

Web Programming

with Python and JavaScript

Web Programming

HTML and CSS

HTML



Git



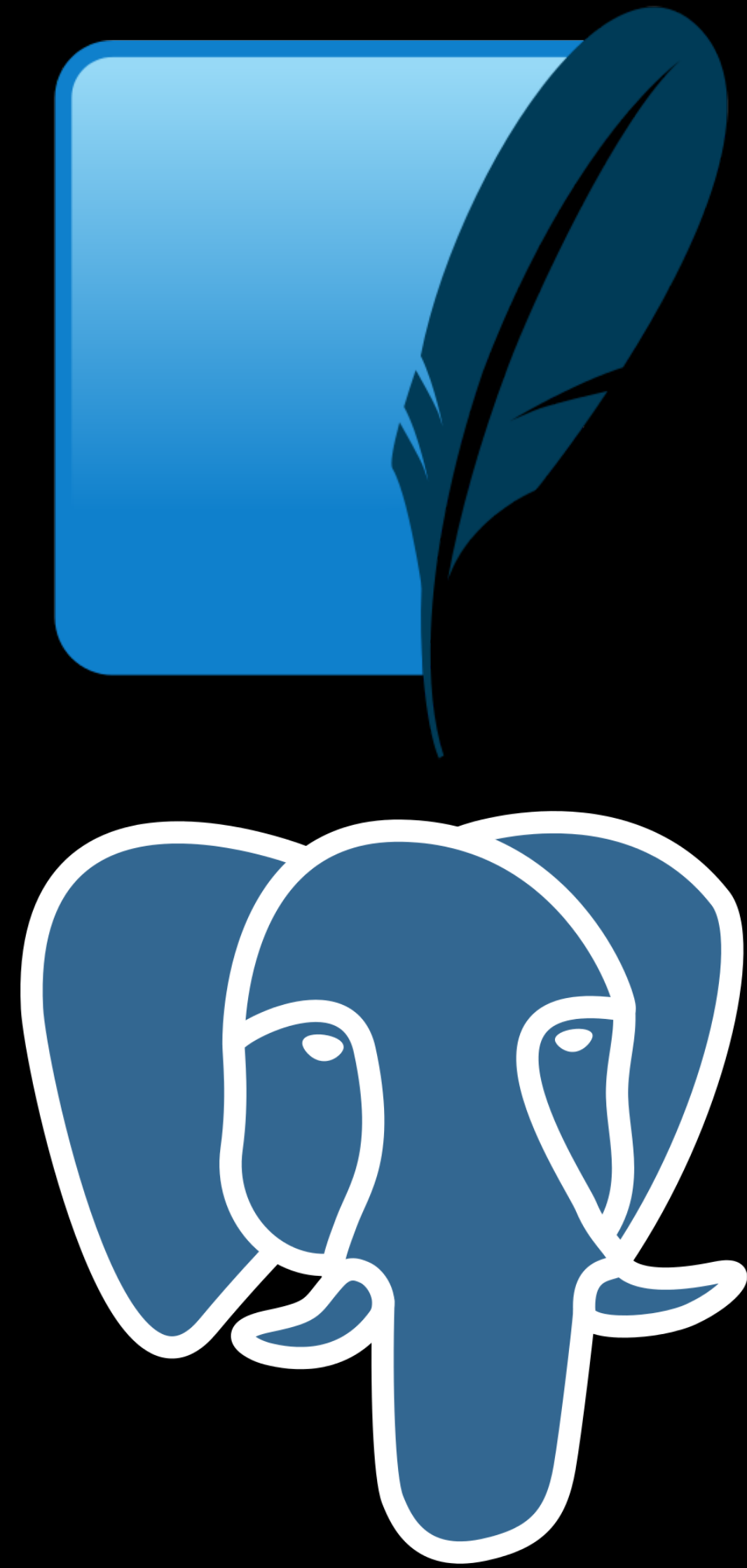
Python



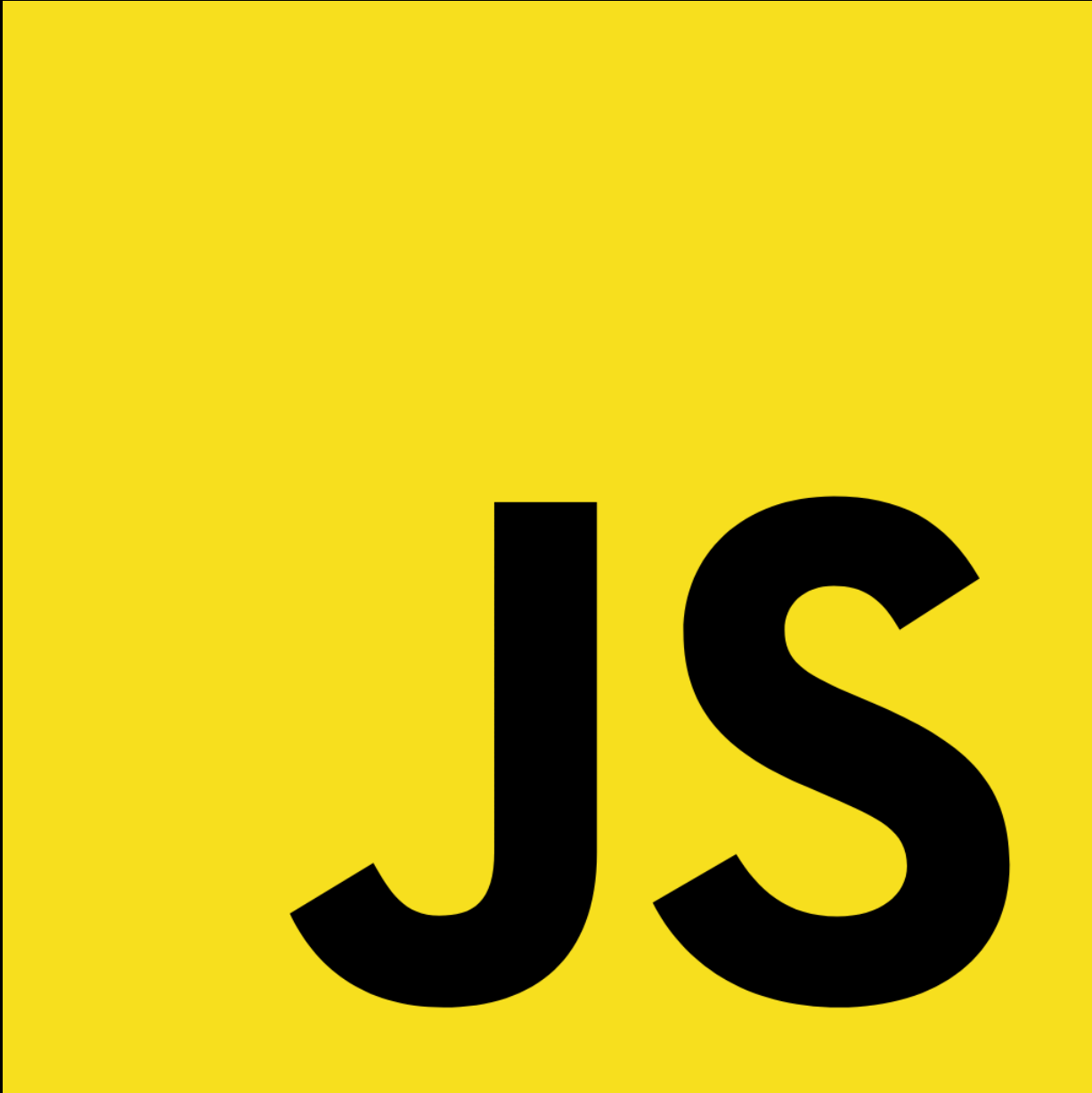
Django

django

SQL, Models, and Migrations

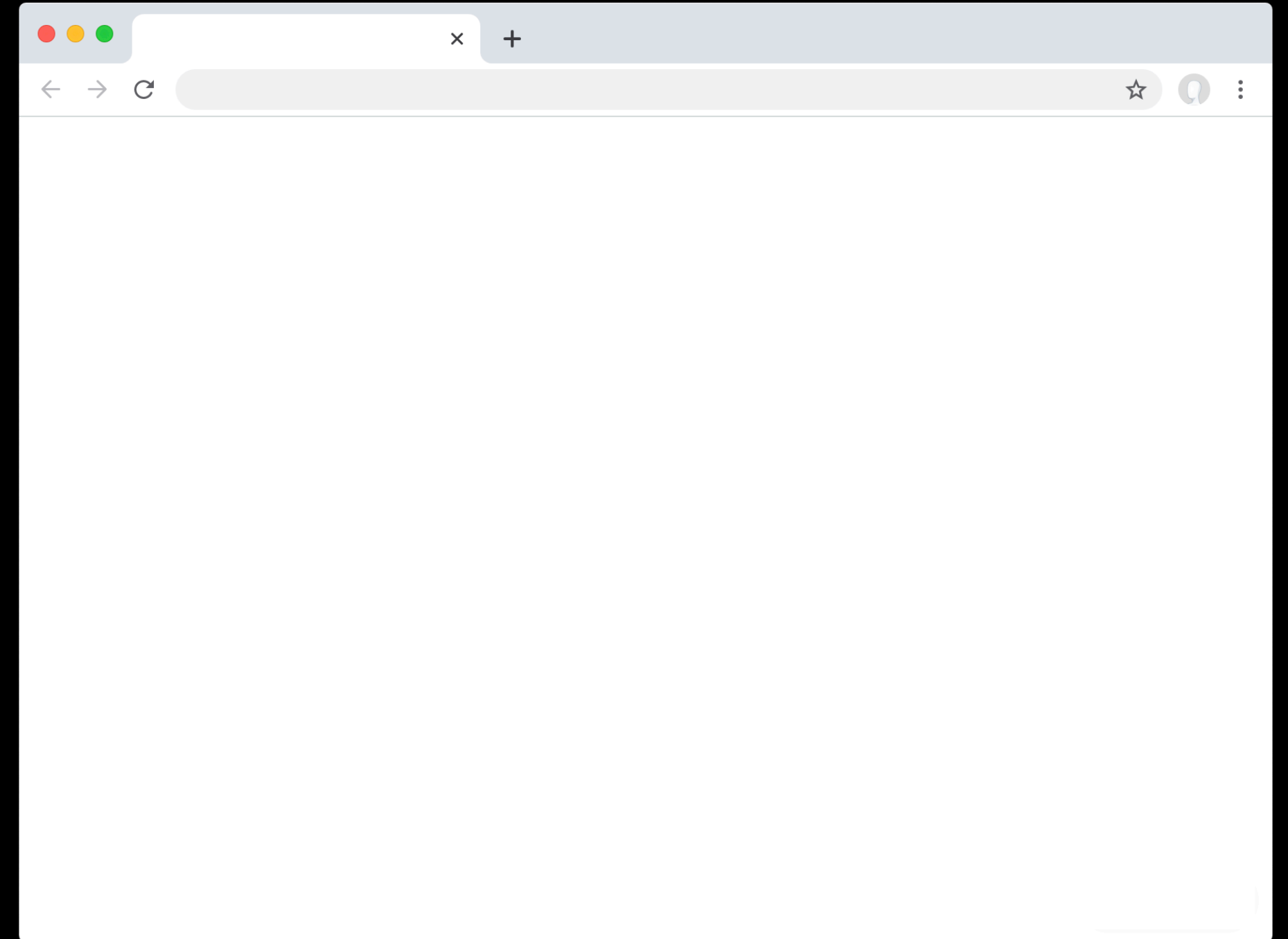


JavaScript

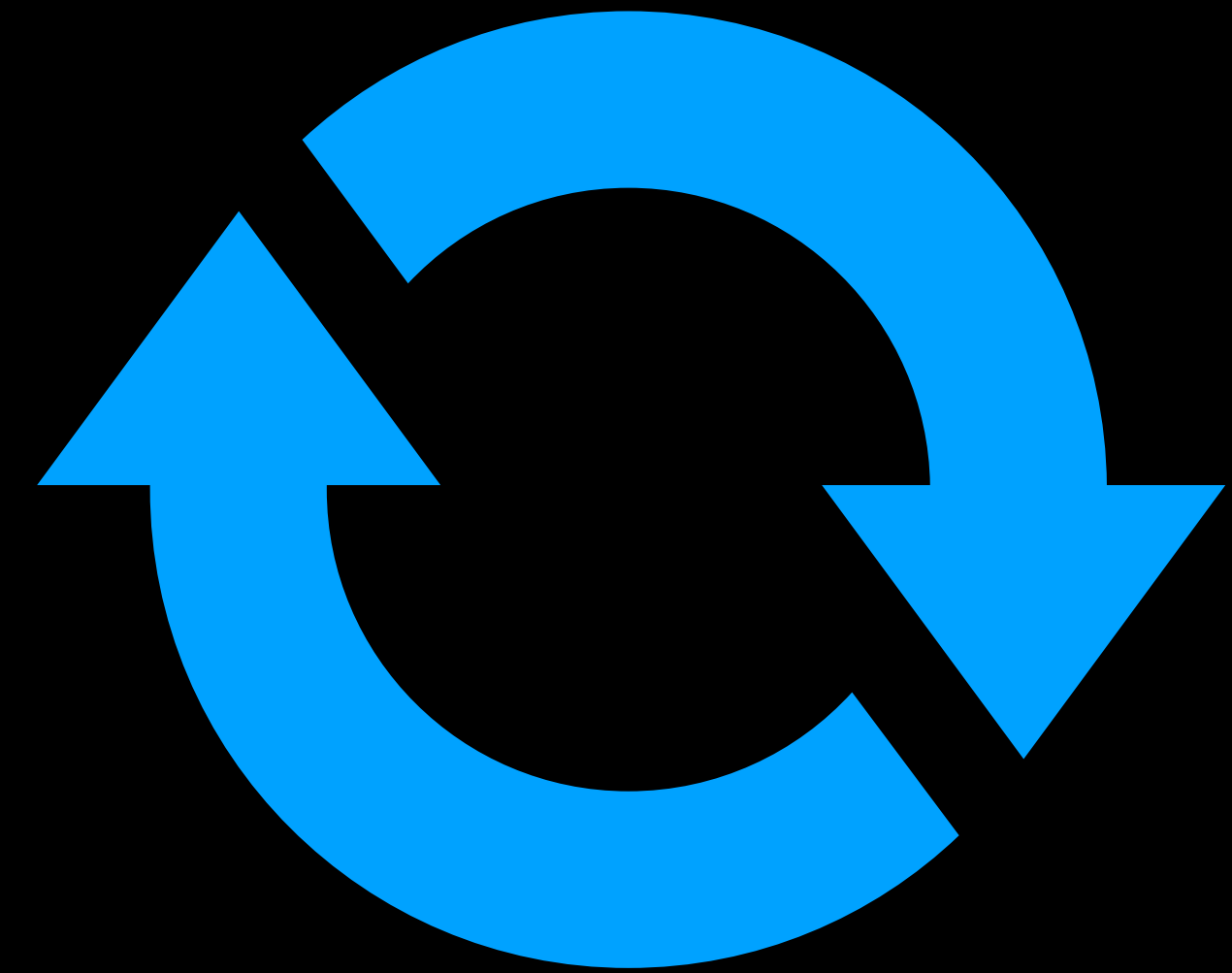
The JavaScript logo, featuring the letters 'JS' in a bold, black, sans-serif font, centered within a solid yellow square.

JS

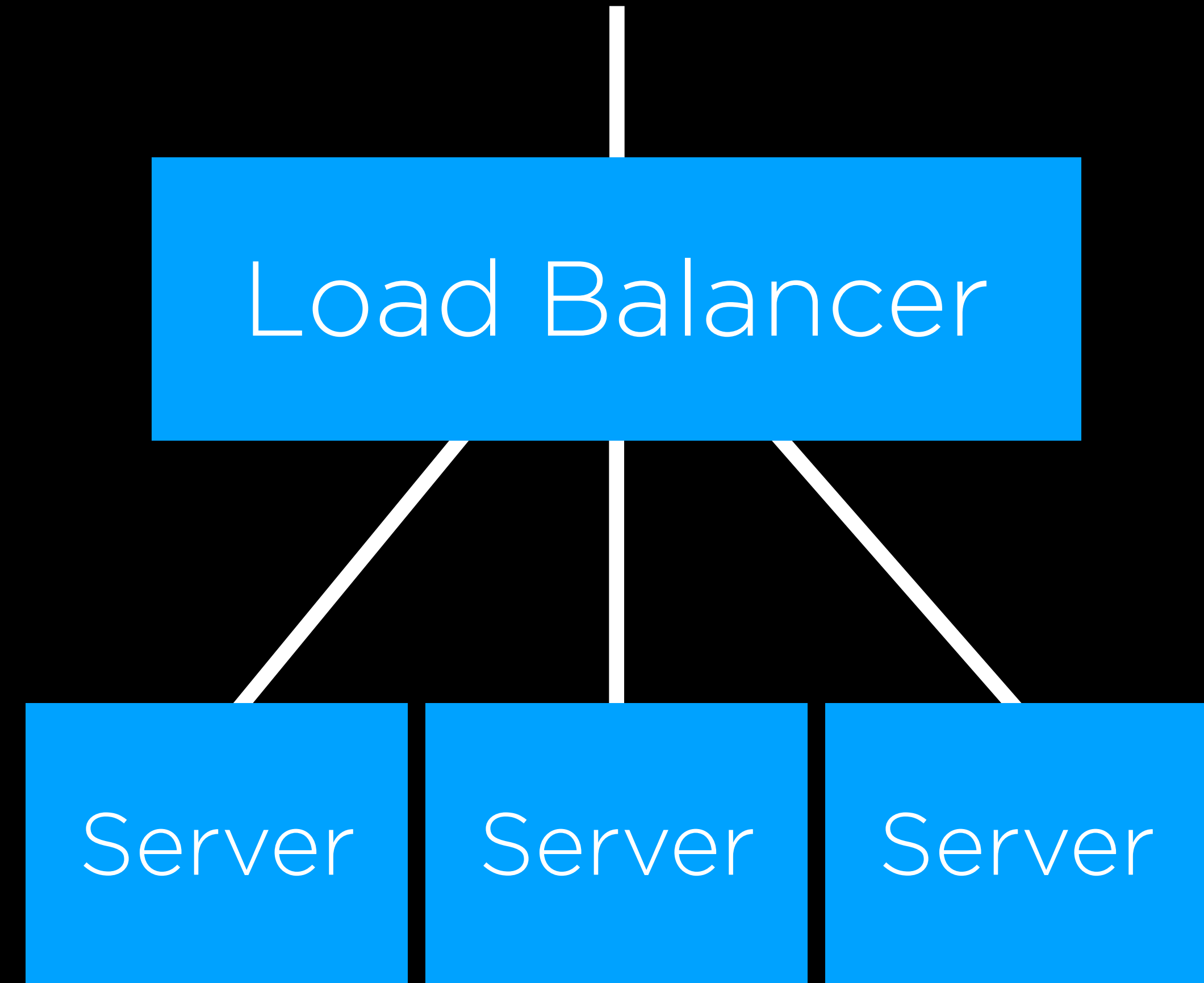
User Interfaces



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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<!DOCTYPE html>
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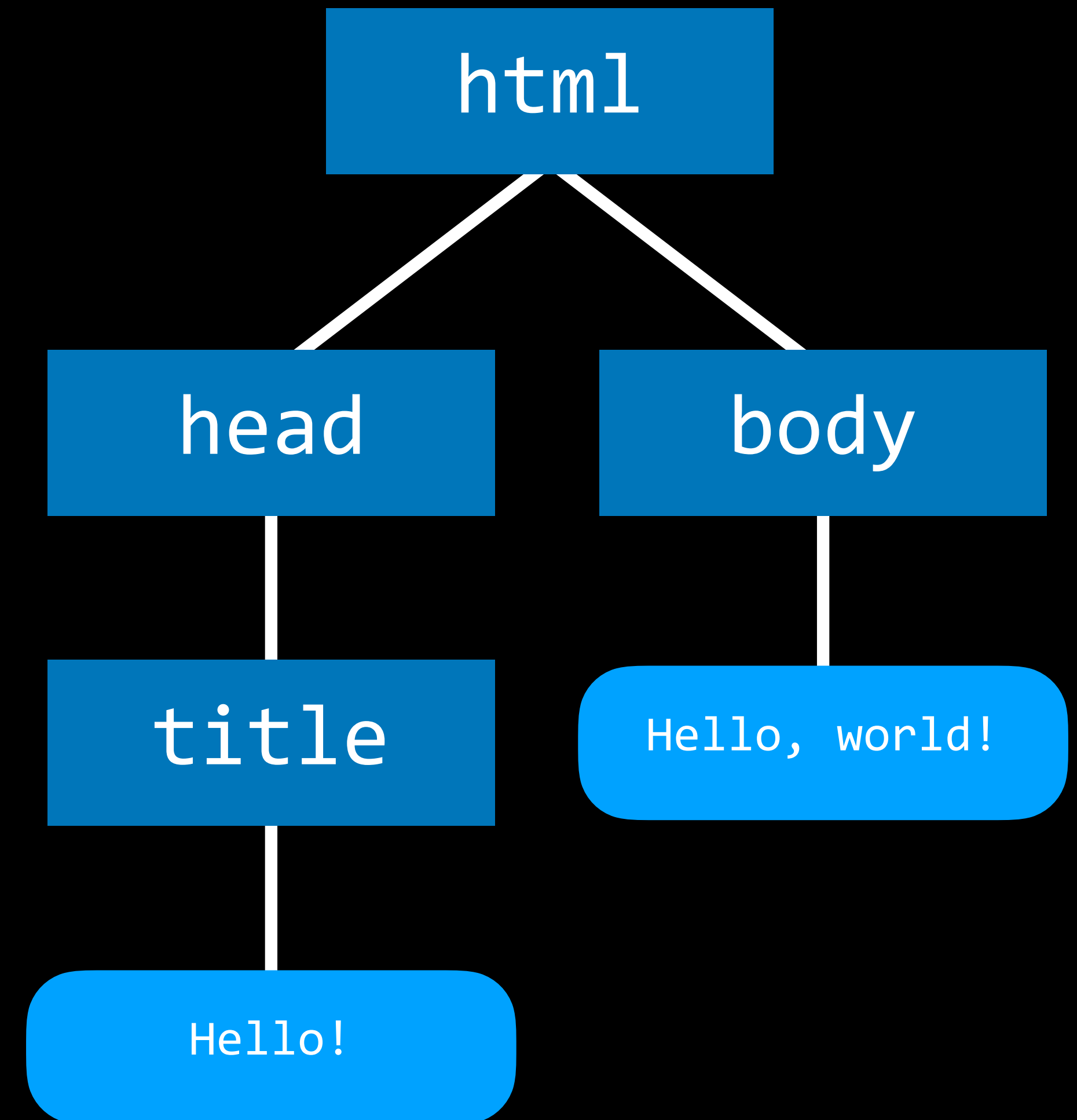
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Document Object Model

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



Common HTML Tags

- `<h1>`, `<h2>`, ..., `<h6>`
- ``, ``
- ``
- `<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 |

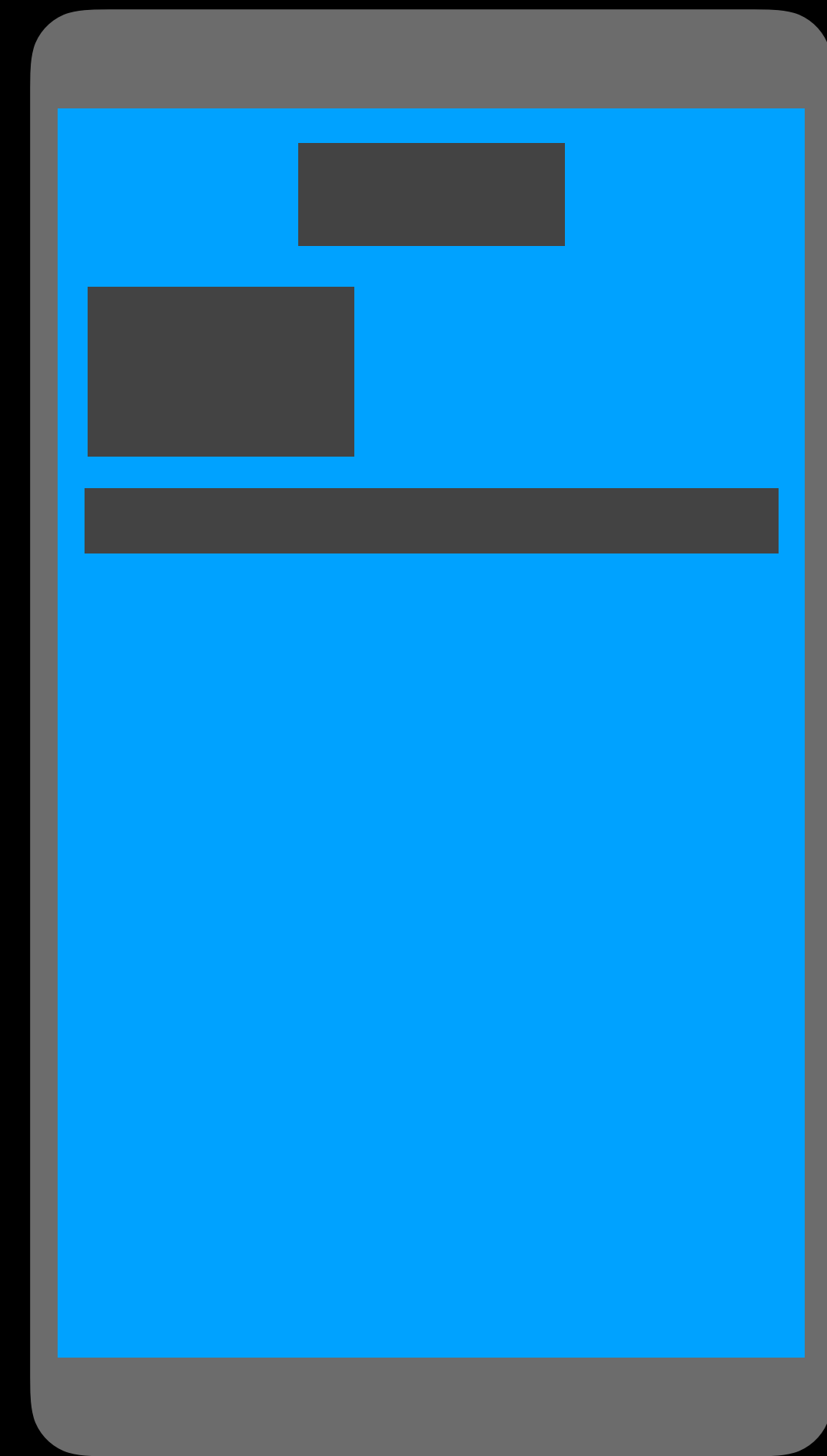
Responsive Design

Responsive Design

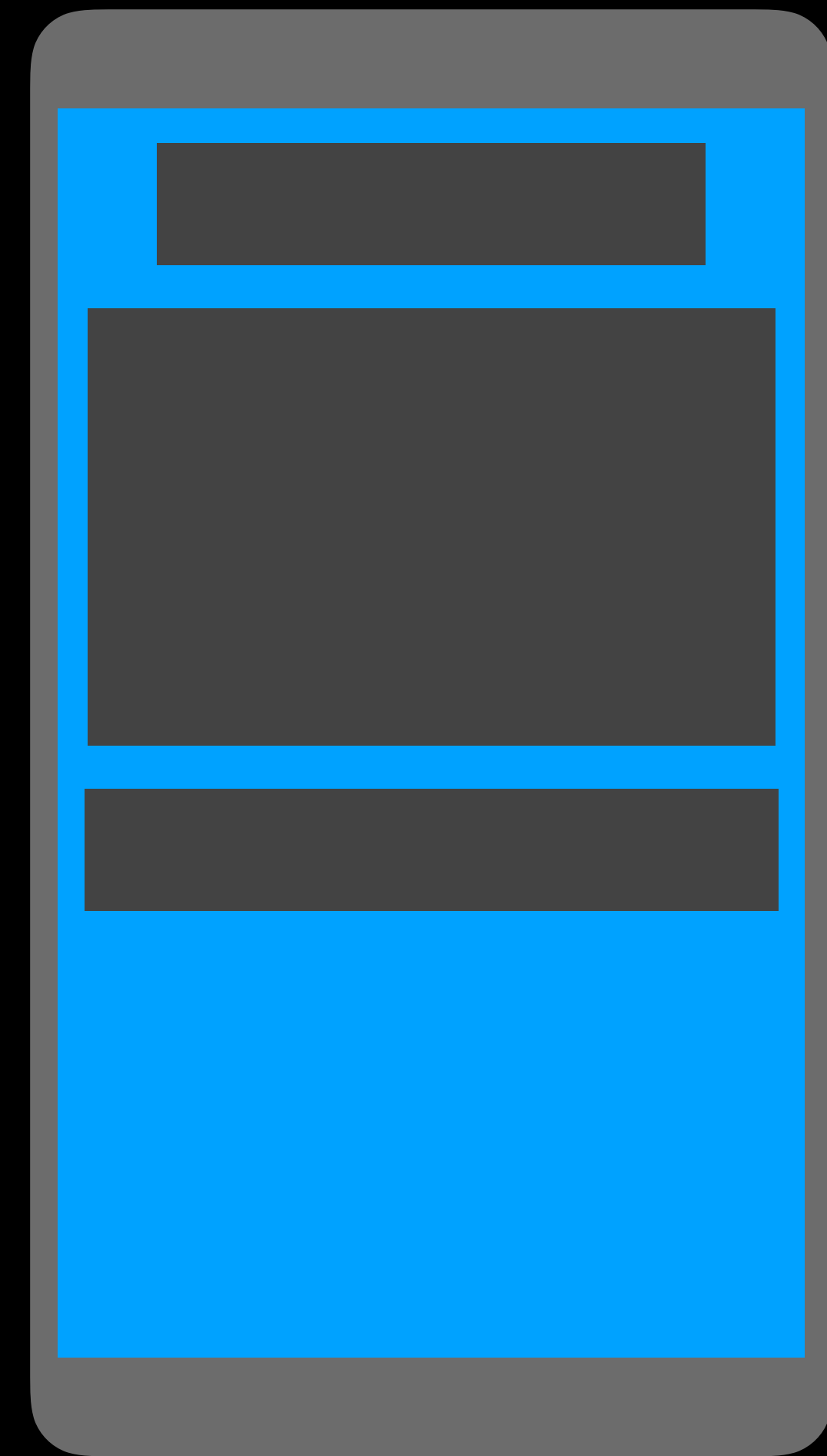
- viewport
- Media Queries
- Flexbox
- Grids

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

Viewport



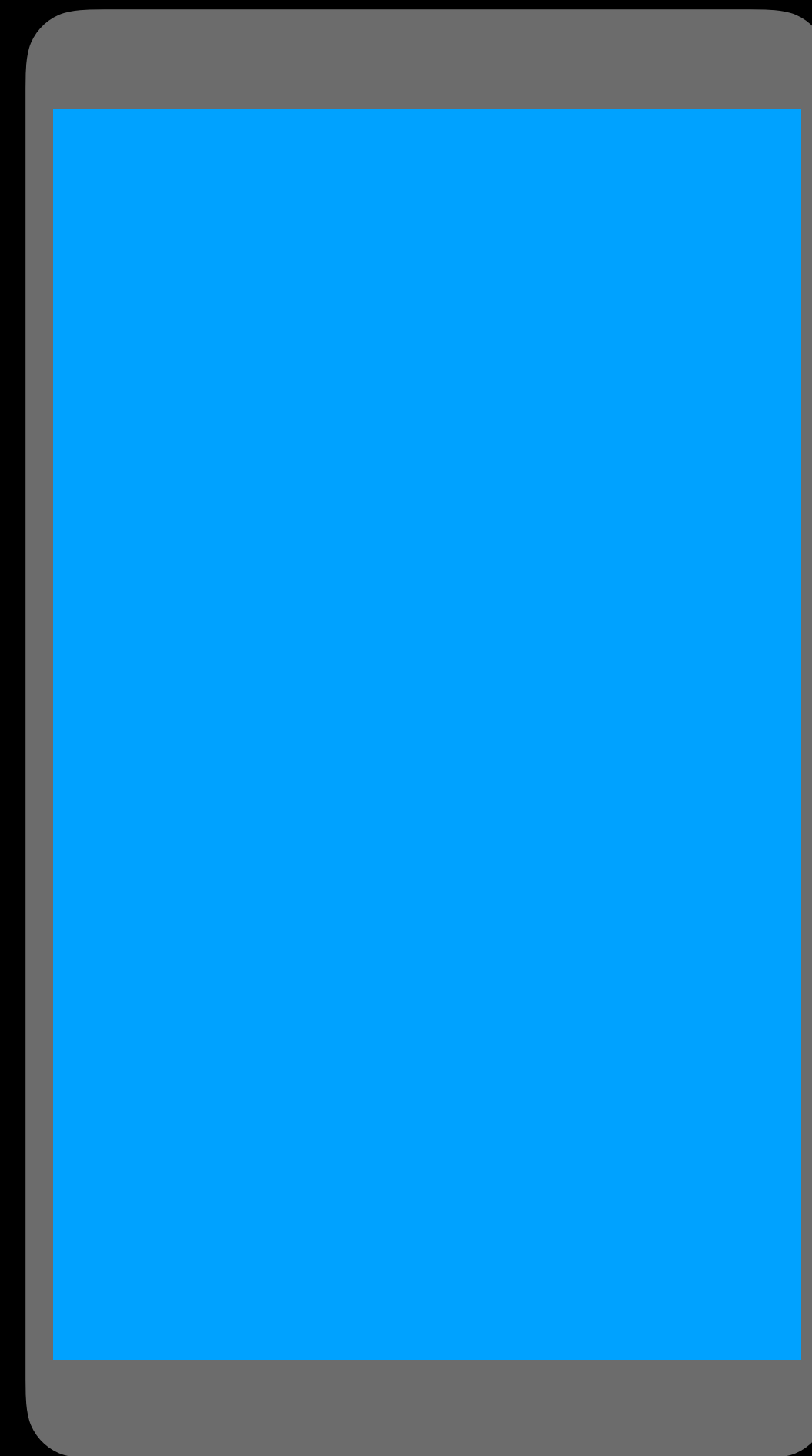
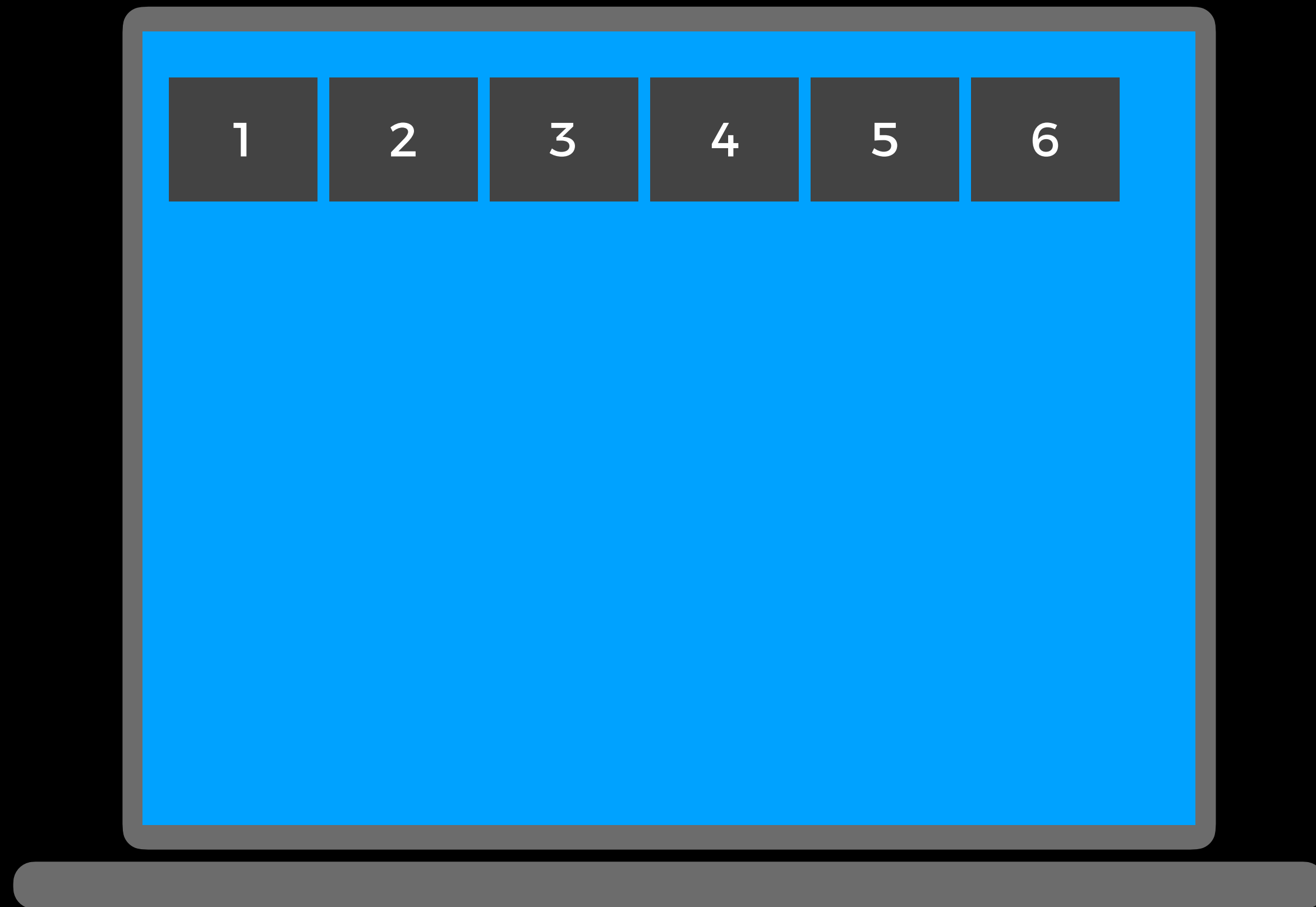
Viewport



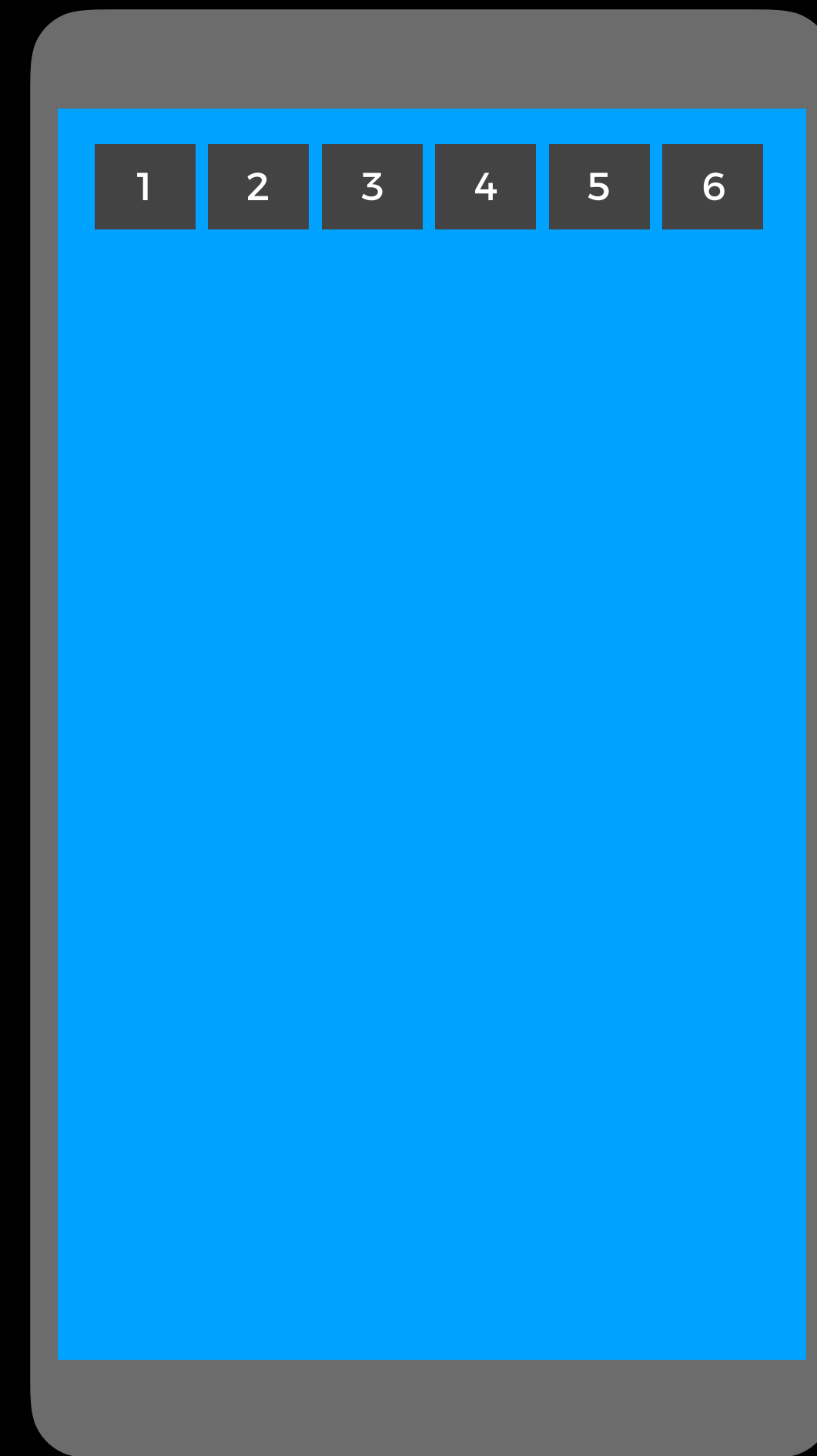
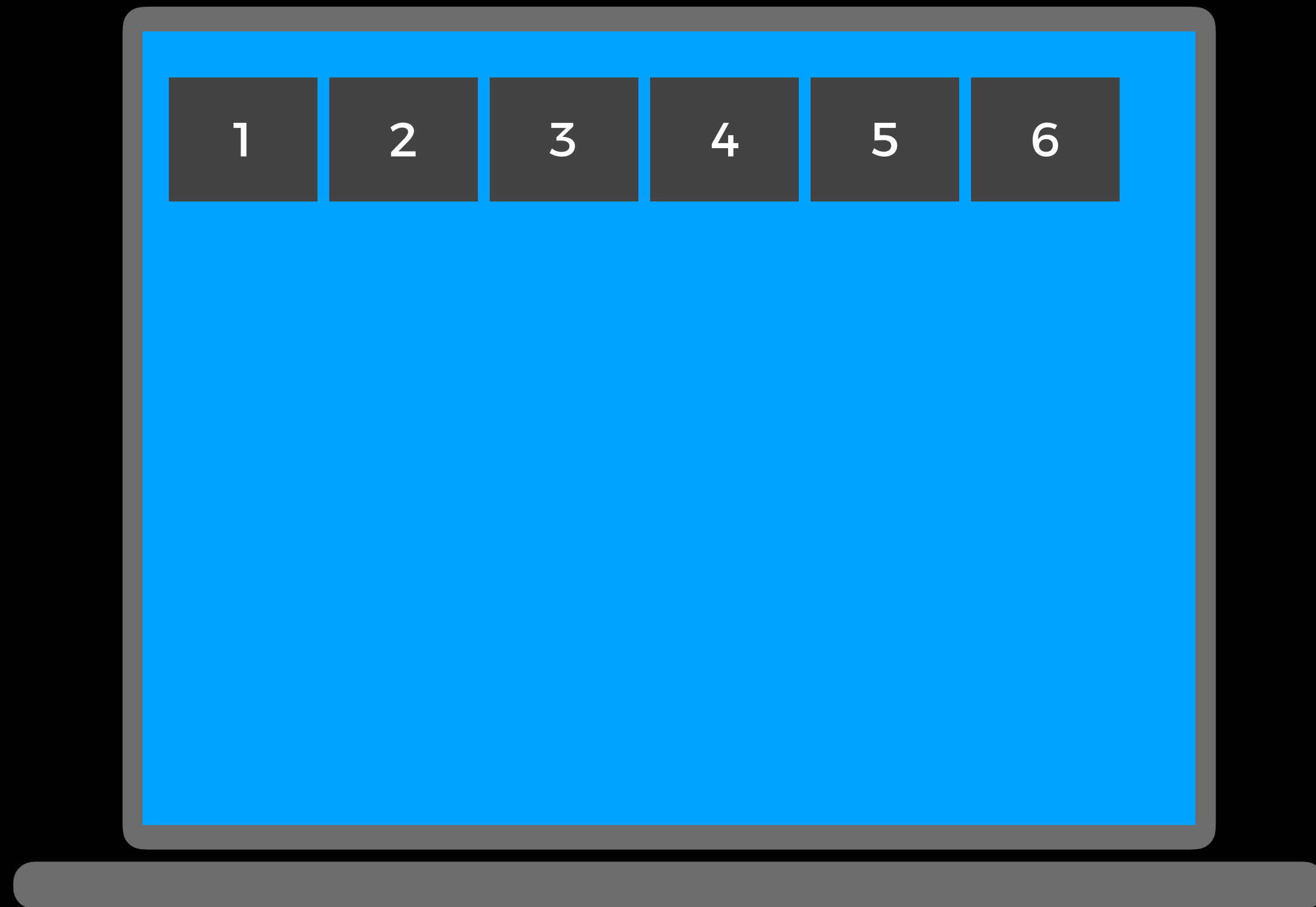
Media Queries

- Media Types: print, screen, ...
- Media Features: height, width, orientation, ...

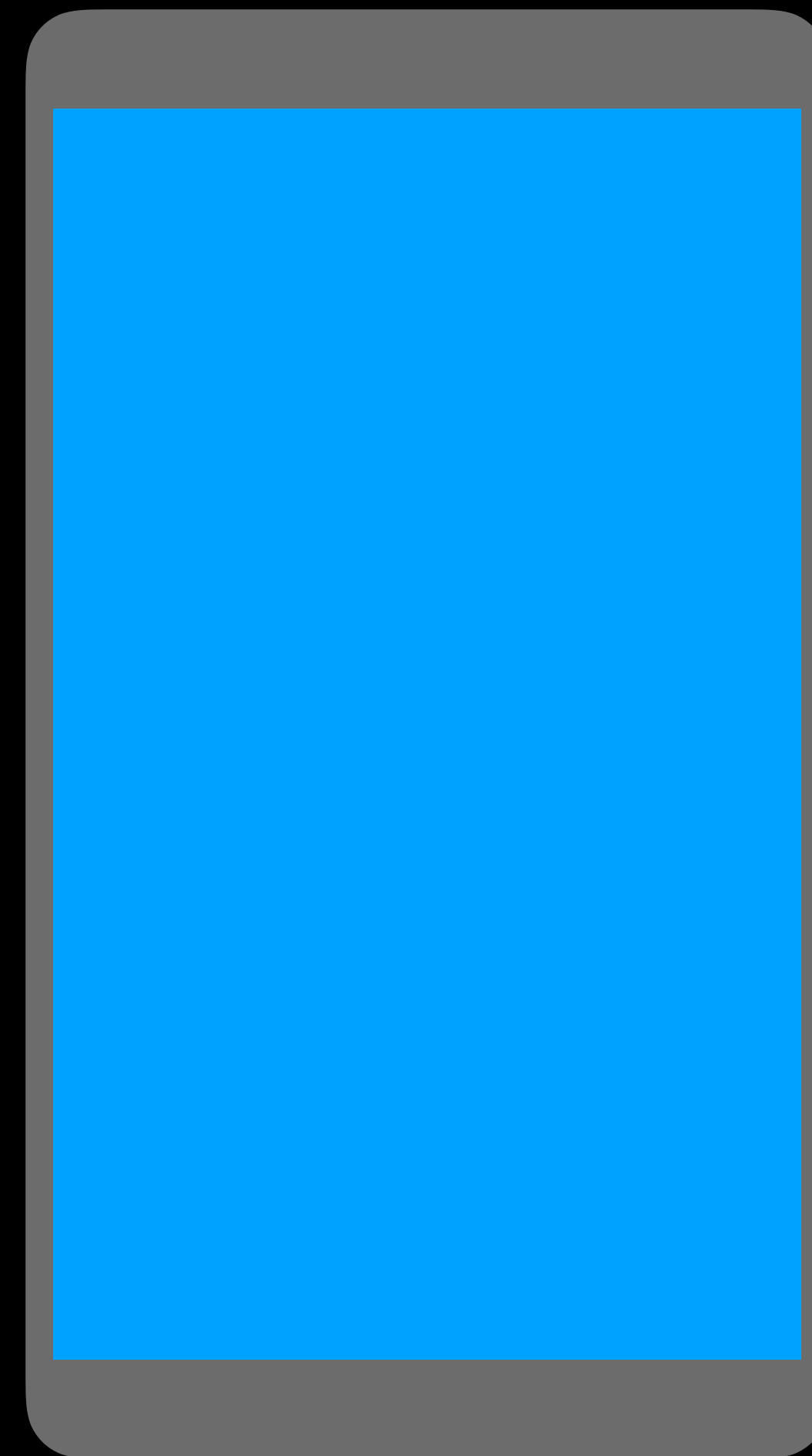
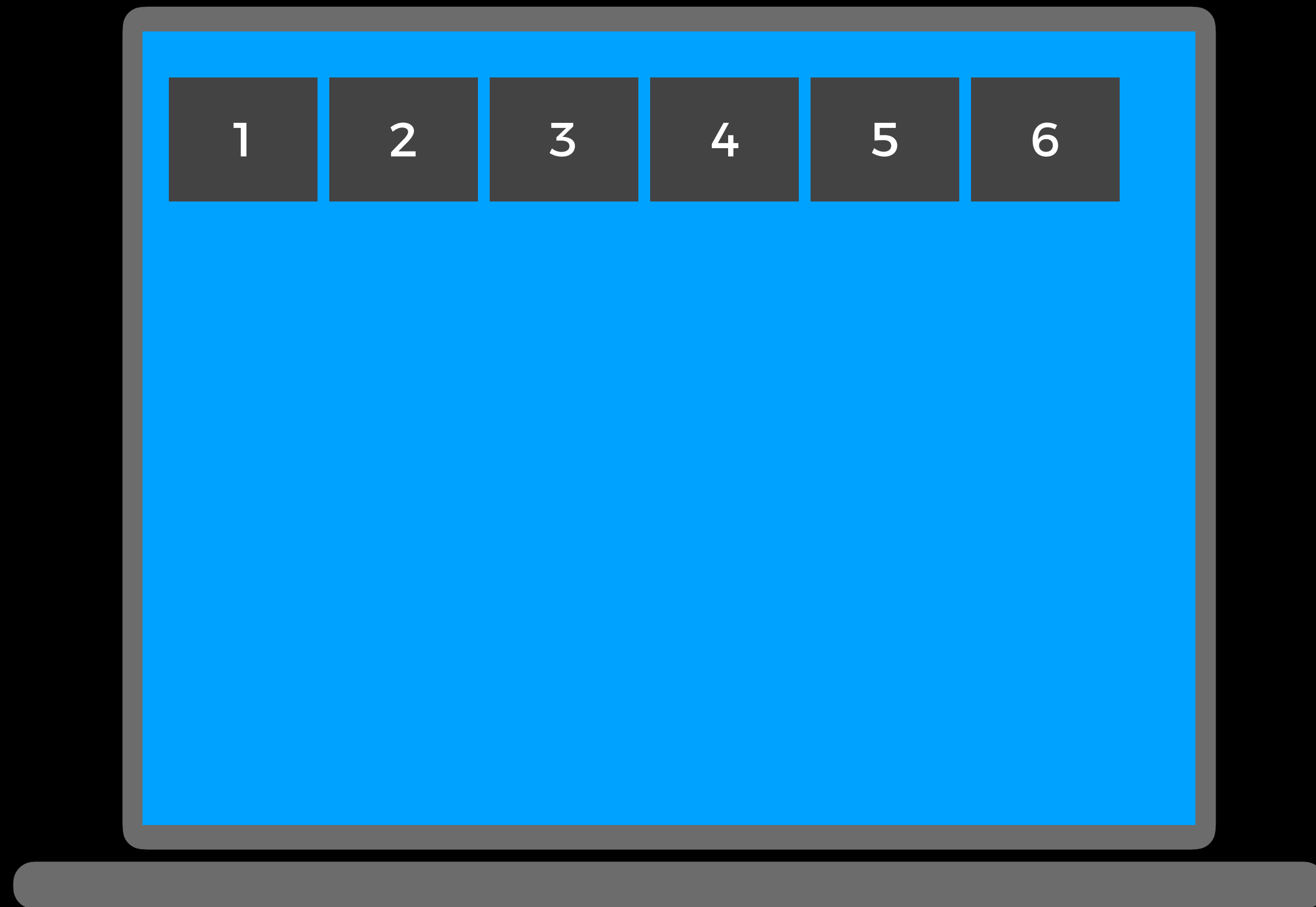
Flexbox



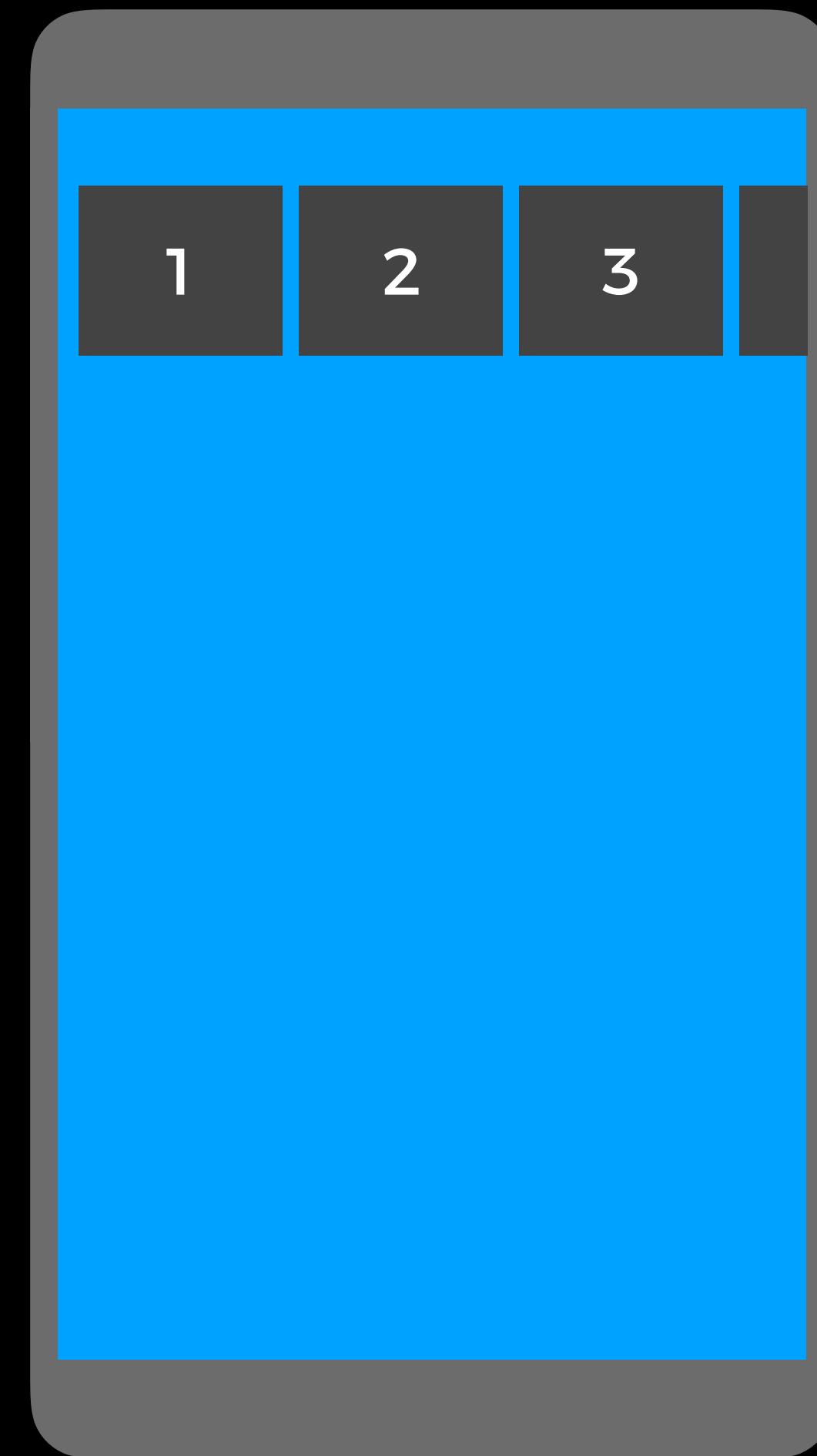
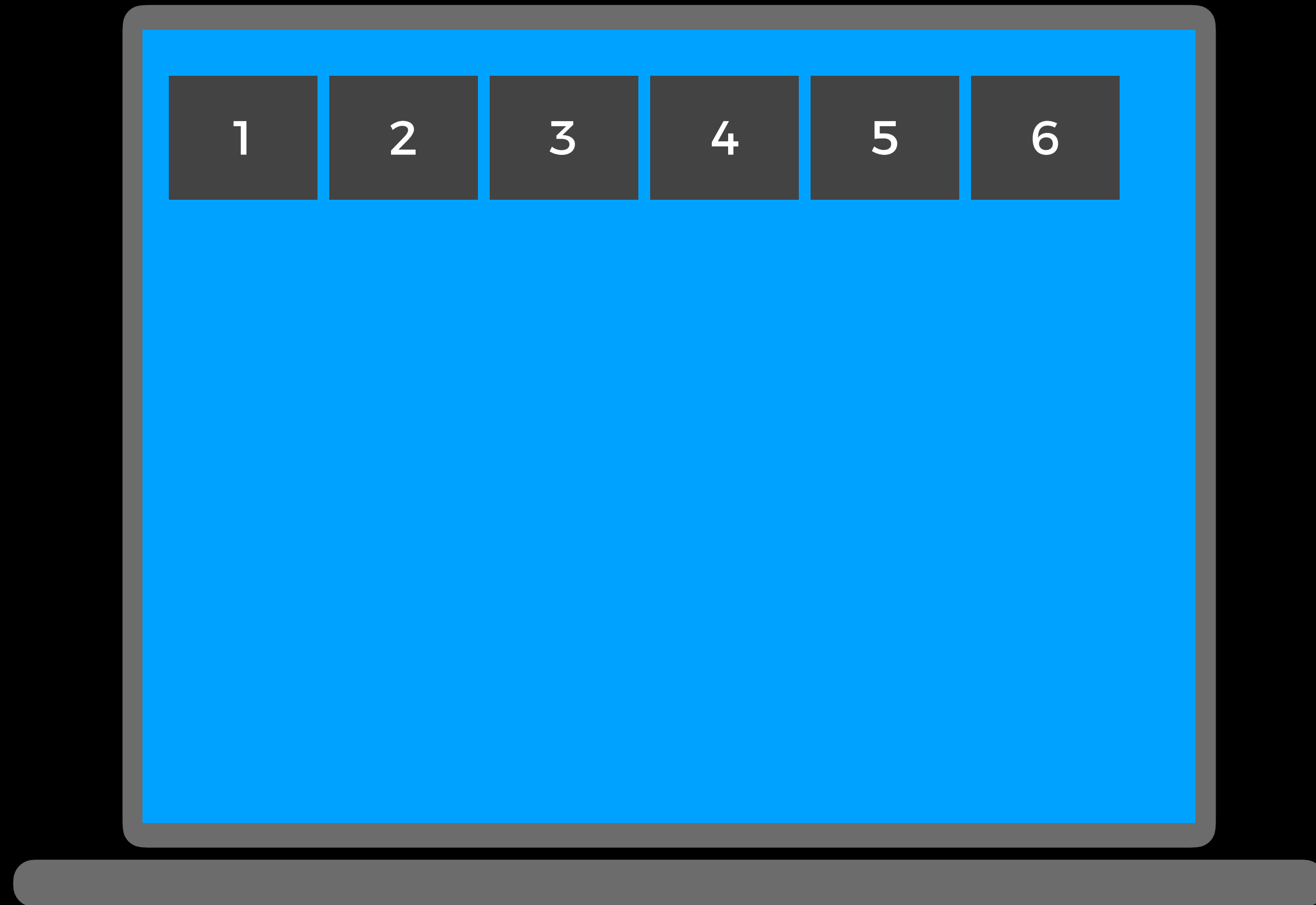
Flexbox



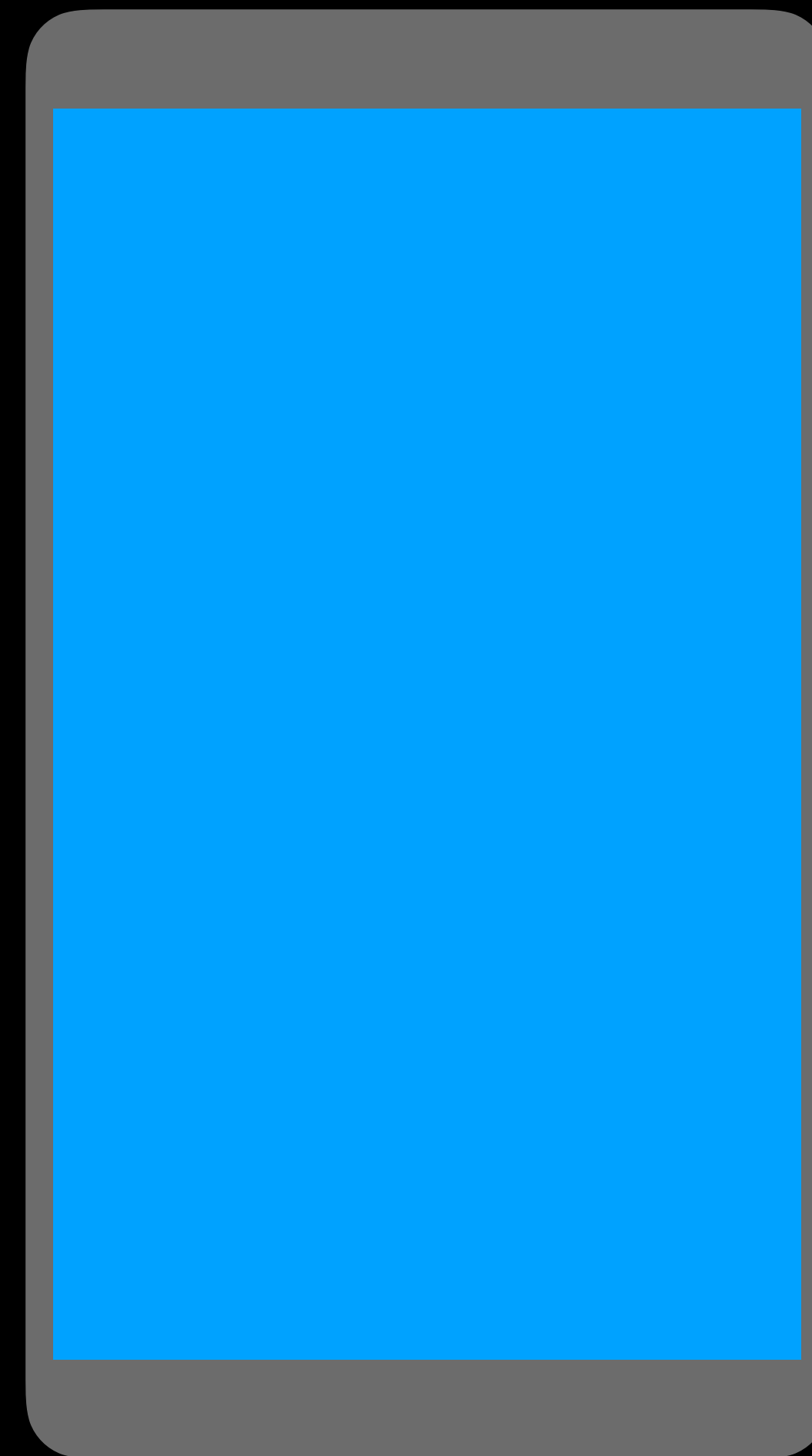
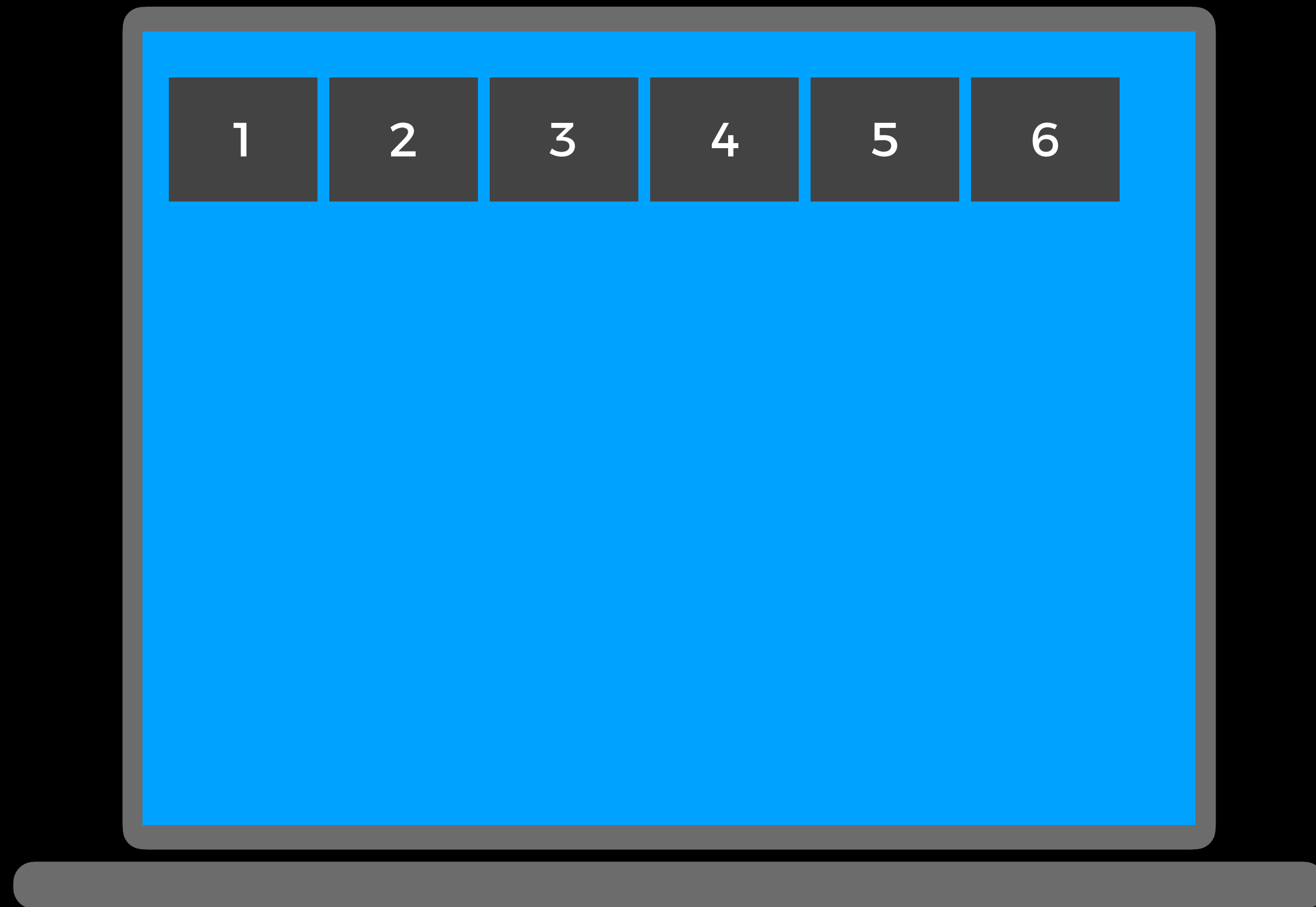
Flexbox



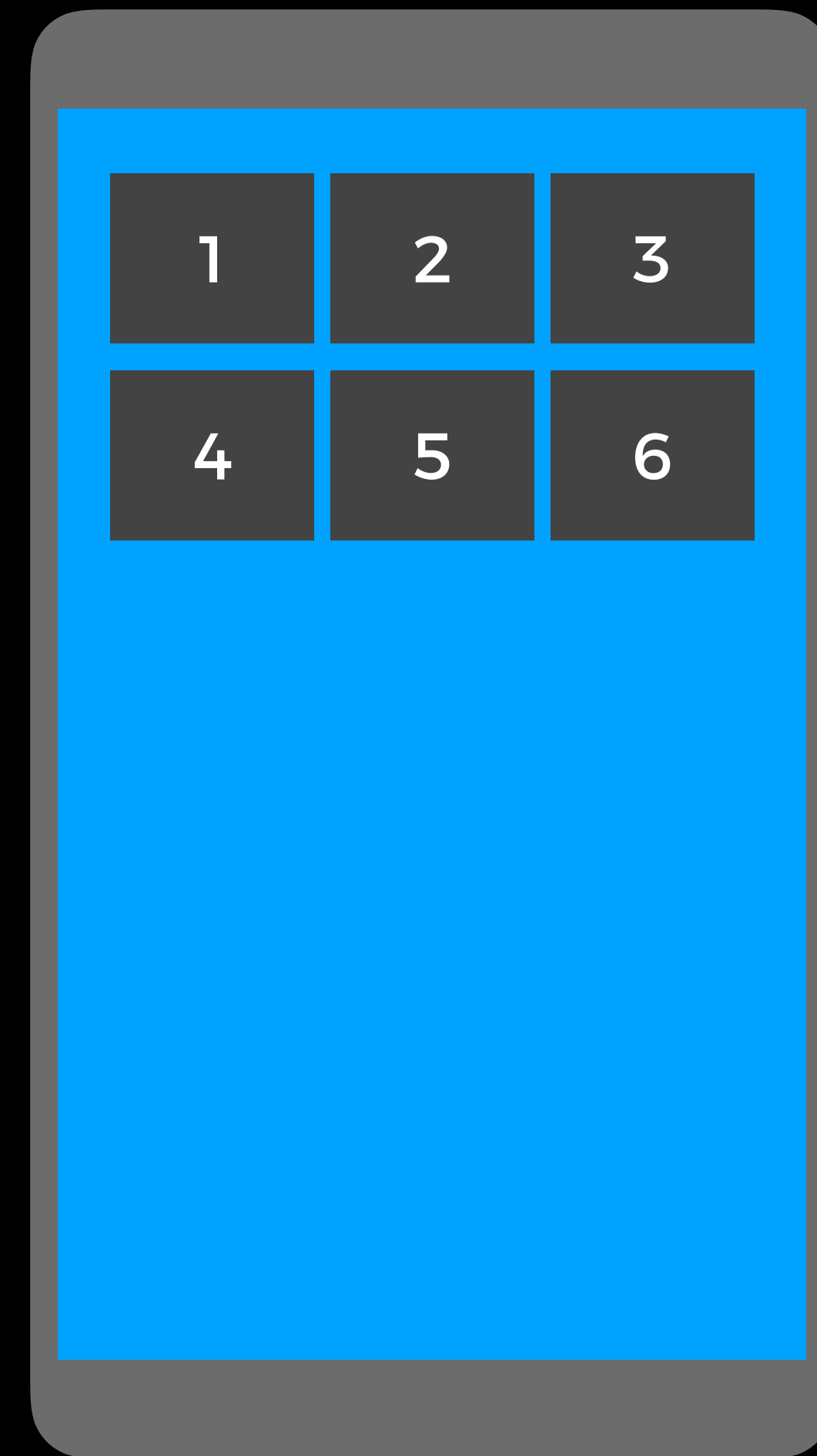
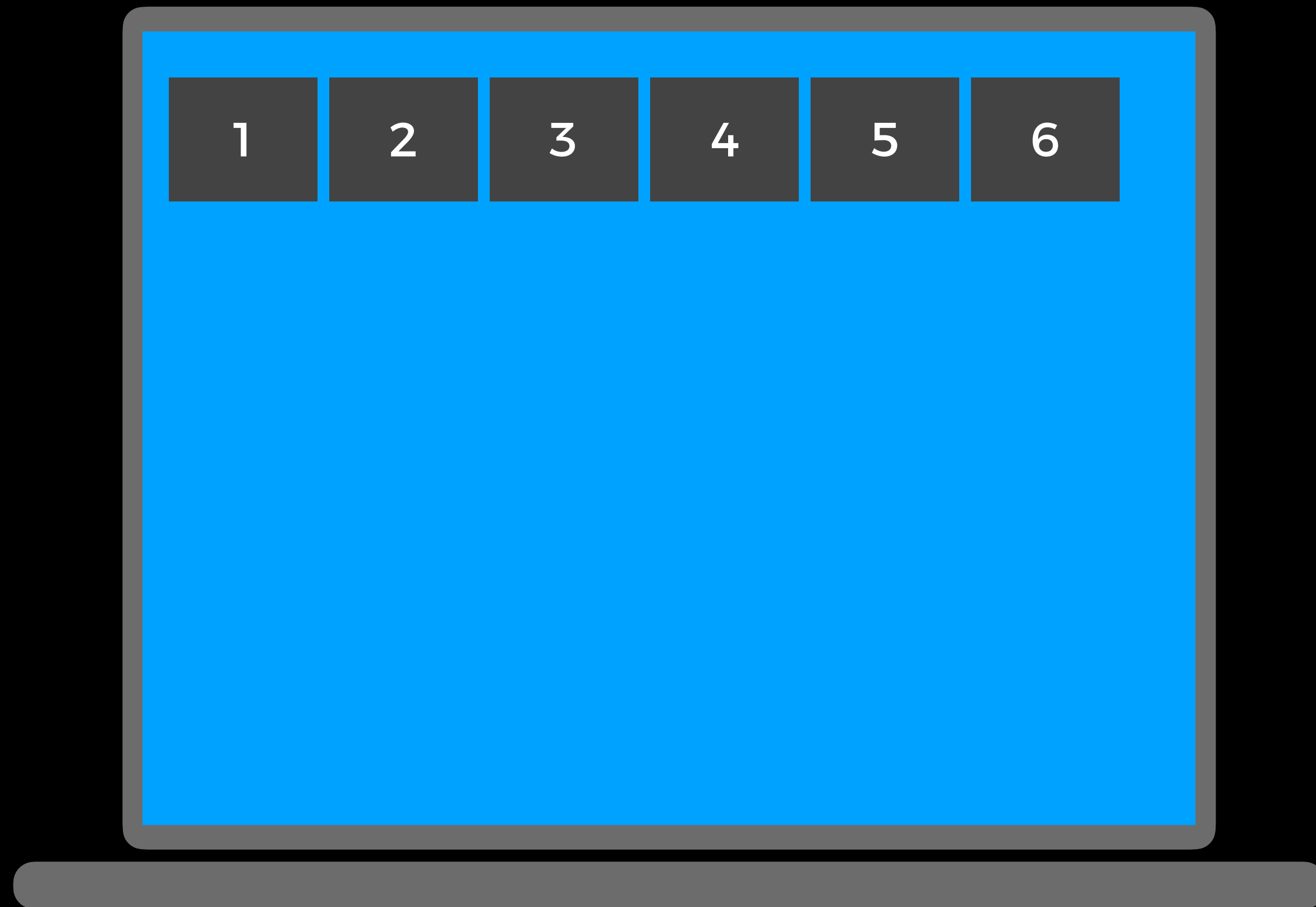
Flexbox



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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