Web Programming
with Python and JavaScript

Web Programming

# HTML and CSS

# Git
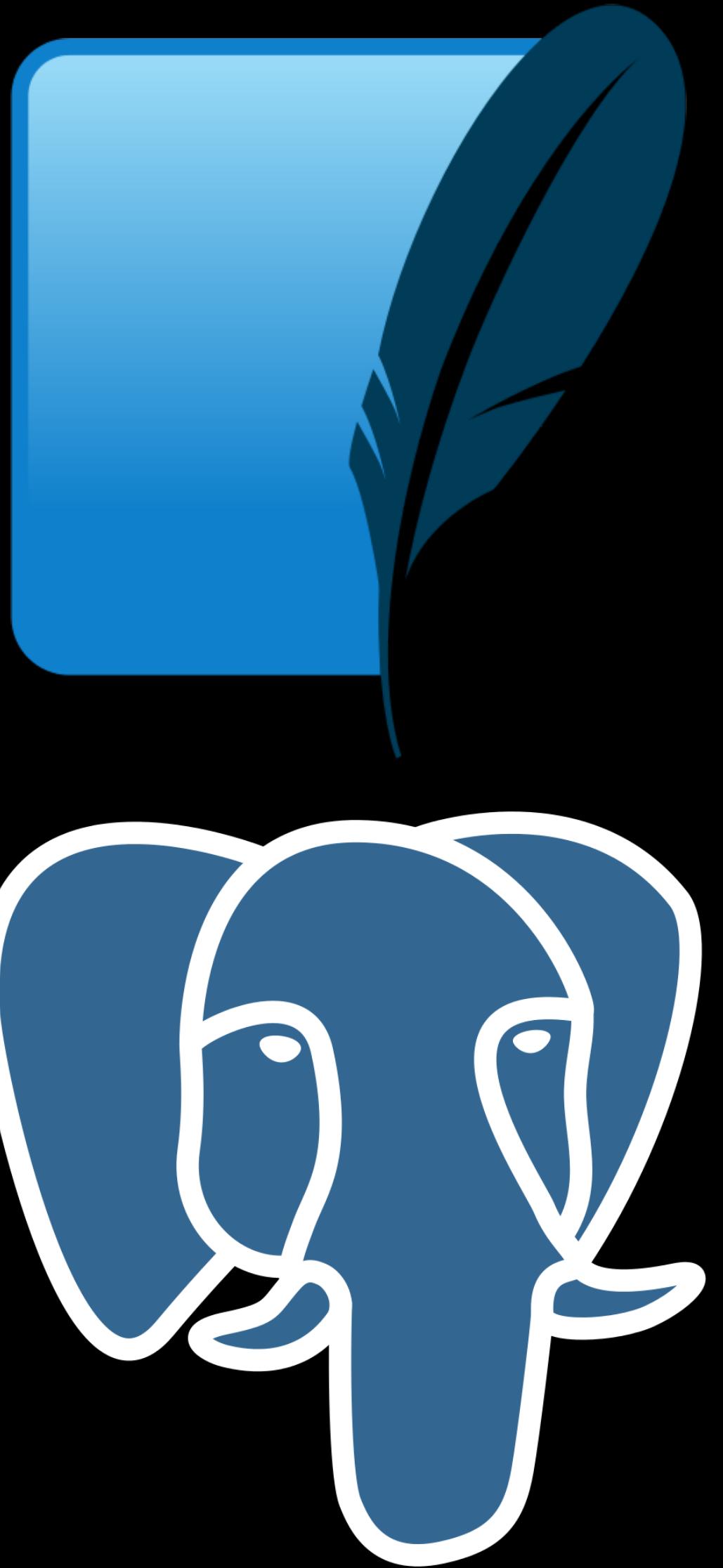
Python
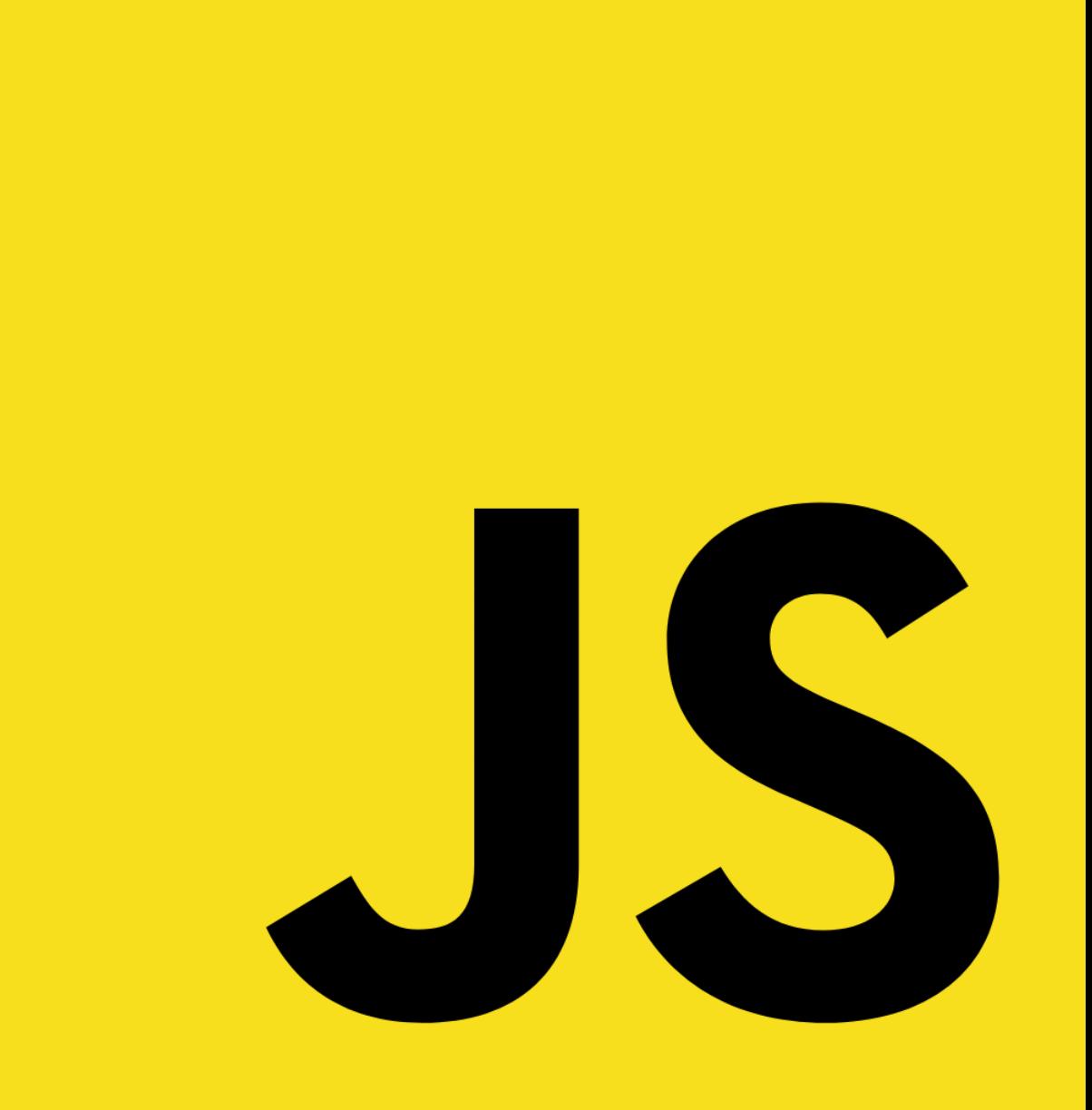
Django

django

SQL, Models, and Migrations
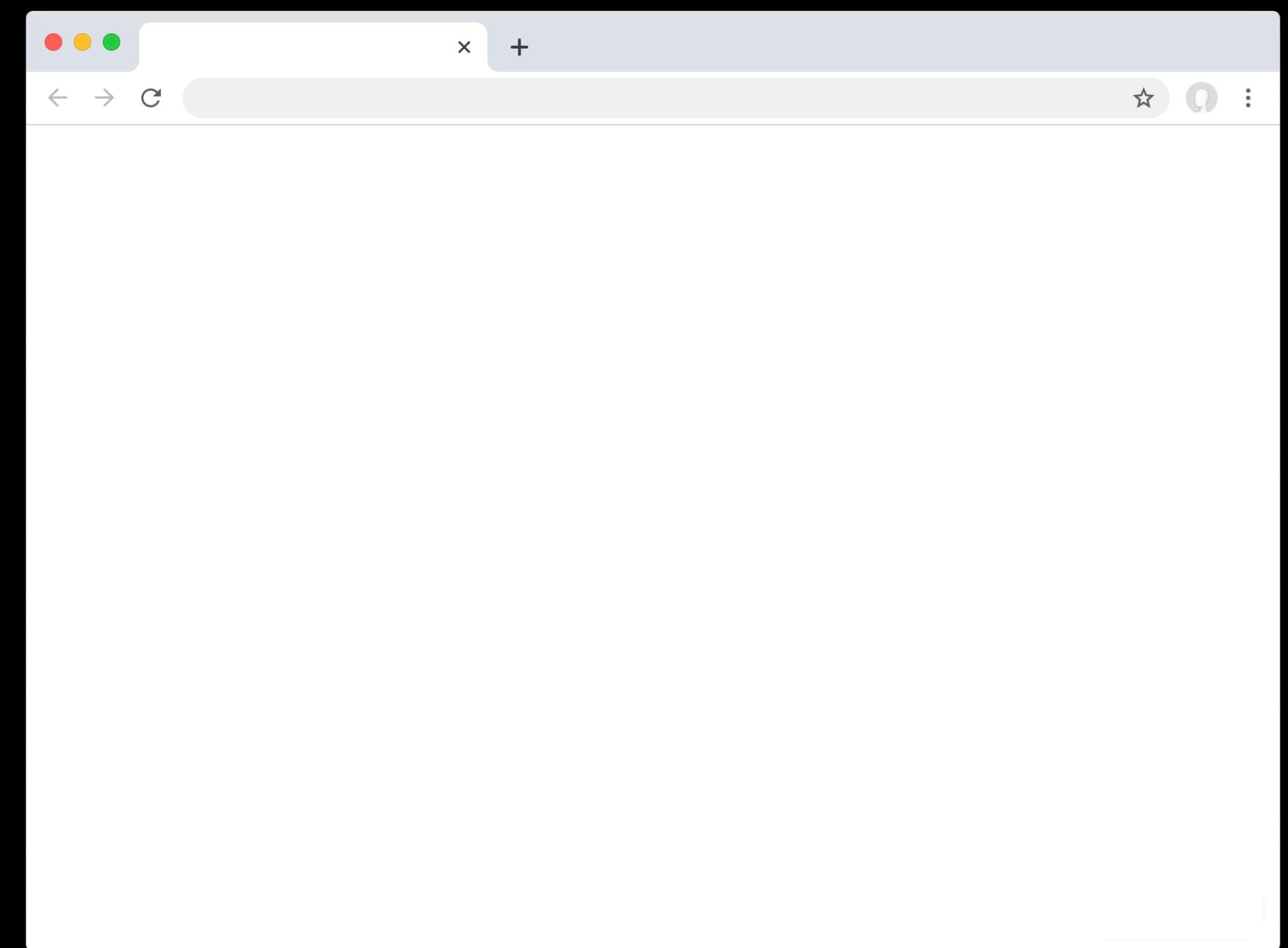
JavaScript
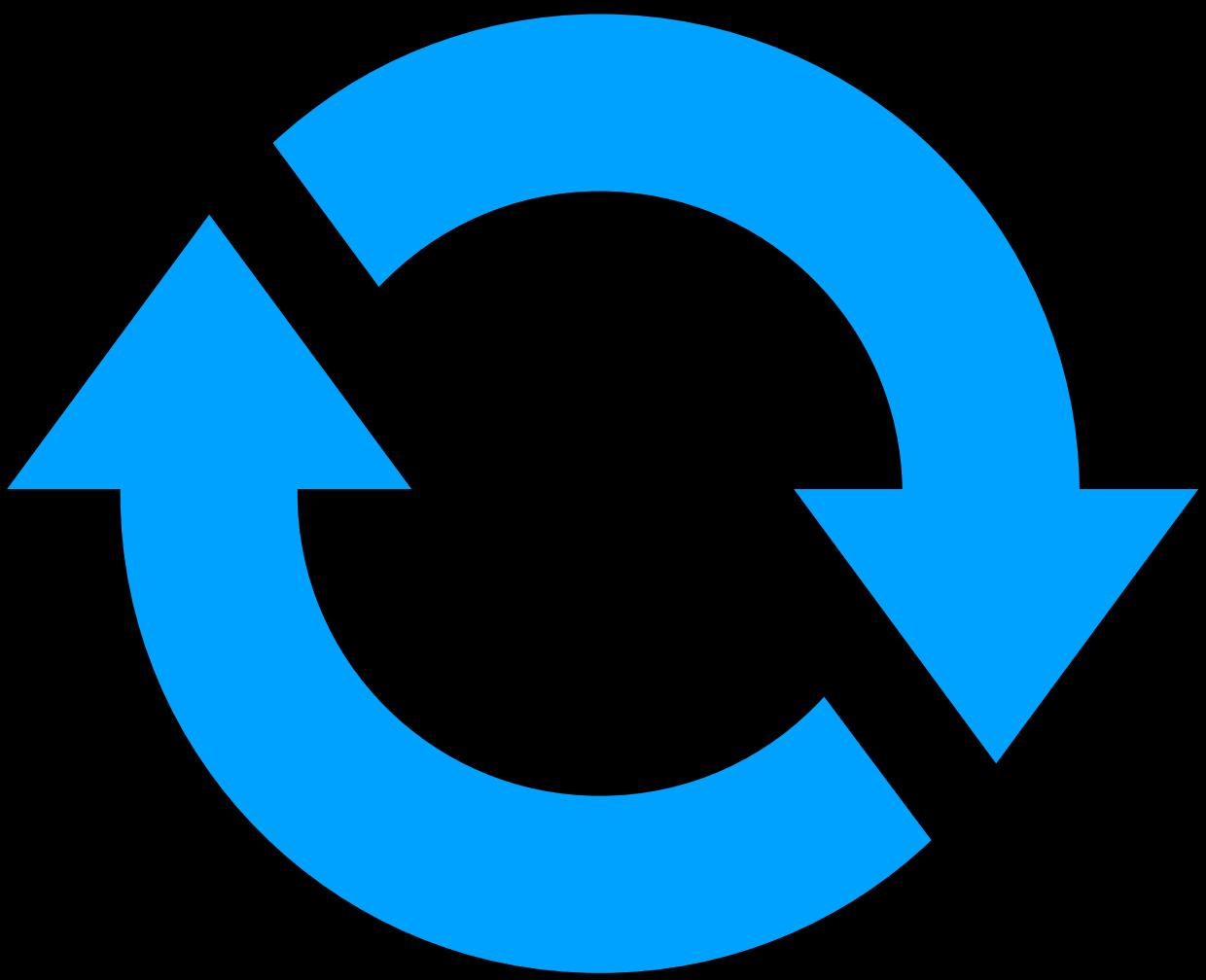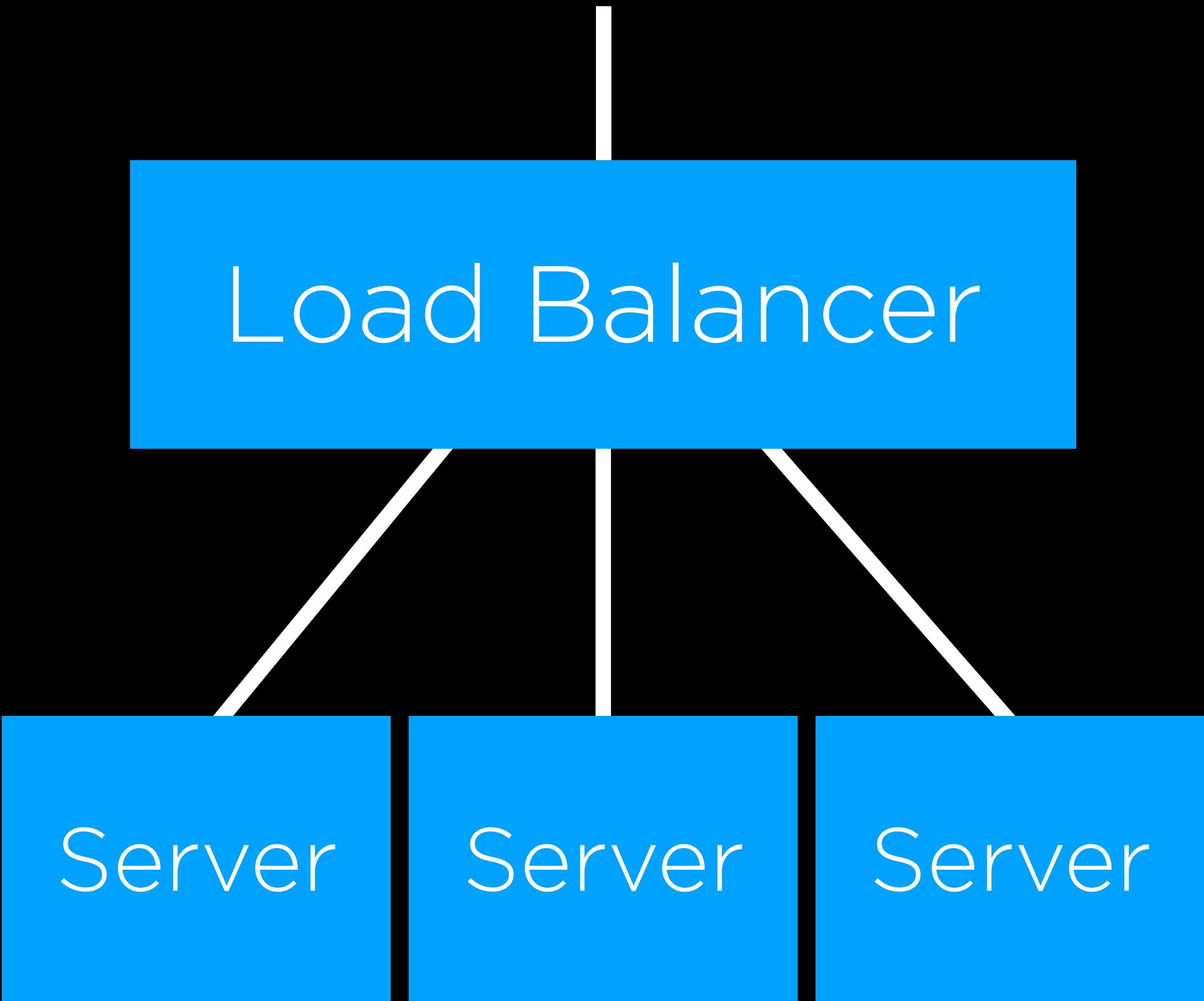
User Interfaces

Testing and CI/CD

Scalability and Security

HTML and CSS

# HTML

```
<!DOCTYPE html>
<html lang="en">
    <head>
        <title>Hello!</title>
    </head>
    <body>
        Hello, world!
    </body>
</html>
```

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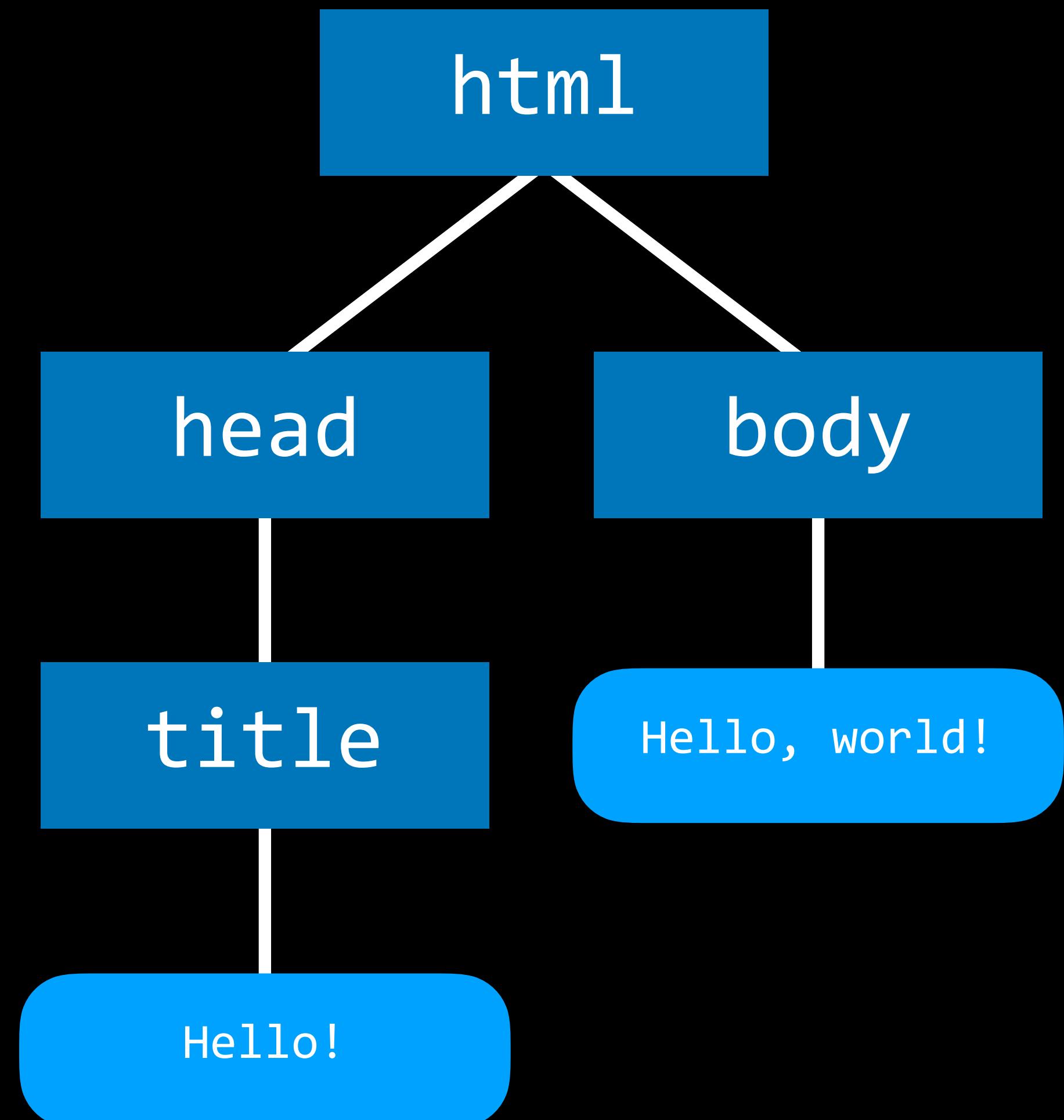
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Document Object Model

```
<!DOCTYPE html>
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    <body>
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    </body>
</html>
```

Common HTML Tags
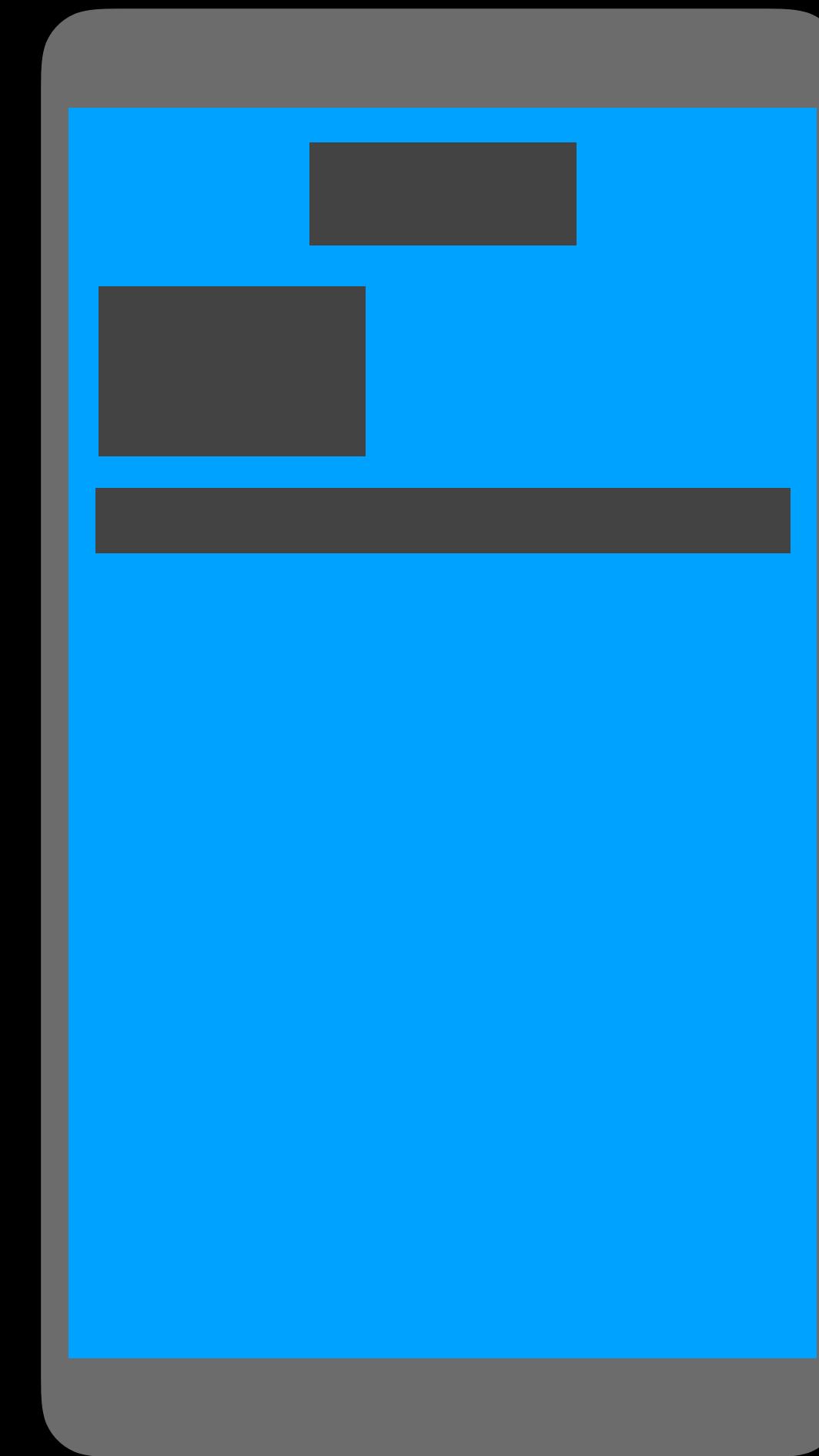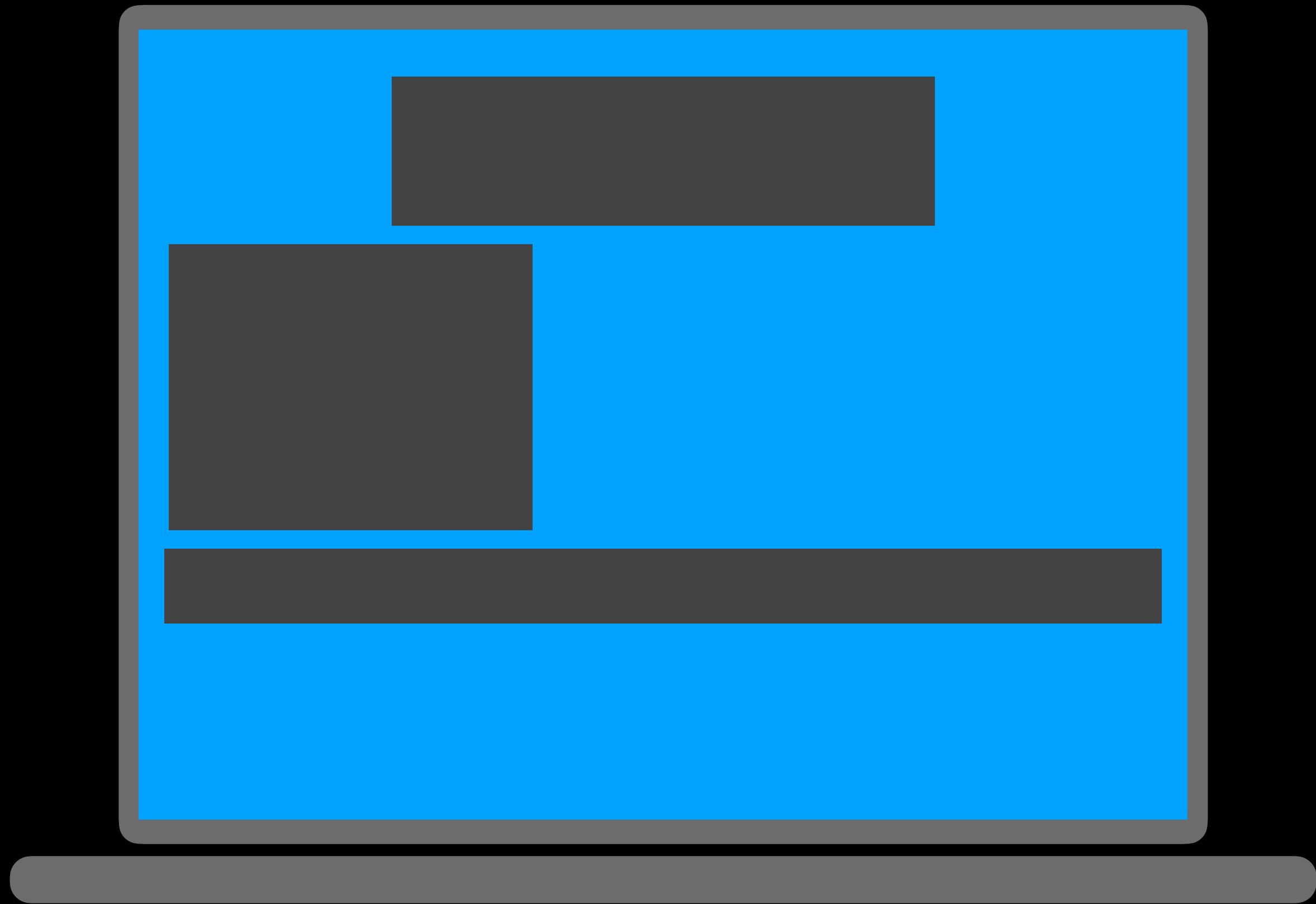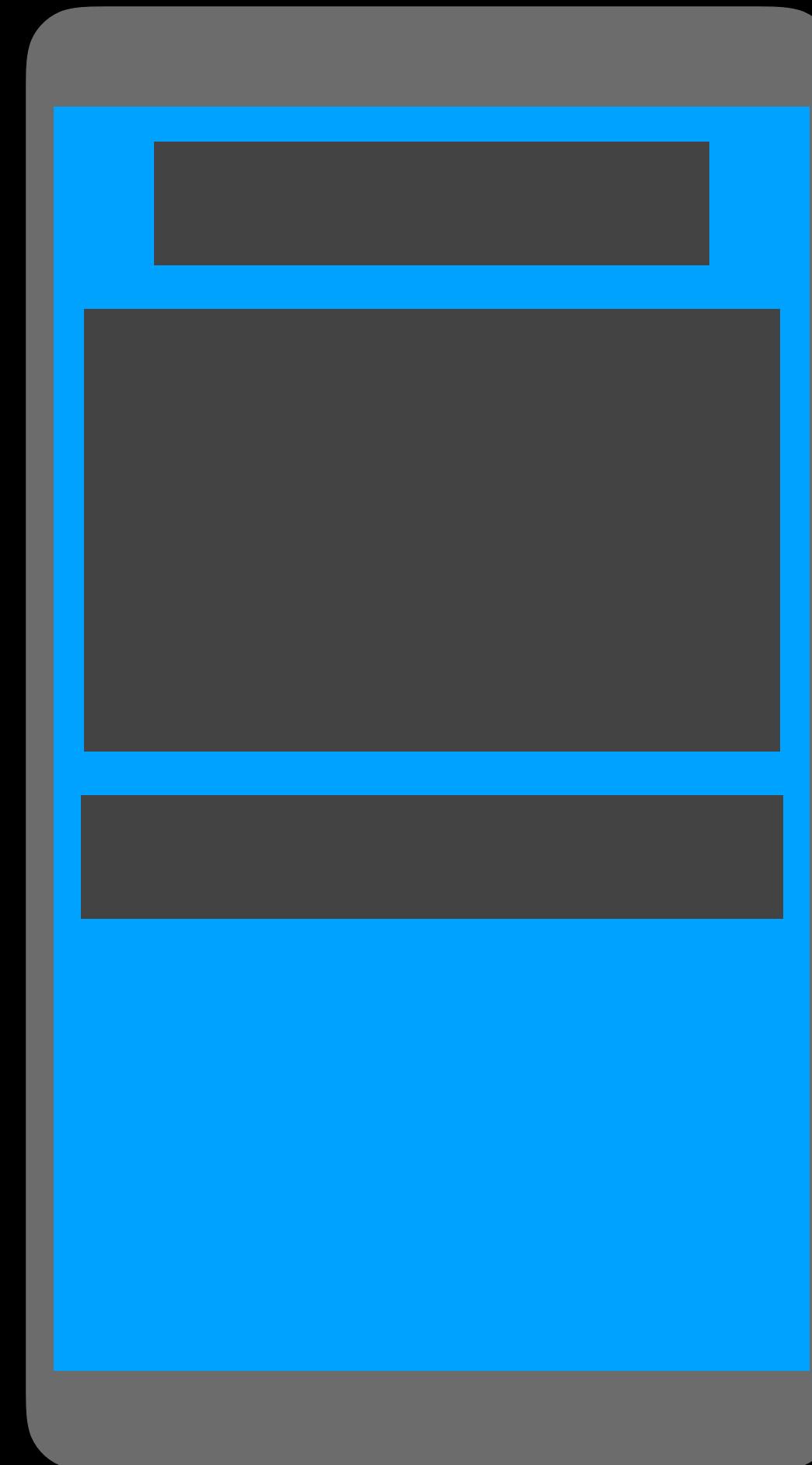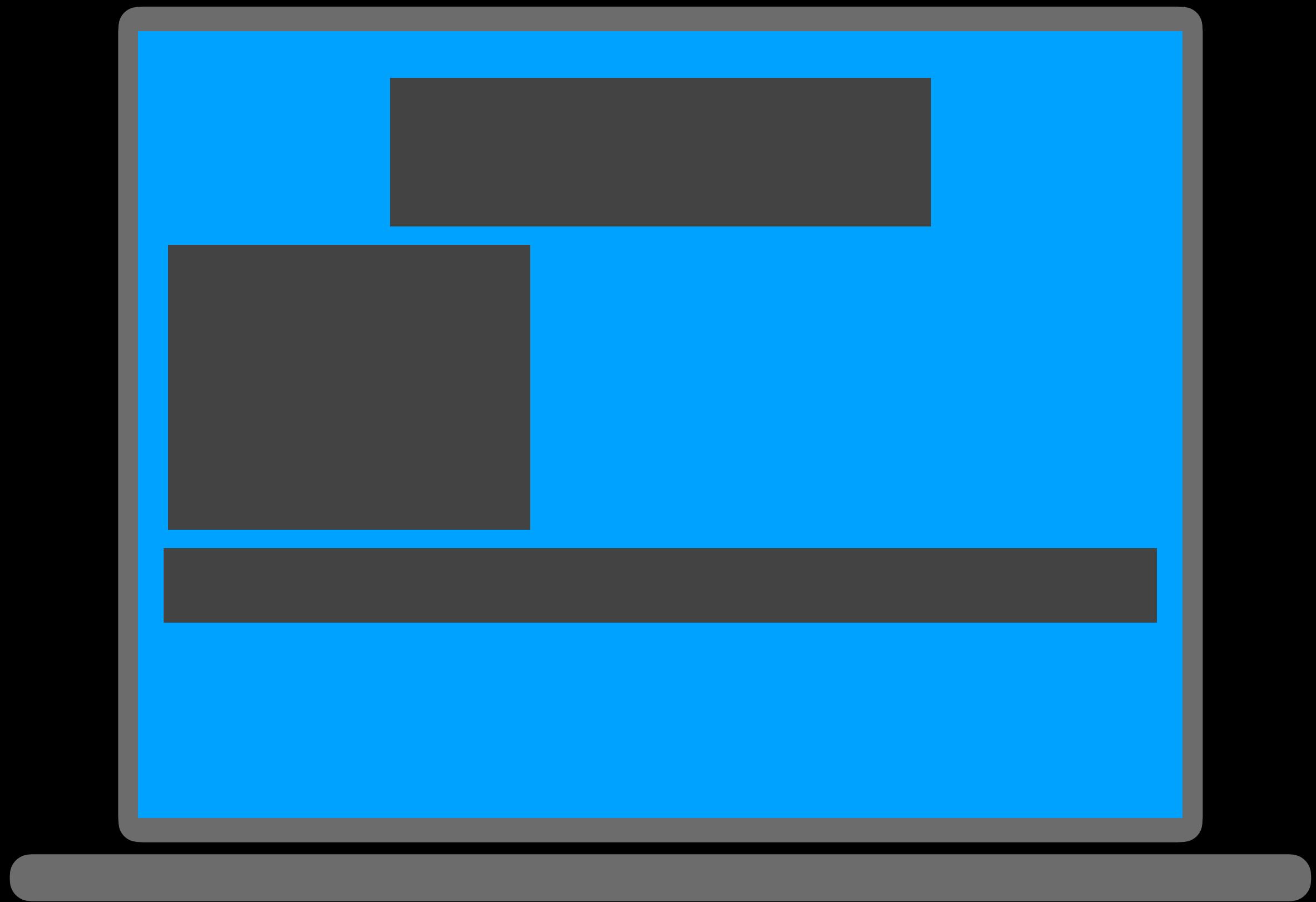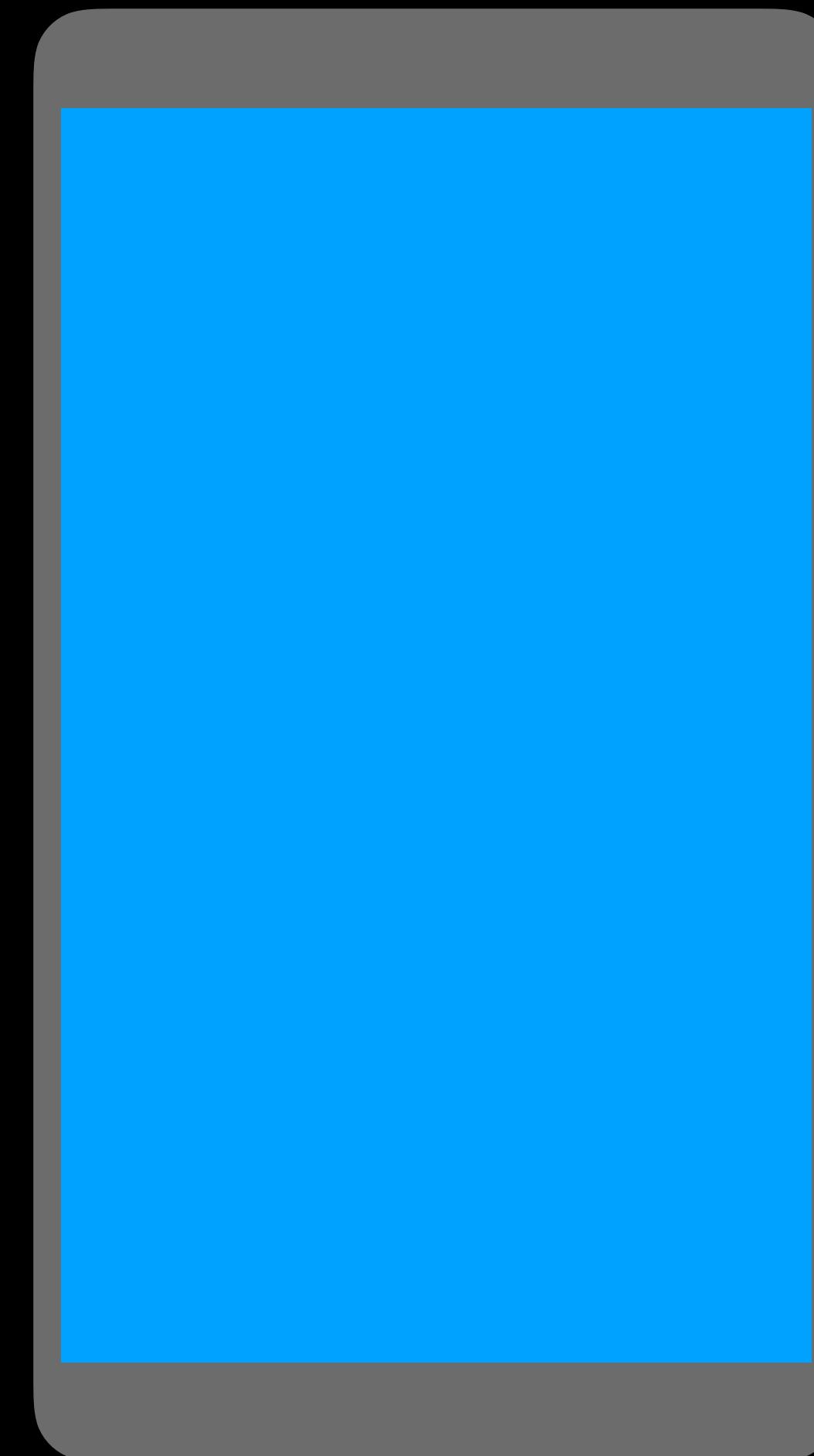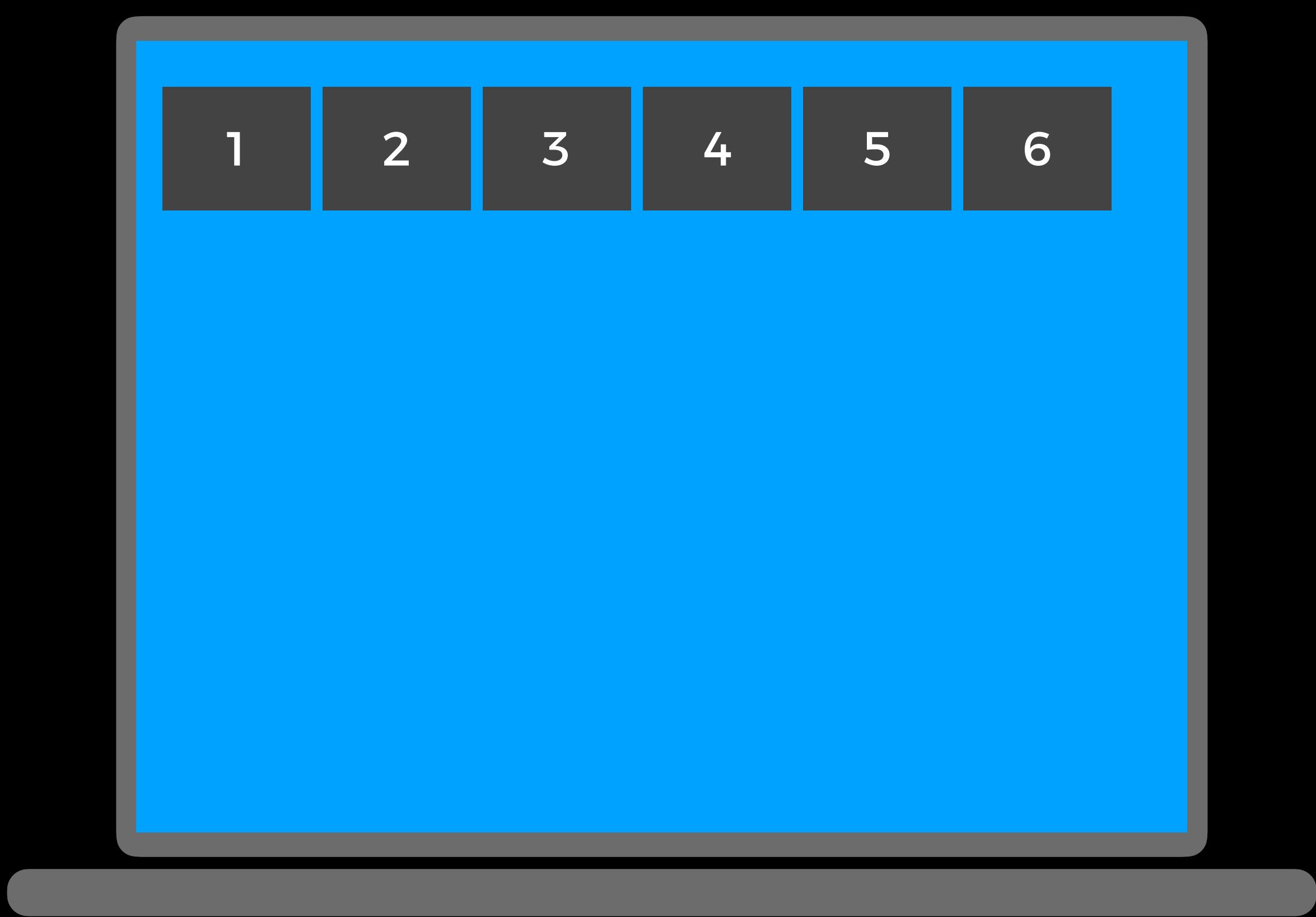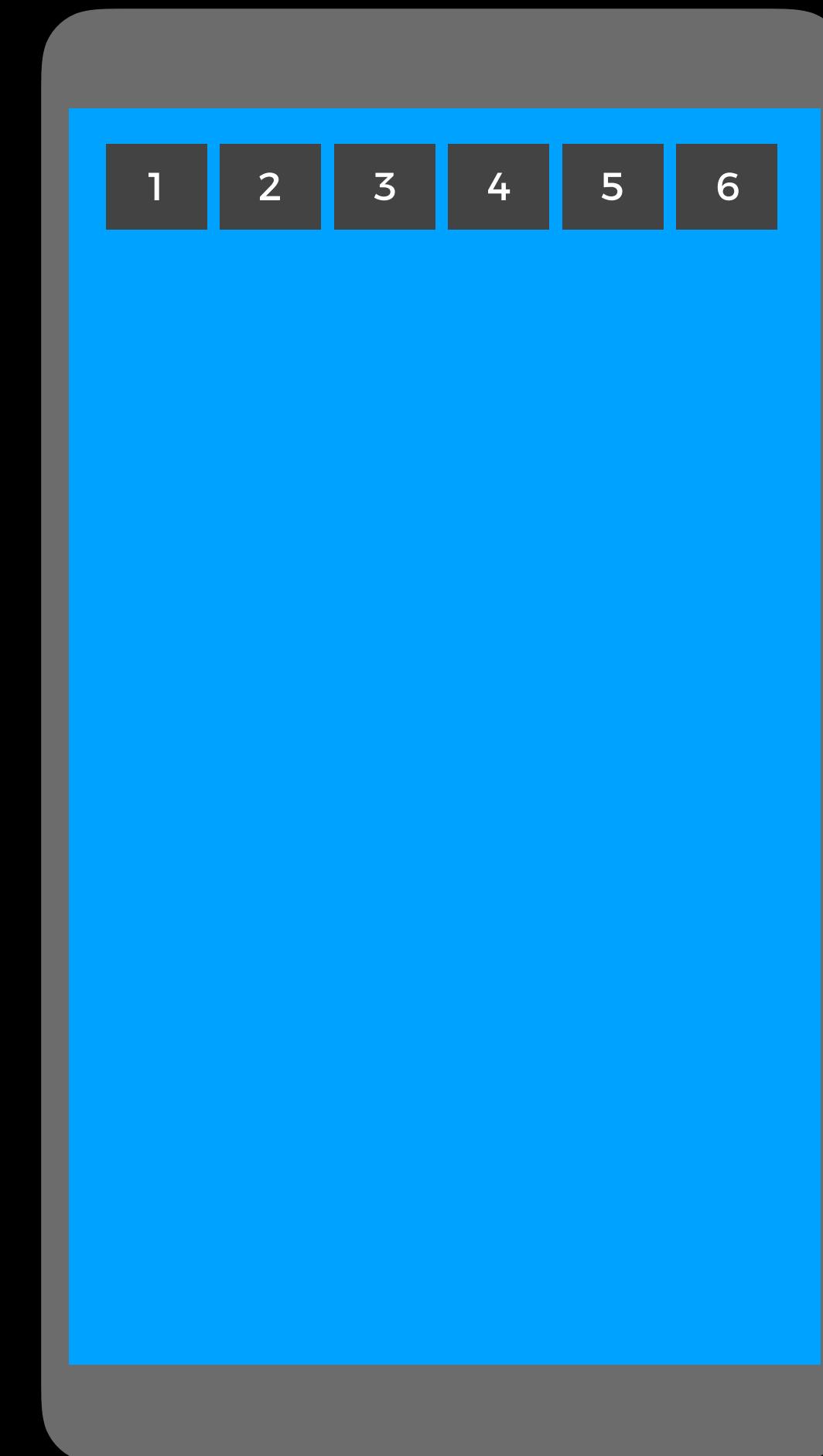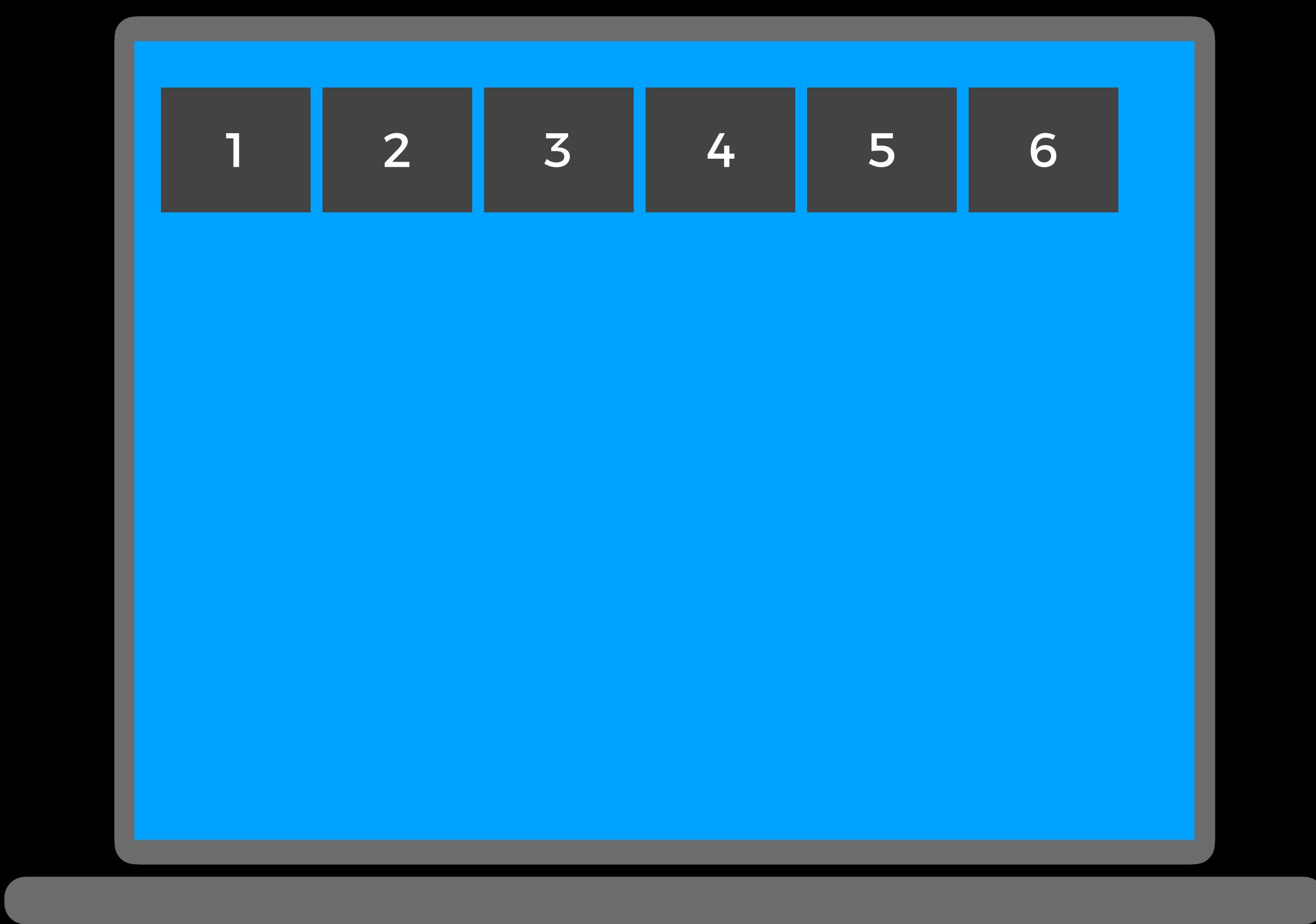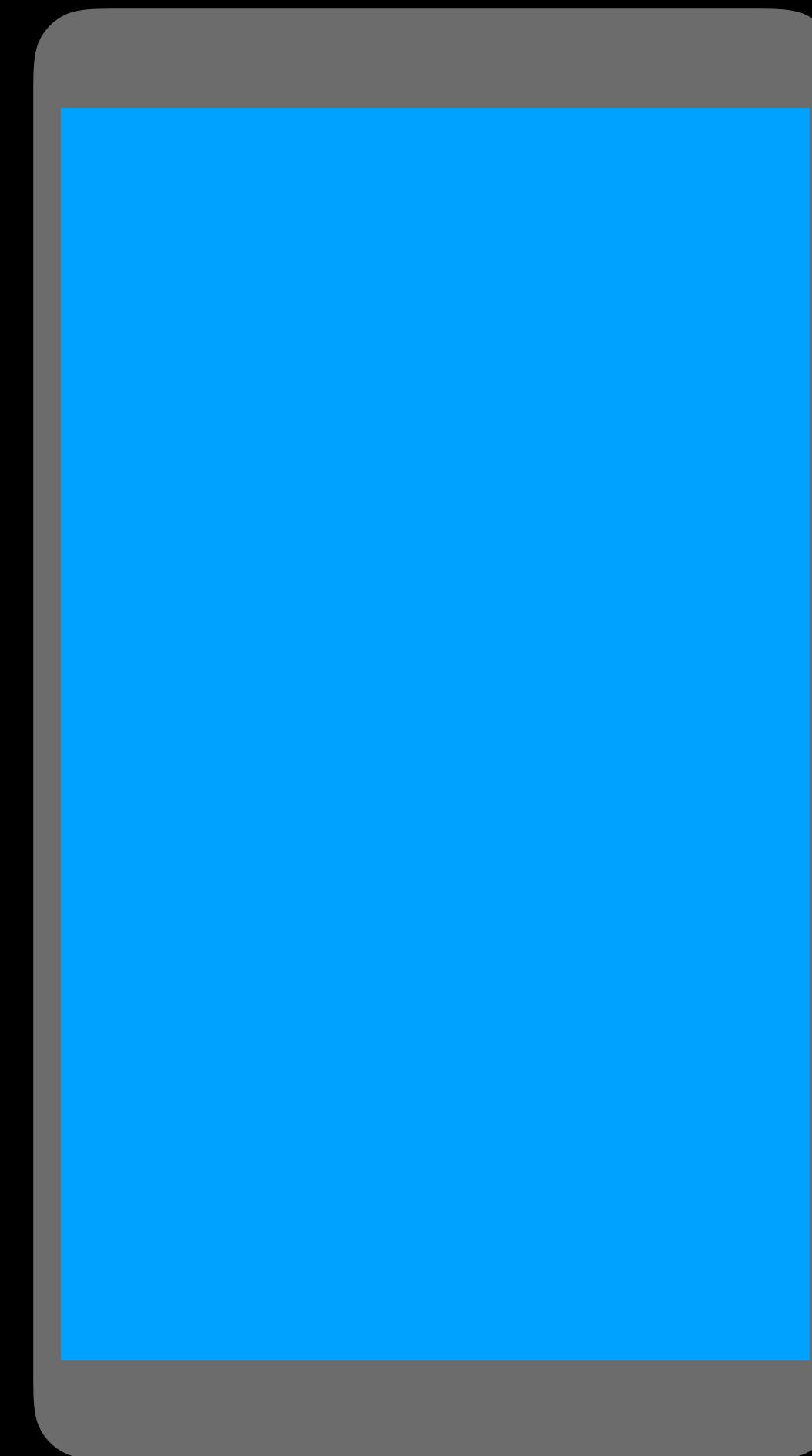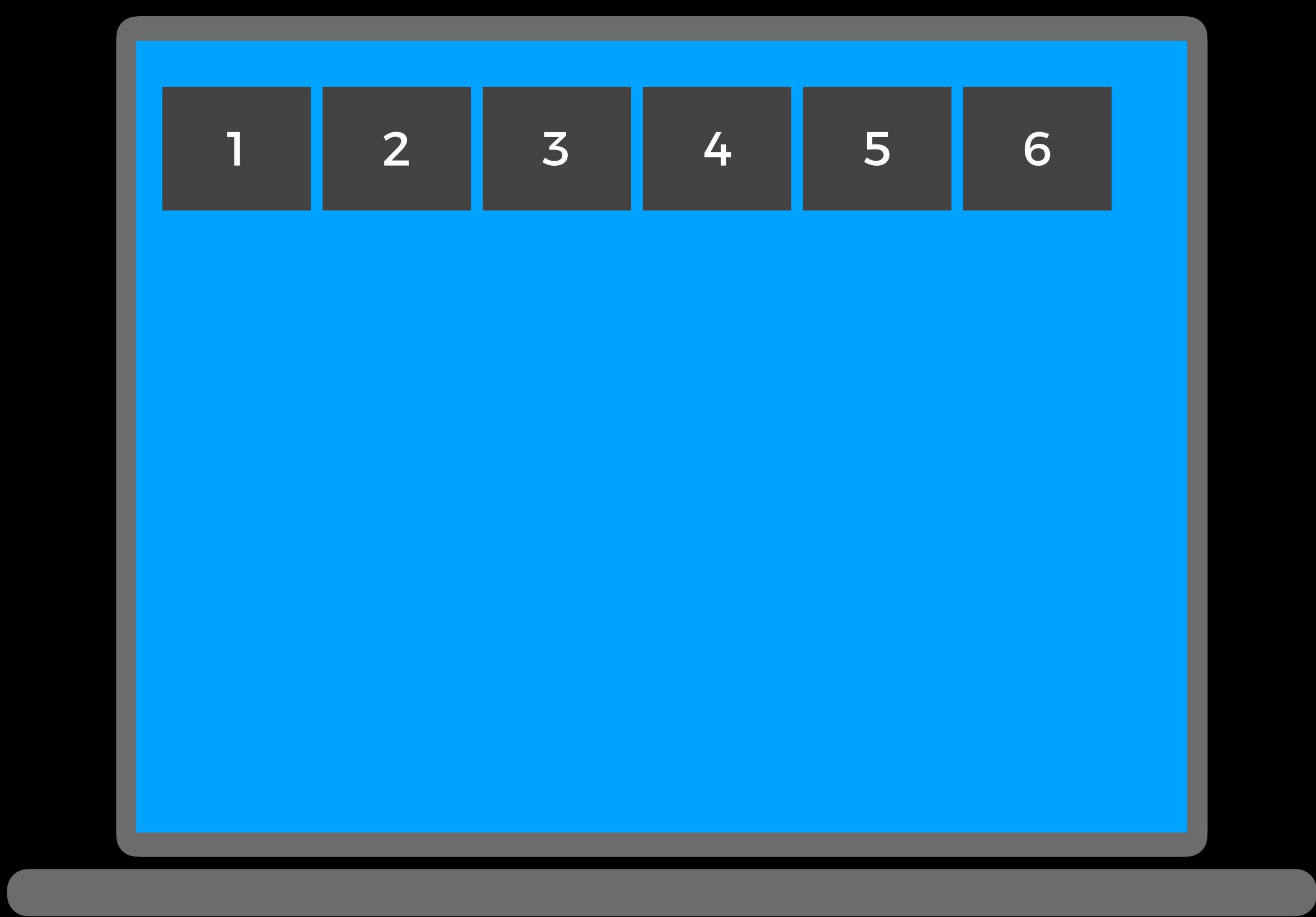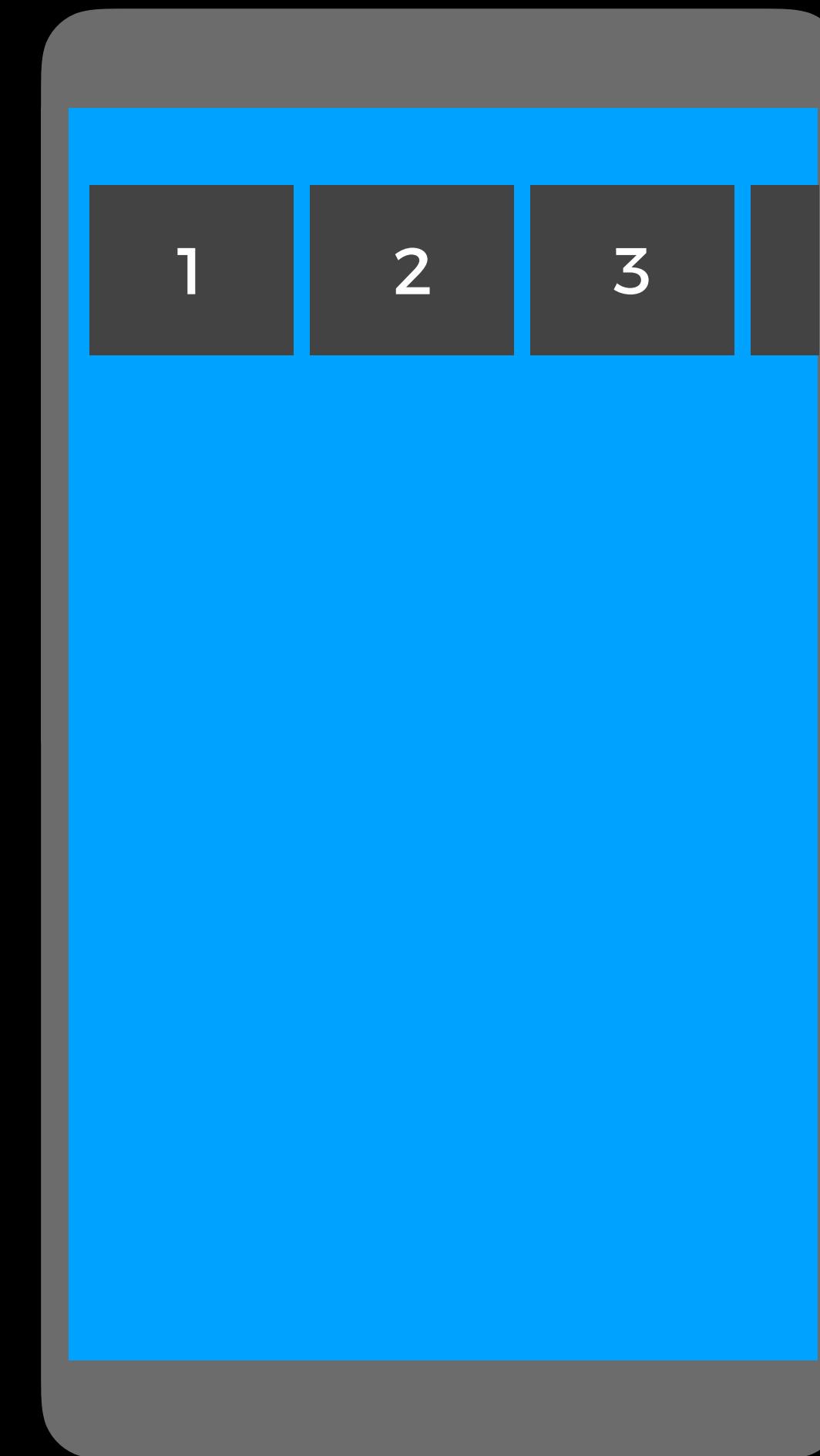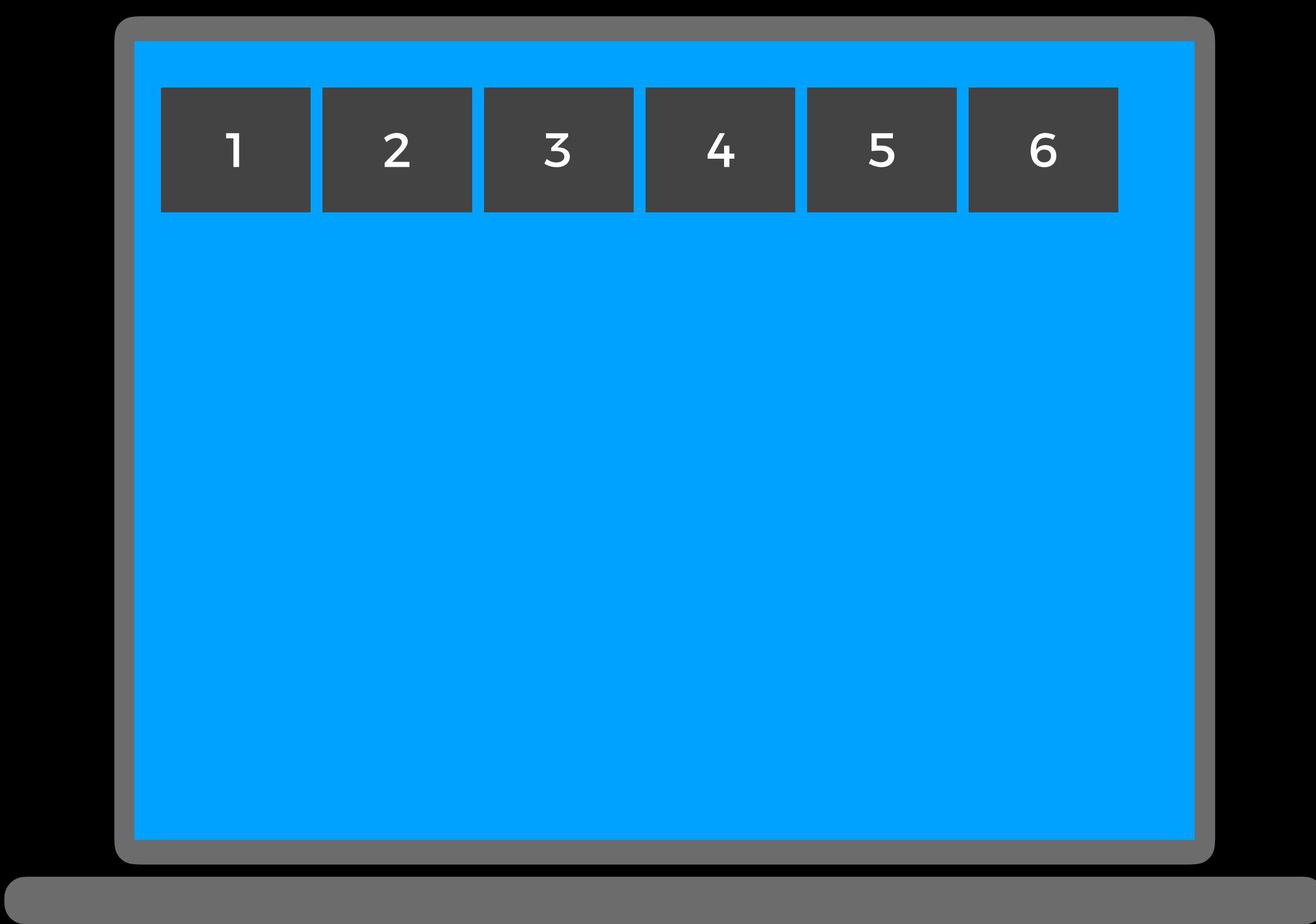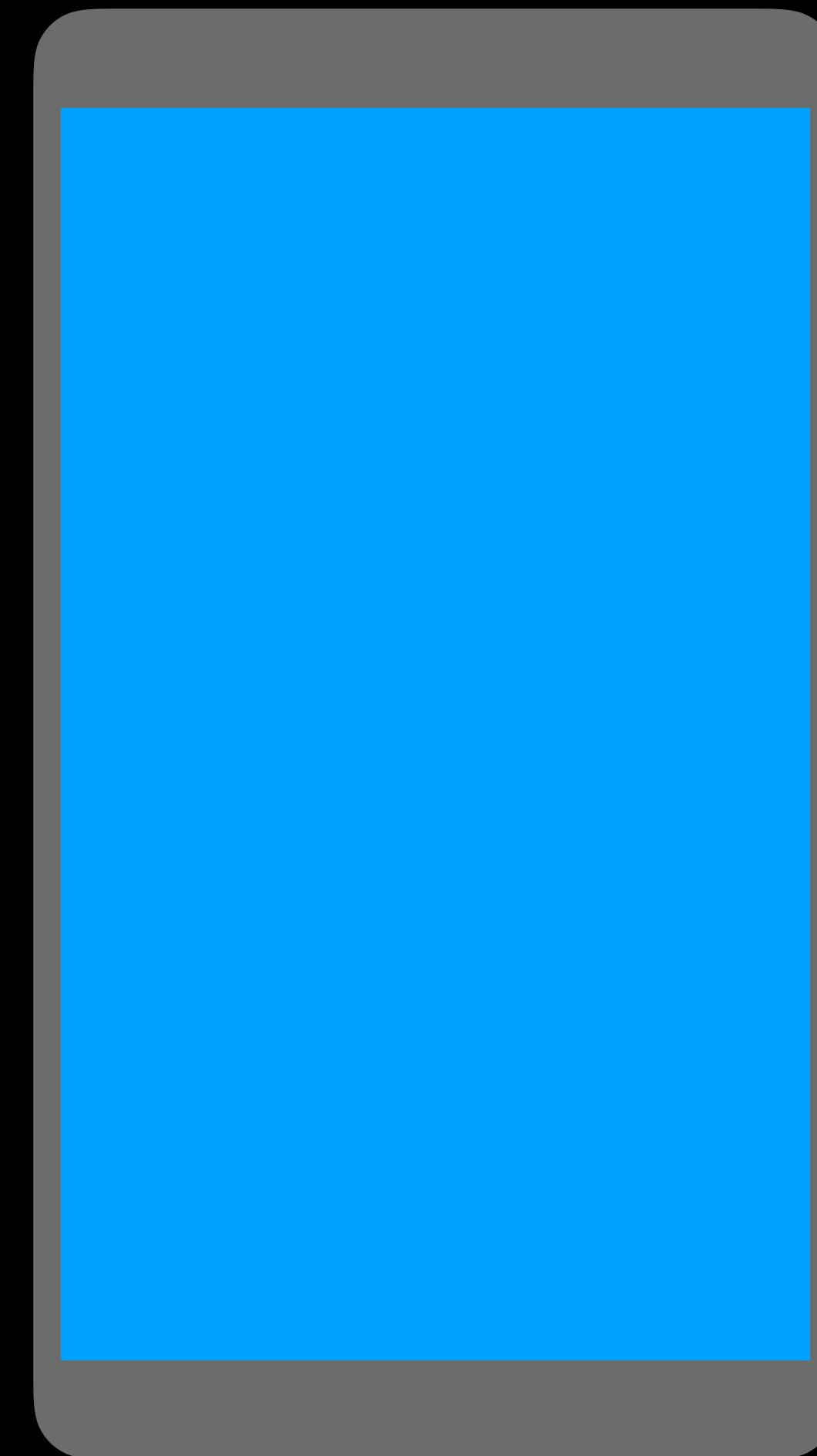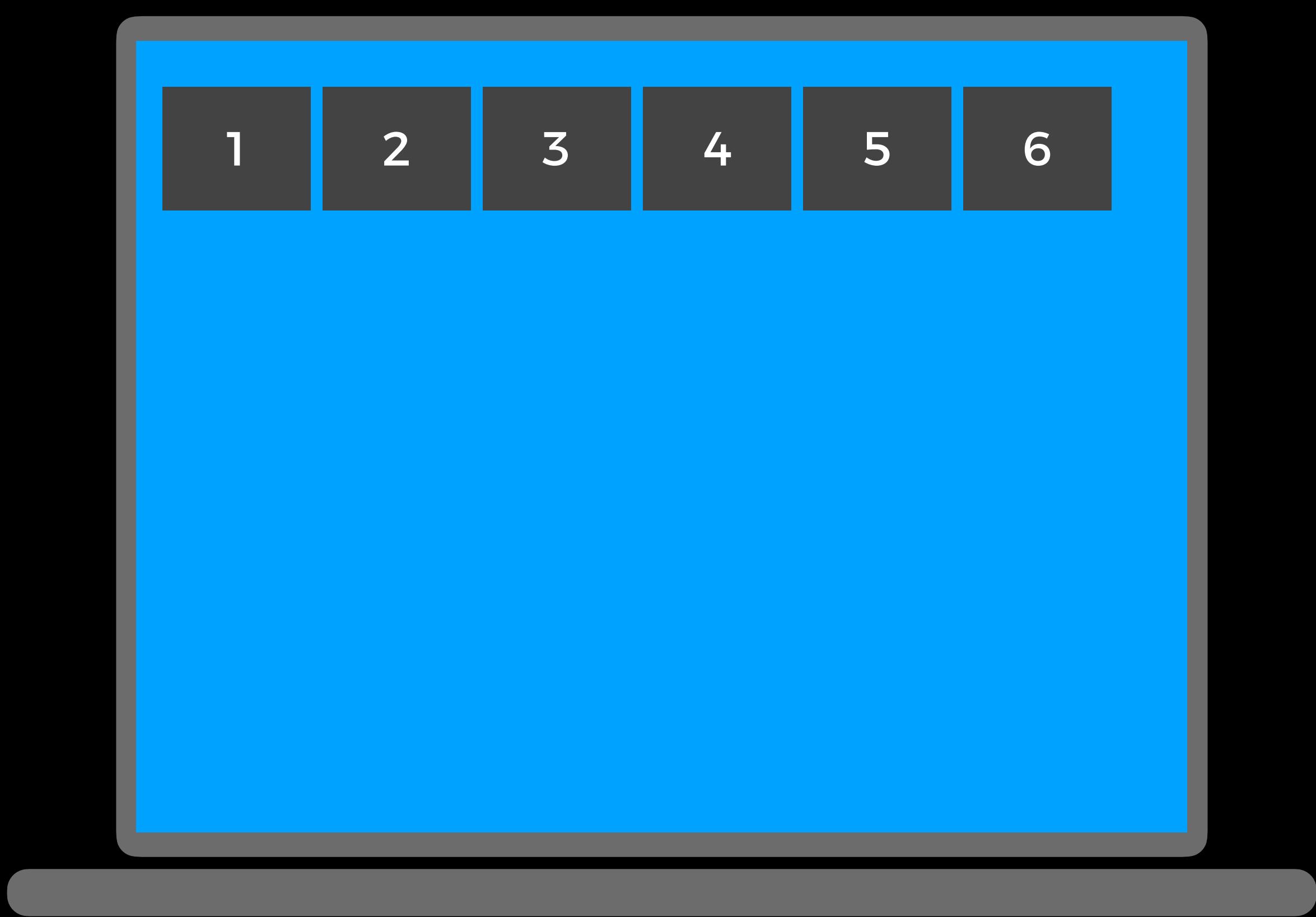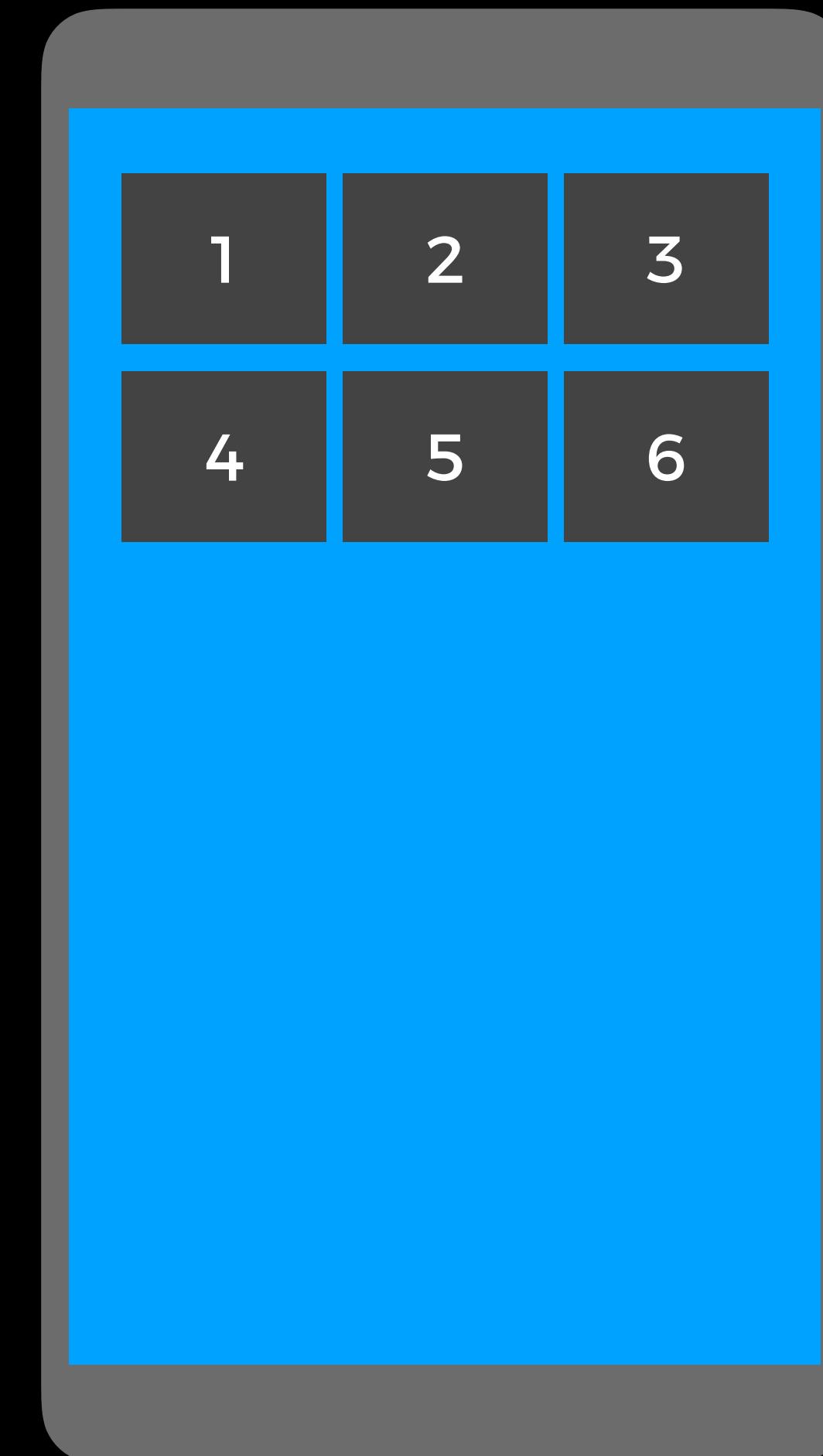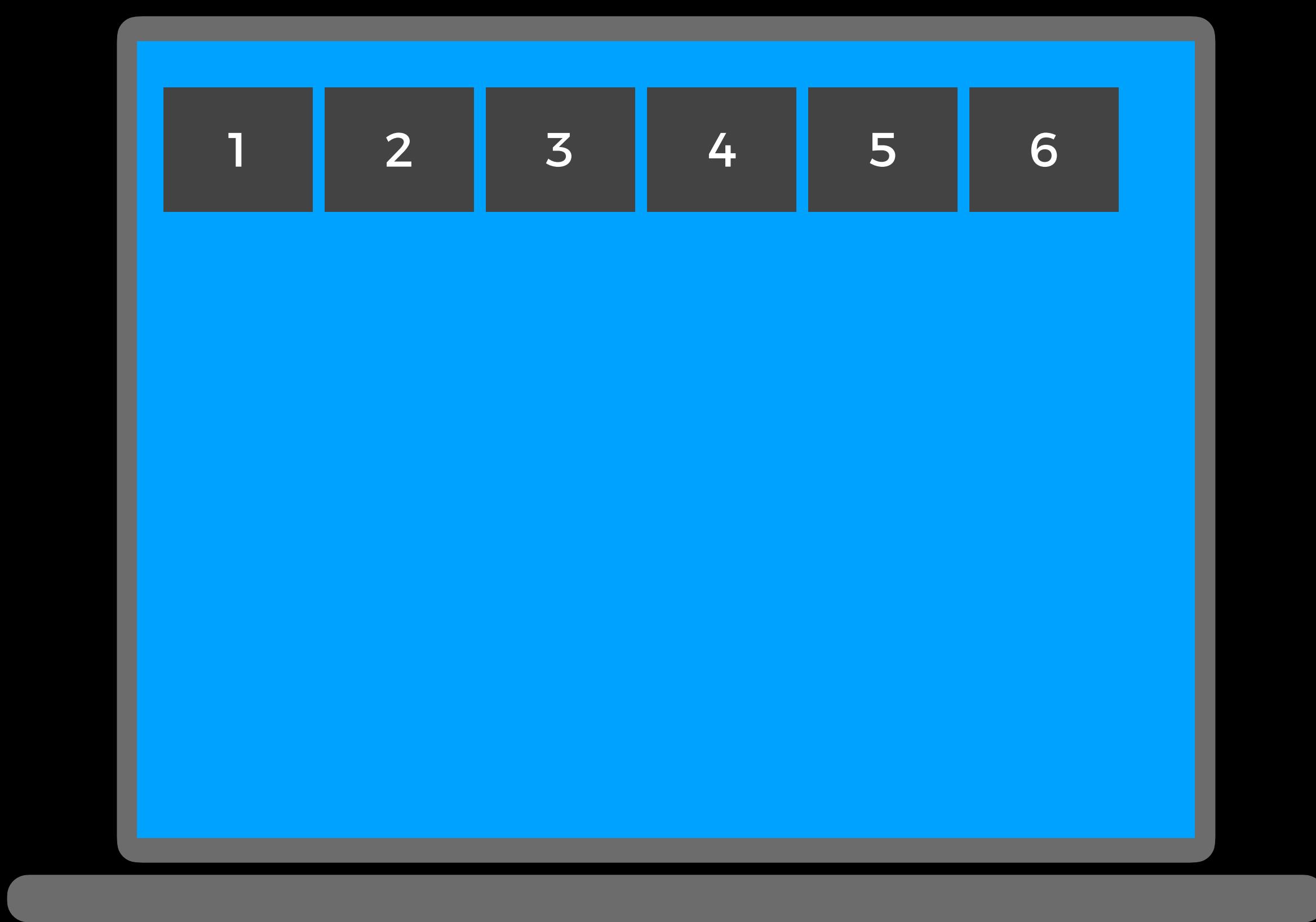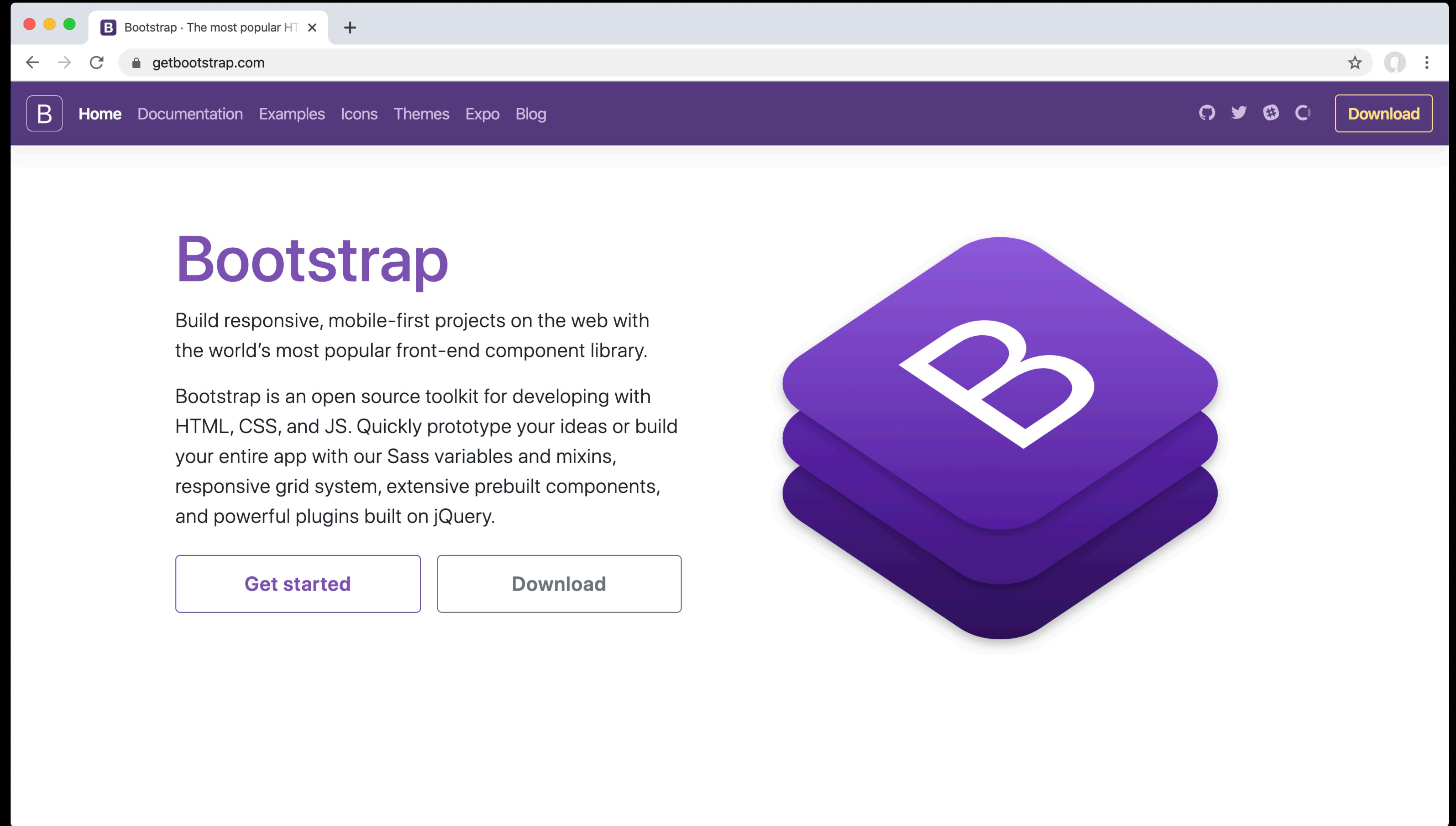
- `<h1>`, `<h2>`, ..., `<h6>`
- `<ol>`, `<ul>`
- `<img>`
- `<a>`
- `<table>`
- `<form>`
- ...

CSS

Common CSS Properties

- `color`

- `text-align`

- `width, height`

- `margin, padding`

- `font-family, font-size, font-weight`

- `border`

- `...`

Identifying Elements

- div

- span

- id

- class

Specificity

1. inline

2. id

3. class

4. type

Specificity

```
<div id="foo">
    Hello!
</div>
```

```
div {
  color: blue;
}
```

Hello!

Specificity

```
<div id="foo">
    Hello!
</div>
```
_____
```
div {
  color: blue;
}

#foo {
  color: red;
}
```

Hello!

Specificity

```
<div id="foo">
    Hello!
</div>
```
_____
```
#foo {
  color: red;
}

div {
  color: blue;
}
```

Hello!

CSS Selectors

a, b	Multiple Element Selector
a b	Descendant Selector
a > b	Child Selector
a + b	Adjacent Sibling Selector
[a=b]	Attribute Selector
a:b	Pseudoclass Selector
a::b	Pseudoelement Selector

Responsive Design

Responsive Design

- `viewport`
- Media Queries
- Flexbox
- Grids

```
<meta name="viewport" content="width=device-width, initial-scale=1.0">
```

Viewport

Viewport

Media Queries

- **Media Types**: print, screen, …

- **Media Features**: height, width, orientation, …

# Flexbox

Flexbox

Flexbox

Flexbox

Flexbox

Flexbox

Bootstrap

Bootstrap

Build responsive, mobile-first projects on the web with the world's most popular front-end component library.

Bootstrap is an open source toolkit for developing with HTML, CSS, and JS. Quickly prototype your ideas or build your entire app with our Sass variables and mixins, responsive grid system, extensive prebuilt components, and powerful plugins built on jQuery.

Get started   Download

Sass

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