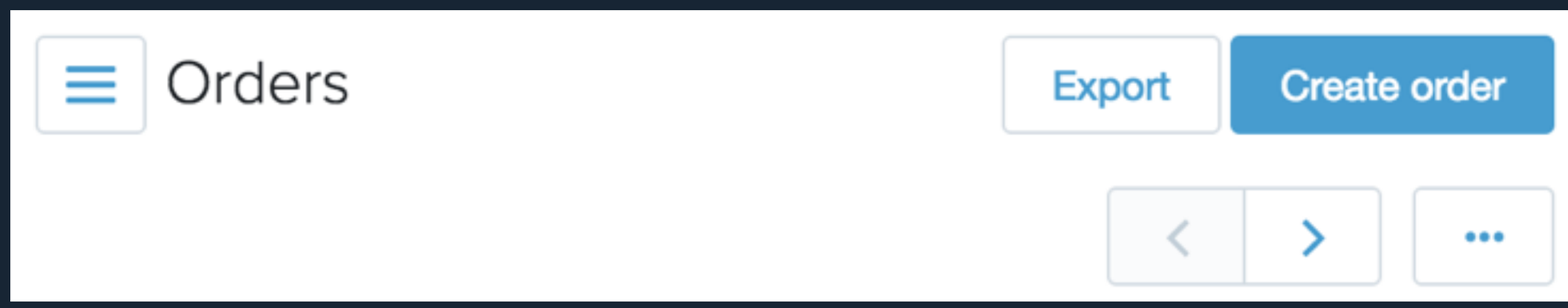
Play with the Codepen

codepen.io/lemonmade/pen/ZYgNmy?editors=110

GOAL

(something like...)





```
<div class="card">
  <header class="card__section card__section--
header">
    <h1 class=“heading">Medium Heading</h1>

    <div class="button-group">
      <div class="button-group__primary">
        <button class="button button--
primary">Primary Action</button>
      </div>

      <div class="button-group__secondary">
        <button class="button">Action 1</button>
        <button class="button">Action 2</button>
      </div>
    </div>
  </header>
</div>
```

Medium Heading

Primary Action Action 1 Action 2

Lorem ipsum dolor sit amet, consectetur adipisicing elit. Libero quo consequuntur ab deserunt, veritatis eaque incidunt impedit dolorum accusantium aliquid iure itaque, fugiat explicabo beatae! Sequi et recusandae veniam ipsa!

STEP 1

```
.card__section--header {
  display: flex;
  align-items: center;
}

.heading {
  flex: 1 0 auto;
}

.button-group {
  flex: 0 0 auto;
}
```

Medium Heading

Primary Action | Action 1 | Action 2

Lorem ipsum dolor sit amet, consectetur adipisicing elit. Libero quo consequuntur ab deserunt, veritatis eaque incidunt impedit dolorum accusantium aliquid iure itaque, fugiat explicabo beatae! Sequi et recusandae veniam ipsa!

STEP 2

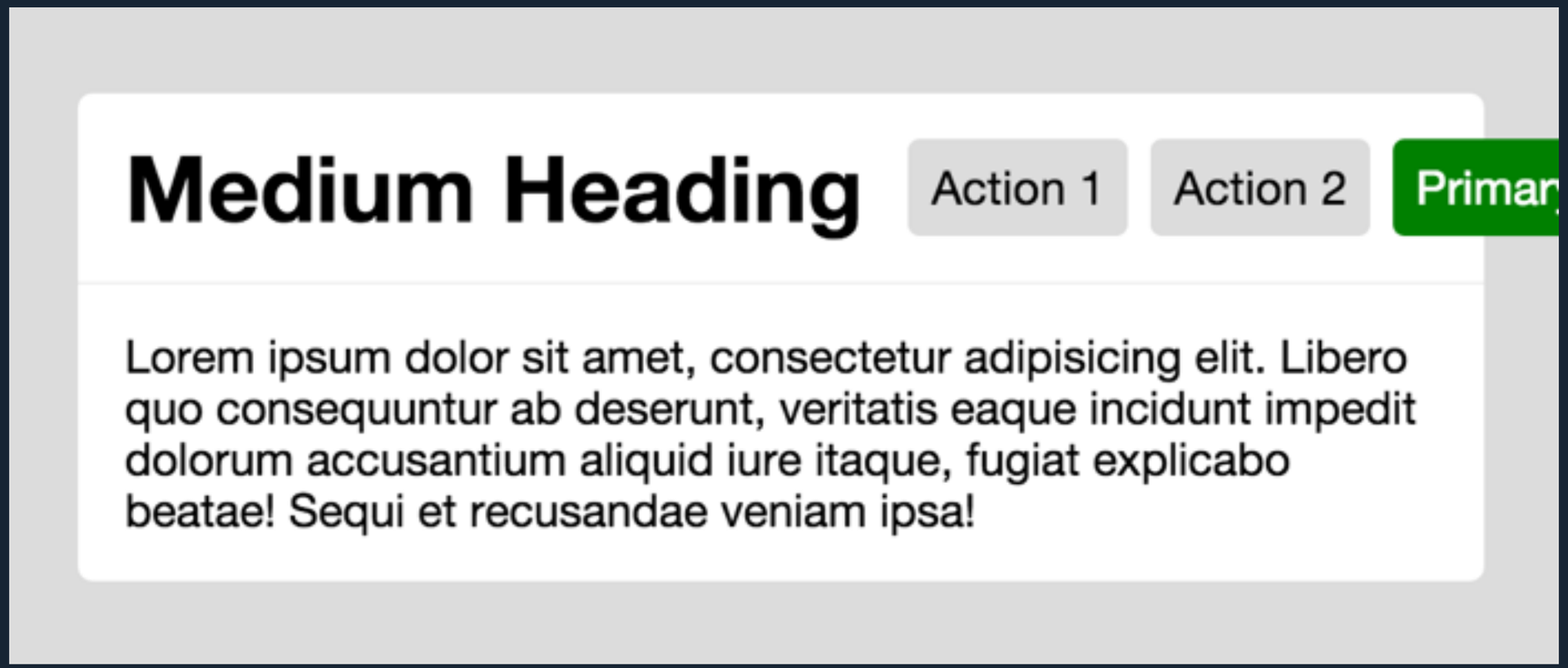
```
.button-group {
  display: inline-flex;
  flex-direction: row-reverse;
}

.button-group__primary,
.button-group__secondary {
  display: flex;
}
```

Medium Heading

Action 1 Action 2 Primary Action

Lorem ipsum dolor sit amet, consectetur adipisicing elit. Libero quo consequuntur ab deserunt, veritatis eaque incidunt impedit dolorum accusantium aliquid iure itaque, fugiat explicabo beatae! Sequi et recusandae veniam ipsa!


Medium Heading
Action 1
Action 2
Primar
Lorem ipsum dolor sit amet, consectetur adipisicing elit. Libero quo consequuntur ab deserunt, veritatis eaque incidunt impedit dolorum accusantium aliquid iure itaque, fugiat explicabo beatae! Sequi et recusandae veniam ipsa!

STEP 3

```
.card__section--header {
  flex-wrap: wrap;
}
```

Medium Heading

Action 1 Action 2 **Primary Action**

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STEP 4

```
.button-group {
  flex: 0.0001 0 auto;
}
```

```
.heading {
  flex: 1000 0 auto;
}

.button-group__secondary {
  flex: 1 0 auto;
}
```

Medium Heading

Action 1 Action 2 Primary Action

Lorem ipsum dolor sit amet, consectetur adipisicing elit. Libero quo consequuntur ab deserunt, veritatis eaque incidunt impedit dolorum accusantium aliquid iure itaque, fugiat explicabo beatae! Sequi et recusandae veniam ipsa!

STEP 5

```
.button-group {
  max-width: 100%;
  flex-wrap: wrap-reverse;
}
```

```
.button-group__primary {
  flex: 0.0001 0 auto;
}

.button-group__secondary {
  max-width: 100%;
  flex: 1000 0 auto;
  flex-wrap: wrap;
}
```

Medium Heading

Action 1 | Action 2 | Primary Action

Lorem ipsum dolor sit amet, consectetur adipisicing elit. Libero quo consequuntur ab deserunt, veritatis eaque incidunt impedit dolorum accusantium aliquid iure itaque, fugiat explicabo beatae! Sequi et recusandae veniam ipsa!

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Action 1 | Action 2 | Primary Action

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Medium Heading

Action 1

Action 2

Primary Action

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Medium Heading

Action 1

Action 2

Primary Action

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CSS-TRICKS REFERENCE

https://css-tricks.com/snippets/css/a-guide-to-flexbox/

AUTOPREFIXER

https://github.com/postcss/autoprefixer

FLEXBUGS

https://github.com/philipwalton/flexbugs

CHRIS SAUVE

@_lemonmade

SHOPIFY

shopify.com/careers

THANKS EVERYONE!