

# React Native

Chiang Mai Maker Club

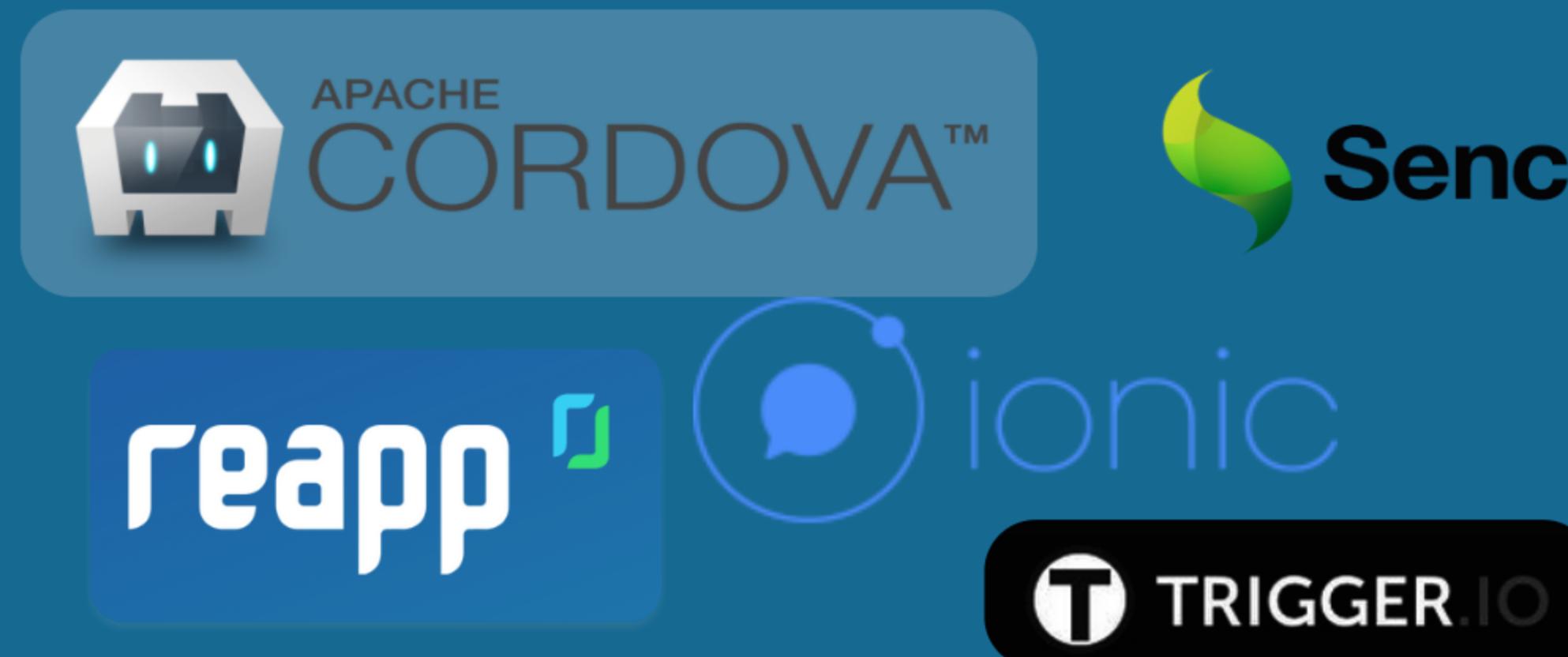
<http://cmmc.io/iot-rn.pdf>

# Mobile Development Options

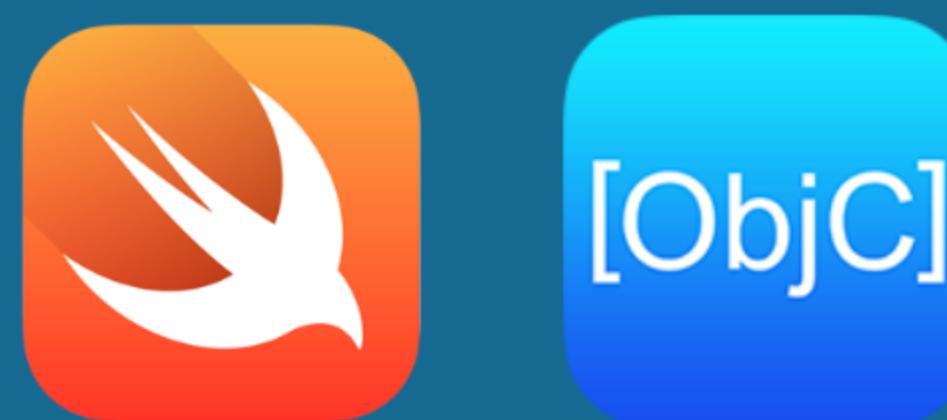
- Native
- Hybrid
- HTML5

# Tools to build mobile apps

## Webviews & basic JS bridge (& hybrid)



## Native



## Compile to Native binary



## Native components via JS bridge



techcrunch.com

My Sites Reader

TC News Startups Mobile Gadgets Enterprise Trending ↗ Pokemon Tesla Amazon

# Mark Zuckerberg: Our Biggest Mistake Was Betting Too Much On HTML5

Posted Sep 11, 2012 by Drew Olanoff (@drew)

Next Story



Today, Mark Zuckerberg revealed that Facebook's mobile strategy relied too much on HTML5, rather than native applications. Not only was this a big mistake with mobile, but Zuckerberg says that its biggest mistake period was the focus on HTML5. This is the first time that the Facebook CEO has openly admitted this, but things are looking good for the new iOS native app. According to Zuckerberg, people are consuming twice as many feed stories since the update to the new iOS app, which is great.

*The first half year has been a little bit slow on product, but for the next six months I expect a lot of really cool stuff.*

This "really cool stuff" will probably have monetization in mind, as it's very clear that mobile path to ad revenue for the company.

Screenshot of the GitHub repository page for [facebook/react-native](#).

The repository has the following statistics:

- Watched by 2,462 users
- Starred 34,931 times
- Forked 7,445 times

Key navigation links include: Code, Issues (921), Pull requests (206), Wiki, Pulse, and Graphs.

The current branch is set to master.

Commits are listed by date:

- Commits on Feb 13, 2015**
  - Update react-docgen** by fkling committed on Feb 13, 2015. Commit hash: [2f322bf](#)
  - Adding react-docgen for documentation generation** by fkling committed on Feb 13, 2015. Commit hash: [ba7021f](#)
  - setup twitter feed and google analytics** by vjeux committed on Feb 13, 2015. Commit hash: [bd53b41](#)
- Commits on Feb 12, 2015**
  - updated copyright year** by galenandrew committed on Feb 12, 2015. Commit hash: [f10bdd2](#)
  - Initial version of the website and docs.** by vjeux committed on Feb 12, 2015. Commit hash: [9231d4f](#)
  - [ReactNative] Add warning when using onScroll without throttleScrollIC...** by vjeux committed on Feb 12, 2015. Commit hash: [dd78b09](#)

The screenshot shows a web browser window displaying the React Native documentation at [facebook.github.io/react-native/docs/getting-started.html](https://facebook.github.io/react-native/docs/getting-started.html). The page title is "Getting Started". The left sidebar contains navigation links for "THE BASICS" (Getting Started, Tutorial, Props, State, Style, Height and Width, Layout with Flexbox, Handling Text Input, Using a ScrollView, Using a ListView, Networking, More Resources), "GUIDES" (Integration With Existing Apps, Colors, Images, Handling Touches, Animations, Accessibility, Timers, Direct Manipulation, Debugging, Testing, JavaScript Environment, Navigation, Performance, Upgrading, Platform Specific Code, Gesture Responder System), "GUIDES (IOS)" (Native Modules, Native UI Components, Linking Libraries, Running On Device, Running On Simulator, Communication between native and React Native), and "GUIDES (ANDROID)" (Native Modules, Native UI Components, Running On Device). The main content area includes a "Edit on GitHub" link, a welcome message, instructions for iOS and Android development, and sections for dependencies (Windows + Android) and testing your React Native installation.

# Getting Started

Welcome to React Native! This page will help you install React Native on your system, so that you can build apps with it right away. If you already have React Native installed, you can skip ahead to the [Tutorial](#).

The instructions are a bit different depending on your development operating system, and whether you want to start developing for iOS or Android. If you want to develop for both iOS and Android, that's fine - you just have to pick one to start with, since the setup is a bit different.

Mobile OS: [iOS](#) [Android](#) Development OS: [Mac](#) [Linux](#) [Windows](#)

## Dependencies for Windows + Android

You will need node.js, the React Native command line tools, Watchman, and Android Studio. We recommend installing node.js and Python2 via [Chocolatey](#), a popular package manager for Windows. Open a Command Prompt as Administrator, then run:

```
choco install nodejs.install  
choco install python2
```

Node comes with npm, which lets you install the React Native command line interface.

```
npm install -g react-native-cli
```

Download and install [Android Studio](#). If you plan to make changes in Java code, we recommend [Gradle Daemon](#) which speeds up the build.

## Testing your React Native Installation

Use the React Native command line tools to generate a new React Native project called "AwesomeProject", then run `react-native run-android` inside the newly created folder.

```
react-native init AwesomeProject  
cd AwesomeProject  
react-native run-android
```

If everything is set up correctly, you should see your new app running in your Android emulator shortly.

```
1 import React, { Component, } from 'react';
2 import {
3   AppRegistry,
4   StyleSheet,
5   Text,
6   View,
7 } from 'react-native';
8
9 class App extends Component {
10   render() {
11     return (
12       <View style={styles.container}>
13         <Text style={styles.welcome}>
14           Welcome to React Native!
15         </Text>
16       </View>
17     );
18   }
19 }
20
21 const styles = StyleSheet.create({
22   container: {
23     flex: 1,
24     justifyContent: 'center',
25     alignItems: 'center',
26     backgroundColor: '#F5FCFF',
27   },
28   welcome: {
29     fontSize: 20,
30     textAlign: 'center',
31     margin: 10,
32   },
33 });
34
35 AppRegistry.registerComponent('App', () => App);
```

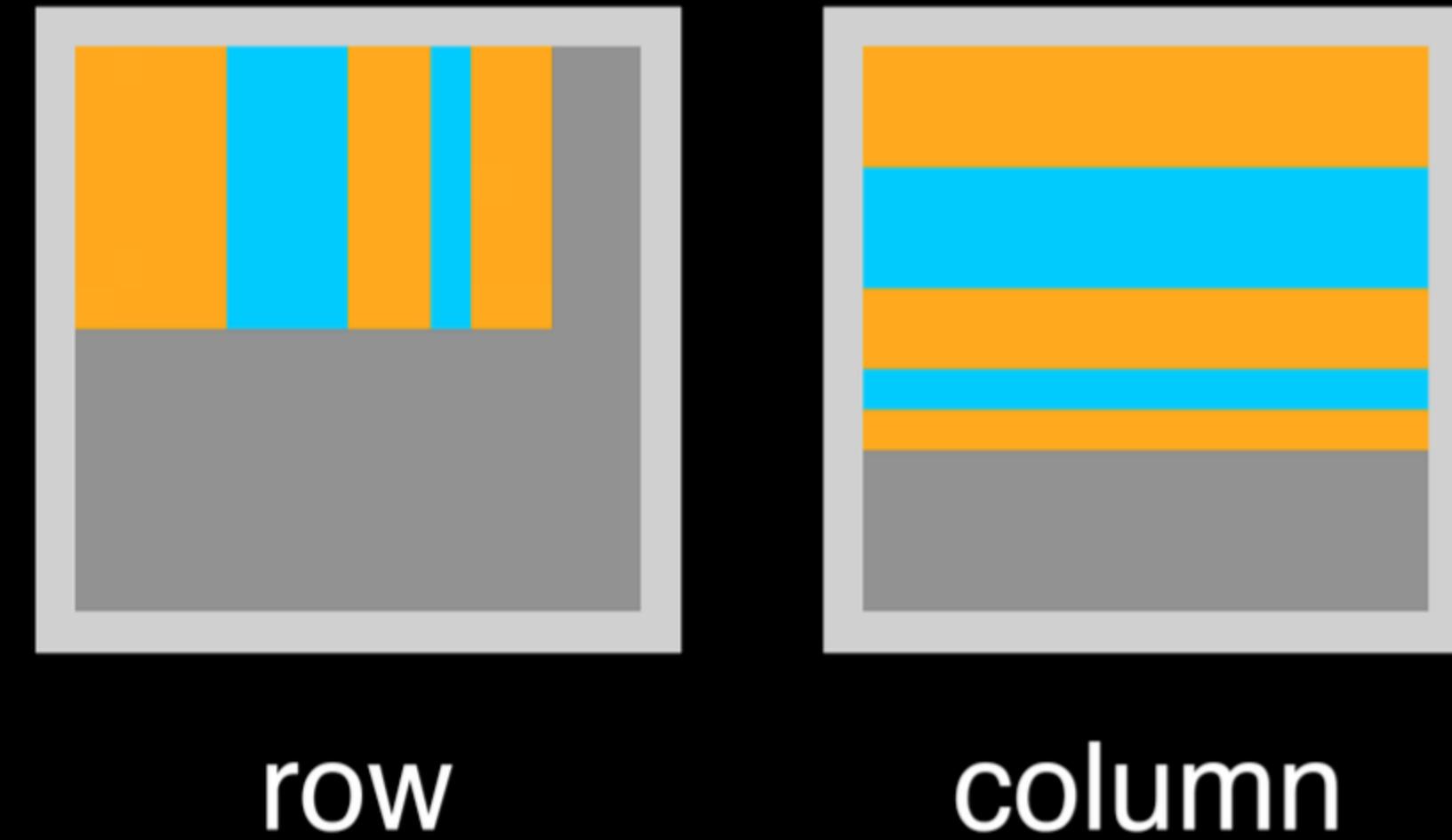


<http://dabbott.github.io/react-native-web-player/>

# FLEX DIRECTION

`flexDirection: 'row' | 'column' (default)`

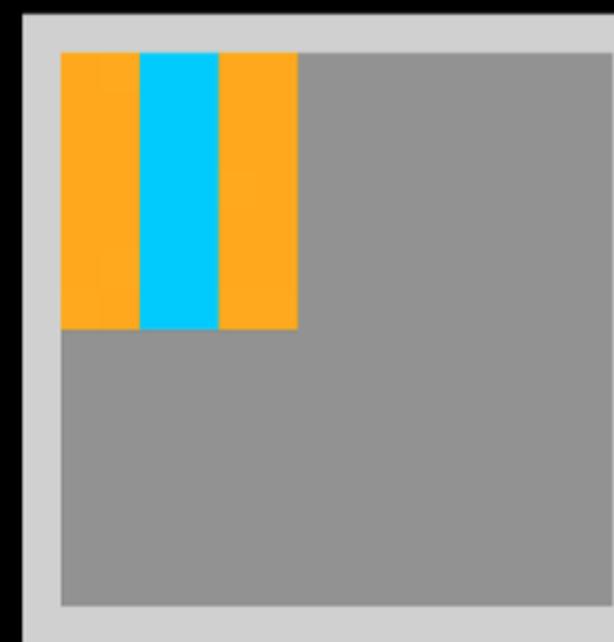
This defines the main axis along which subviews are stacked.



# JUSTIFY CONTENT

```
justifyContent: 'flex-start' (default) | 'center' | 'flex-end' |  
'space-between' | 'space-around'
```

This defines how views align along the main axis.



flex-start



center



flex-end



space-between



space-around

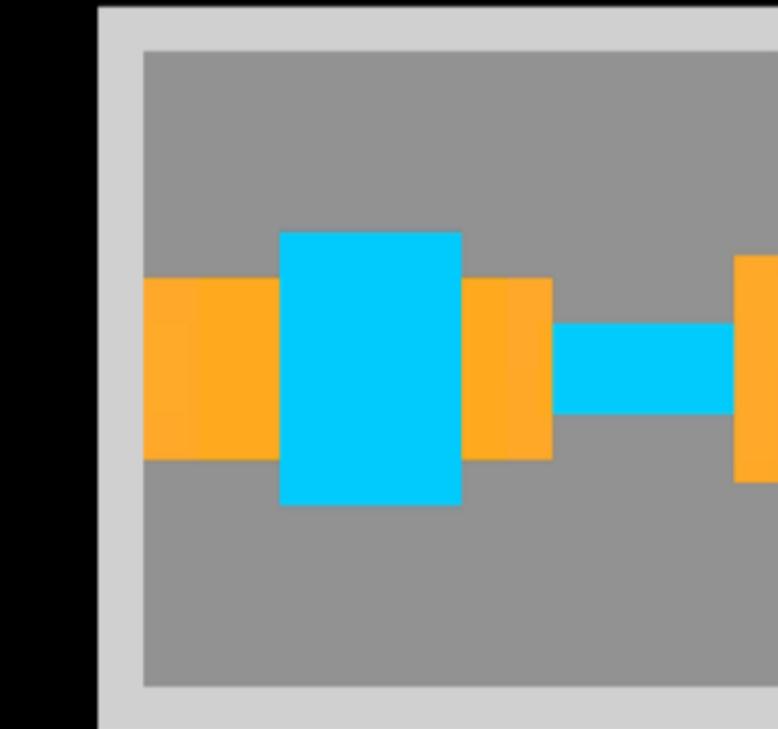
# ALIGN ITEMS

alignItems: 'flex-start' (default) | 'center' | 'flex-end'

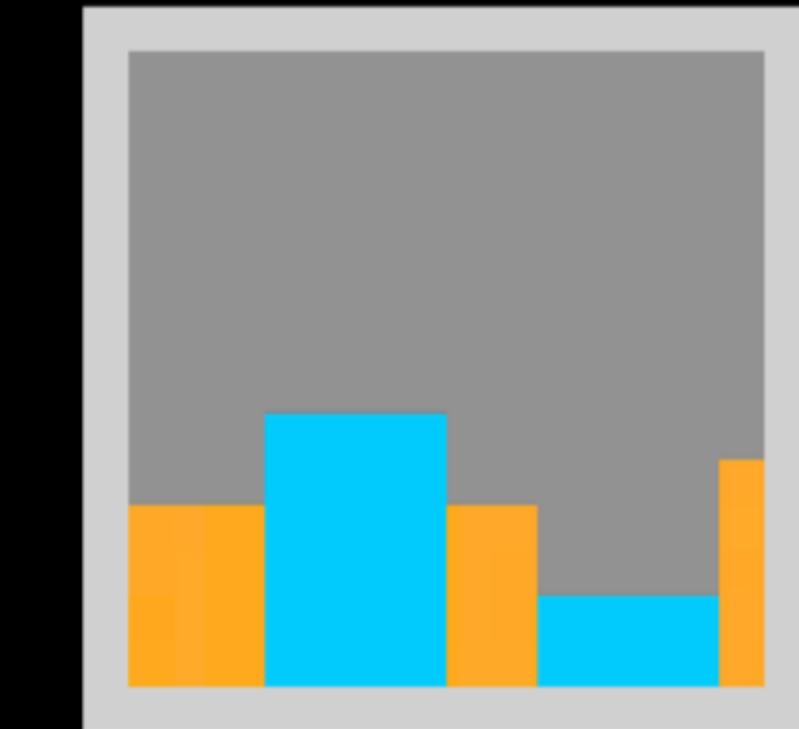
This defines how views align along the cross axis.



flex-start



center



flex-end

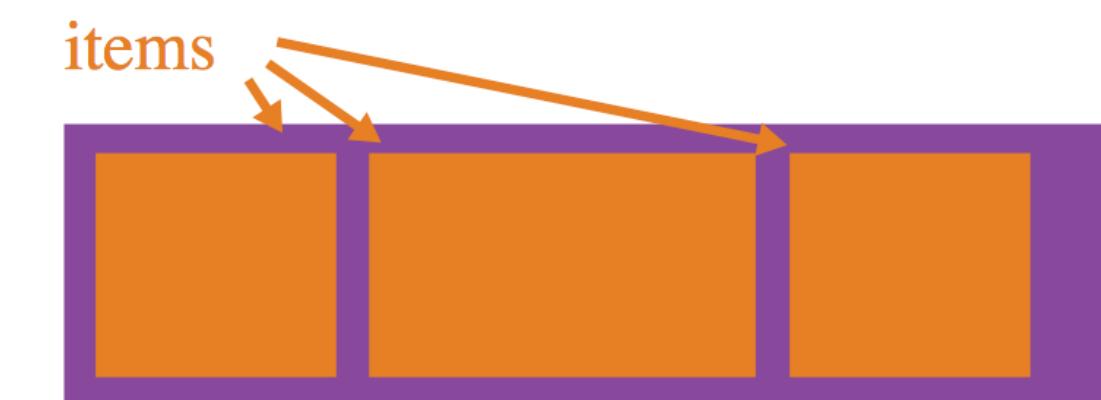
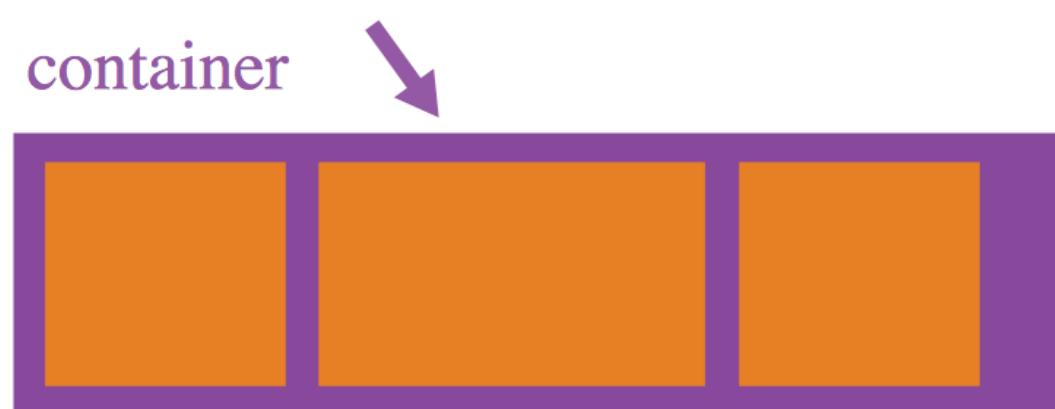


# A Complete Guide to Flexbox

BY [CHRIS COYIER](#) LAST UPDATED ON MAY 18, 2016

## ► Background

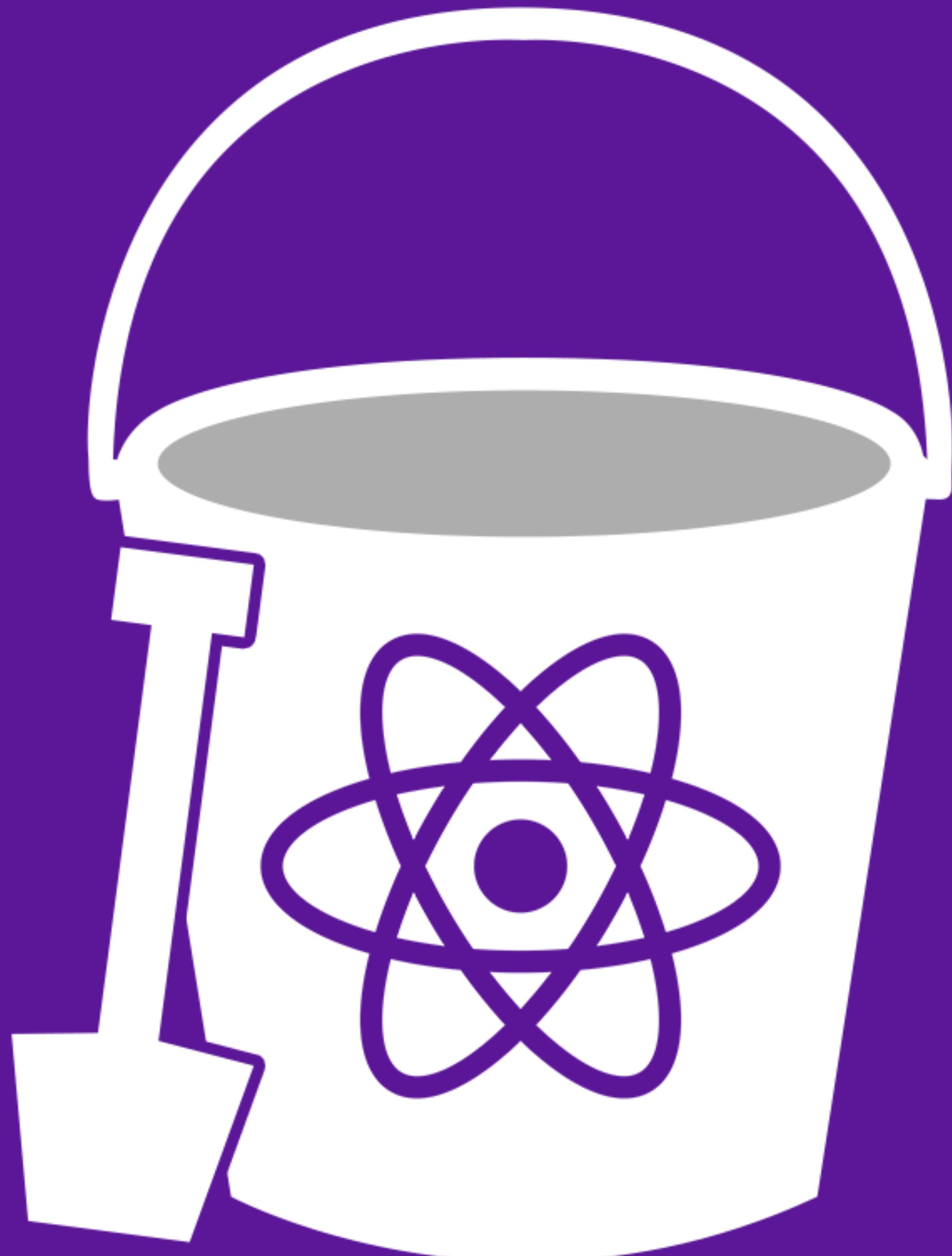
## ► Basics & Terminology



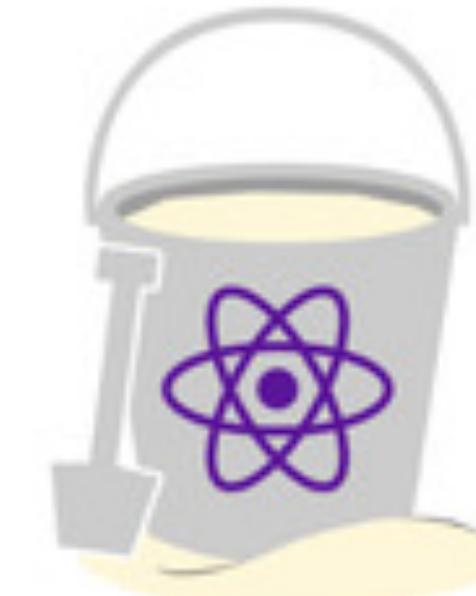
**Properties for the  
Parent**

**Properties for the  
Children**

<http://rnplay.org>



# React Native Playground



Run React Native apps from  
[rnplay.org](http://rnplay.org) directly on your device.

Get started by trying apps on the *Explore* tab, or  
login to your rnplay.org account in *My Apps*.

## How do I exit a loaded app?

Tap and hold the screen with two fingers  
simultaneously for 1.5 seconds.

## What does target mean?

The target React Native version for an app. An  
app might not behave if the target is different than  
the our bundled React Native version.



Explore



My Apps



Direct URL



Scan Code



About



CHIANG MAI  
**MAKER**CLUB

rnplay.org

Commits · facebook/react-native Layout with Flexbox – React Native | A framework for building... WorkShopNETPIE-ReactNativeSwitch by compilerexe Fork

Files index.ios.js

index.android.js

index.ios.js

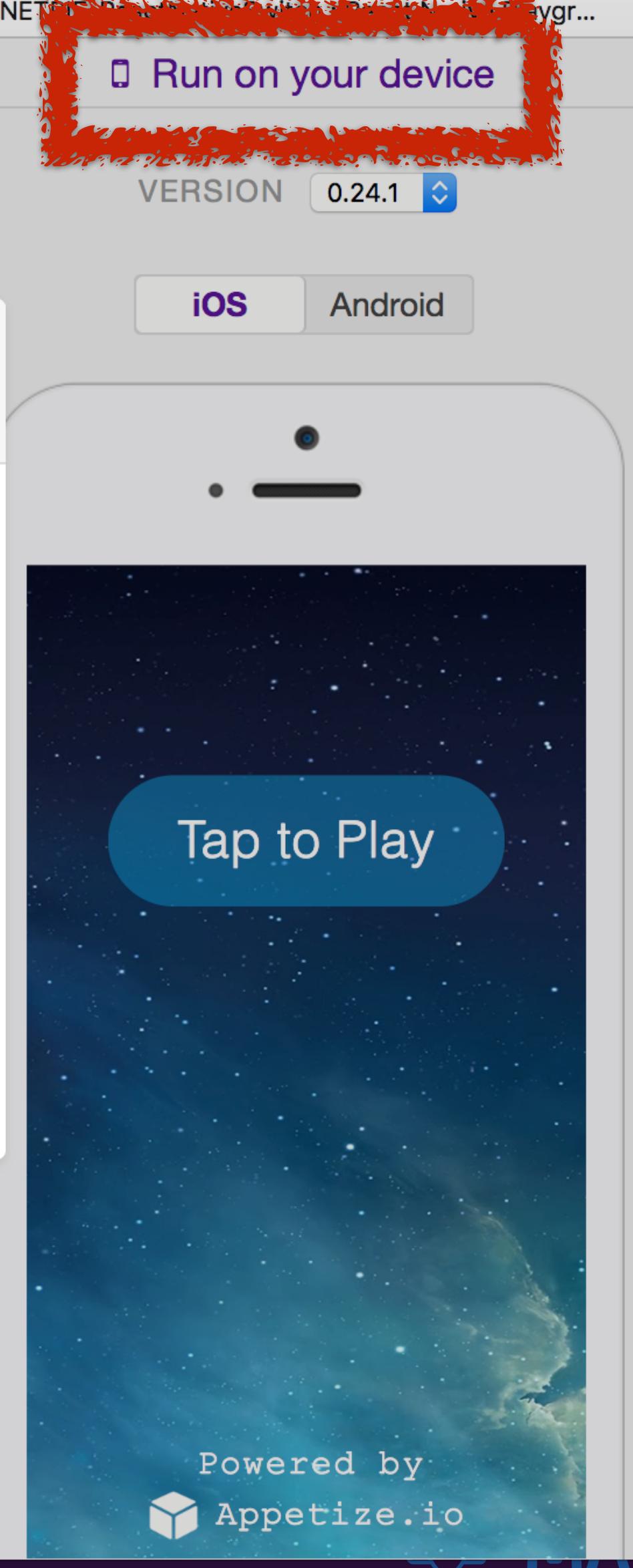
```
1 import React, { Component } from 'react';
2 import {
3   AppRegistry,
4   StyleSheet,
5   Text,
6   TextInput,
7   Switch,
8   View
9 } from 'react-native';
10
11 var WorkShopNETPIE = {
12   getInitialState() {
13     return {
14       topic: 'React Native'
15     }
16   },
17   onChangeTopic(event) {
18     this.setState({topic: event.nativeEvent.text});
19     console.log(this.state.topic);
20   }.bind(this)
21 },
22 render() {
23
24   var onChangeTopic = function(event) {
25     this.setState({topic: event.nativeEvent.text});
26     console.log(this.state.topic);
27   }.bind(this);
28 }
```

Scan this with our iOS app! [Download on the App Store](#)



VERSION 0.24.1

iOS Android



Powered by Appetize.io

Console Logs

# REACT NATIVE!

<http://dabbott.github.io/react-native-web-player/>

<http://bit.ly/react-button>

<http://bit.ly/react-layout>

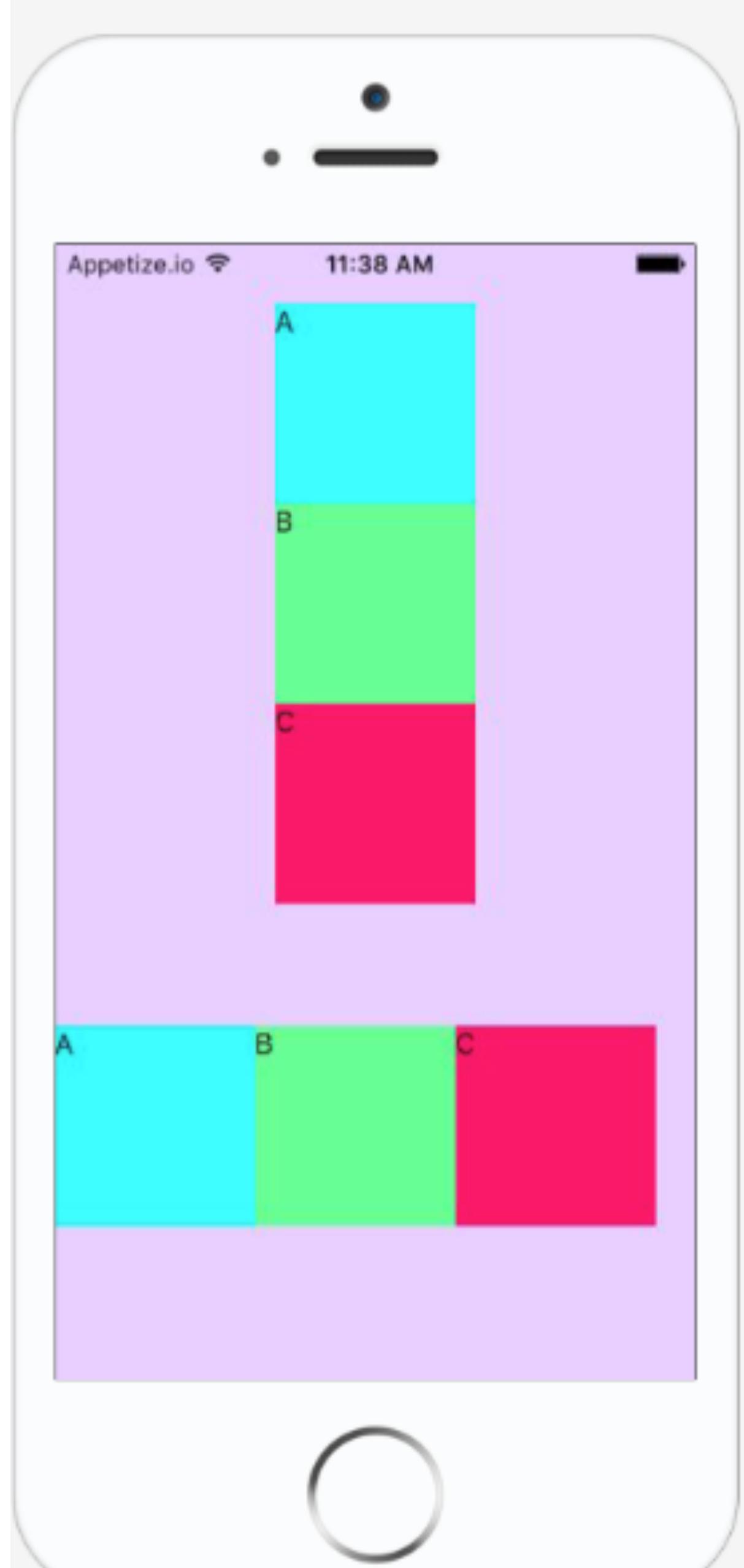
A screenshot of a Mac OS X desktop showing a browser window. The window title is 'gist.github.com'. The address bar shows 'rn-layout-basic-step1.js' and 'rn-button.js'. The tab bar also includes 'Bitly | Bitlink Management' and a '+' button. The main content is a GitHub Gist page for 'NAzT / rn-layout-basic-step1.js'. The gist was last active just now. It has 7 revisions. The 'Code' tab is selected. There are buttons for 'Edit', 'Delete', 'Star', 'Download ZIP', and 'Raw' view. The code itself is a React Native component named 'FlexDirectionBasics'.

```
// http://dabbott.github.io/react-native-web-player/
import React, { Component } from 'react';
import { AppRegistry, View, Text } from 'react-native';

class FlexDirectionBasics extends Component {
  render() {
    return (
      <View style={{flex: 1}}>
        <View style={{flex: 1, flexDirection: 'row'}>
          <View style={{width: 50, height: 50, backgroundColor: 'powderblue'}} />
          <View style={{width: 50, height: 50, backgroundColor: 'skyblue'}} />
          <View style={{width: 50, height: 50, backgroundColor: 'steelblue'}} />
        </View>
        <View style={{flex: 1, flexDirection: 'row'}>
          <Text>Hello</Text>
        </View>
      </View>
    );
  }
}
```

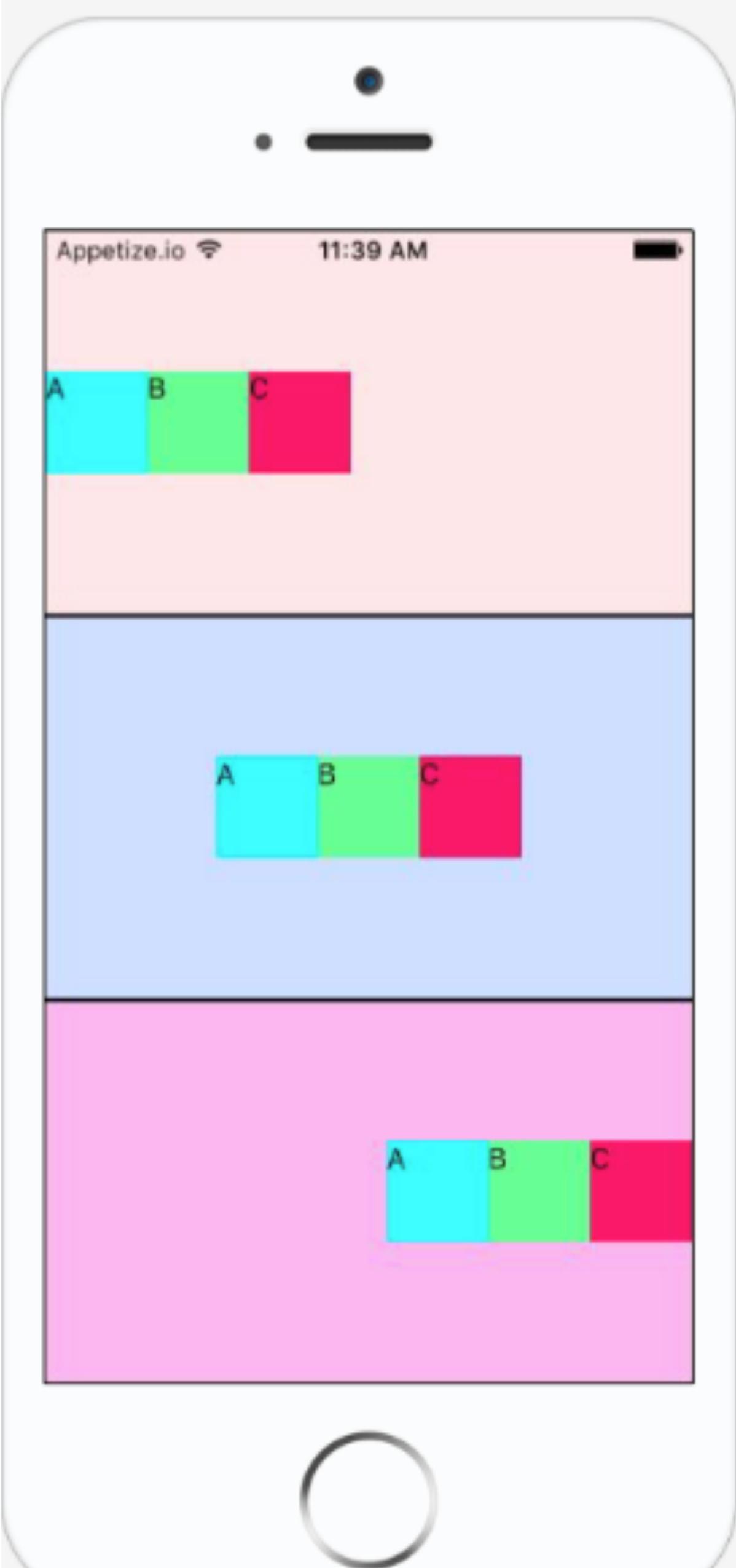
<https://facebook.github.io/react-native/docs/flexbox.html>

# Examples



<https://rnplay.org/apps/cXQKNg>

## React NativeFlexDirection-Tutorial



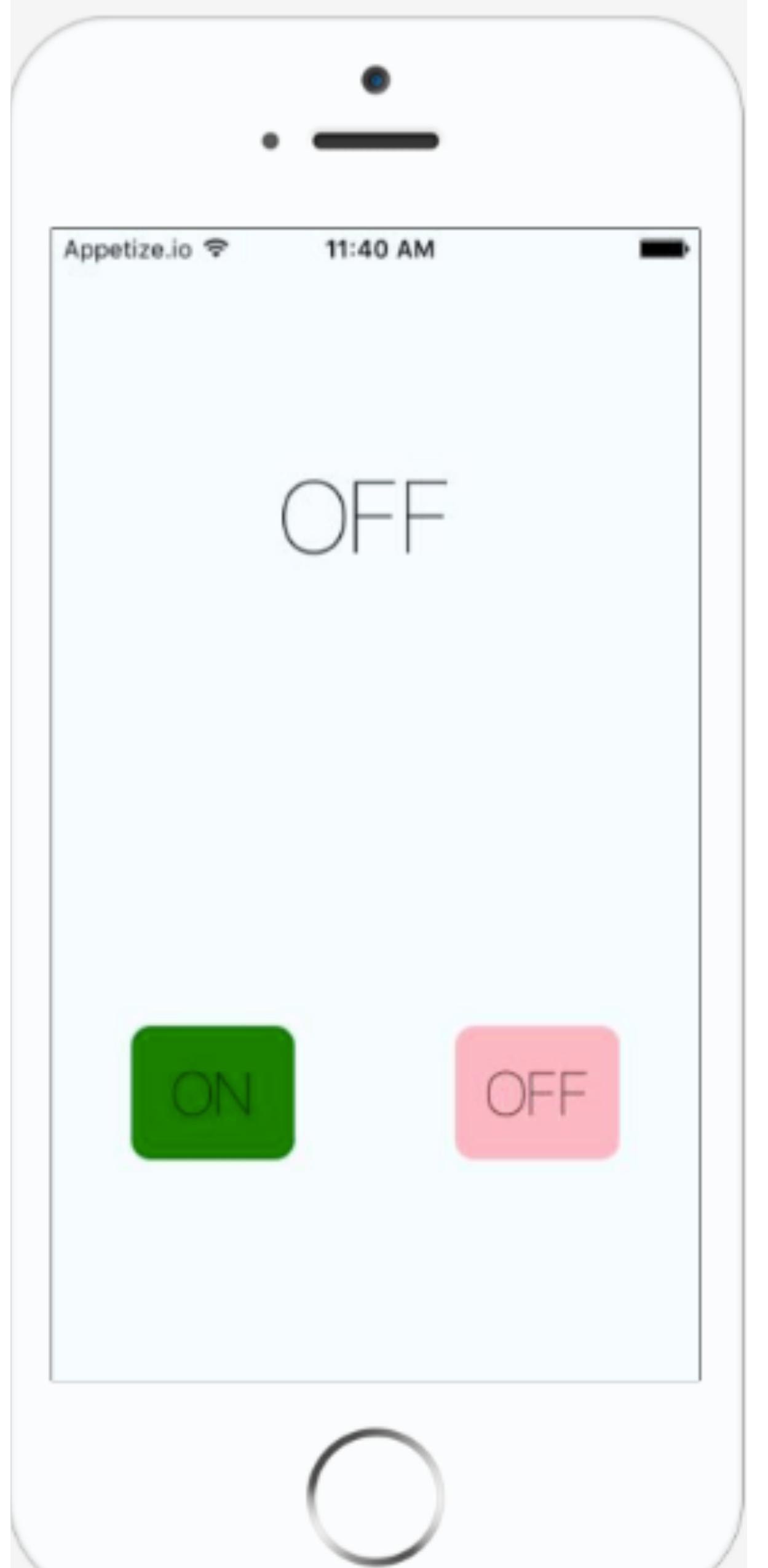
[https://rnplay.org/apps/\\_aVrGQ](https://rnplay.org/apps/_aVrGQ)

## React Native-JustifyContent



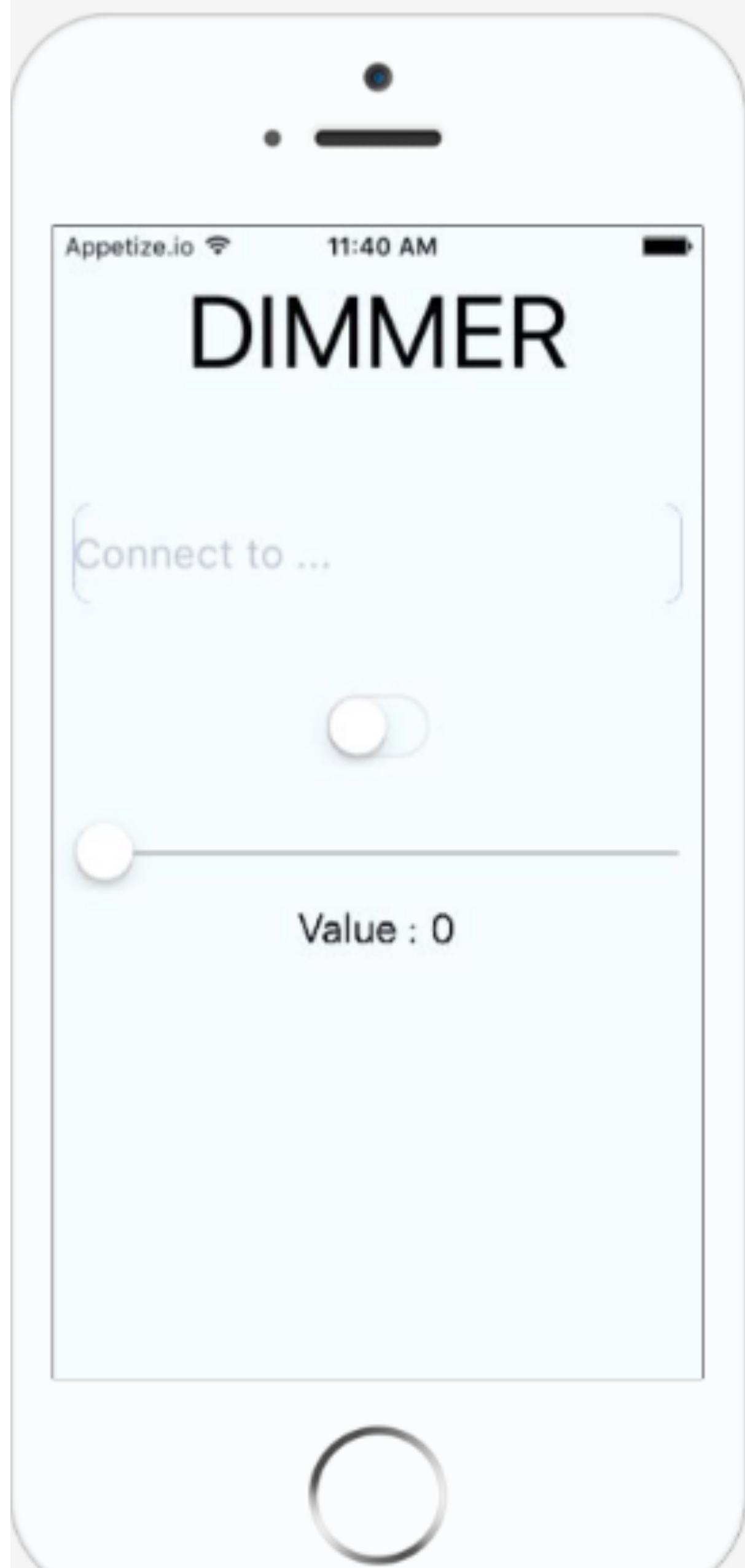
<https://rnplay.org/apps/43V6hA>

## React Native-Slider



<https://rnplay.org/apps/KiUOiw>

## React Native-OnOffButton



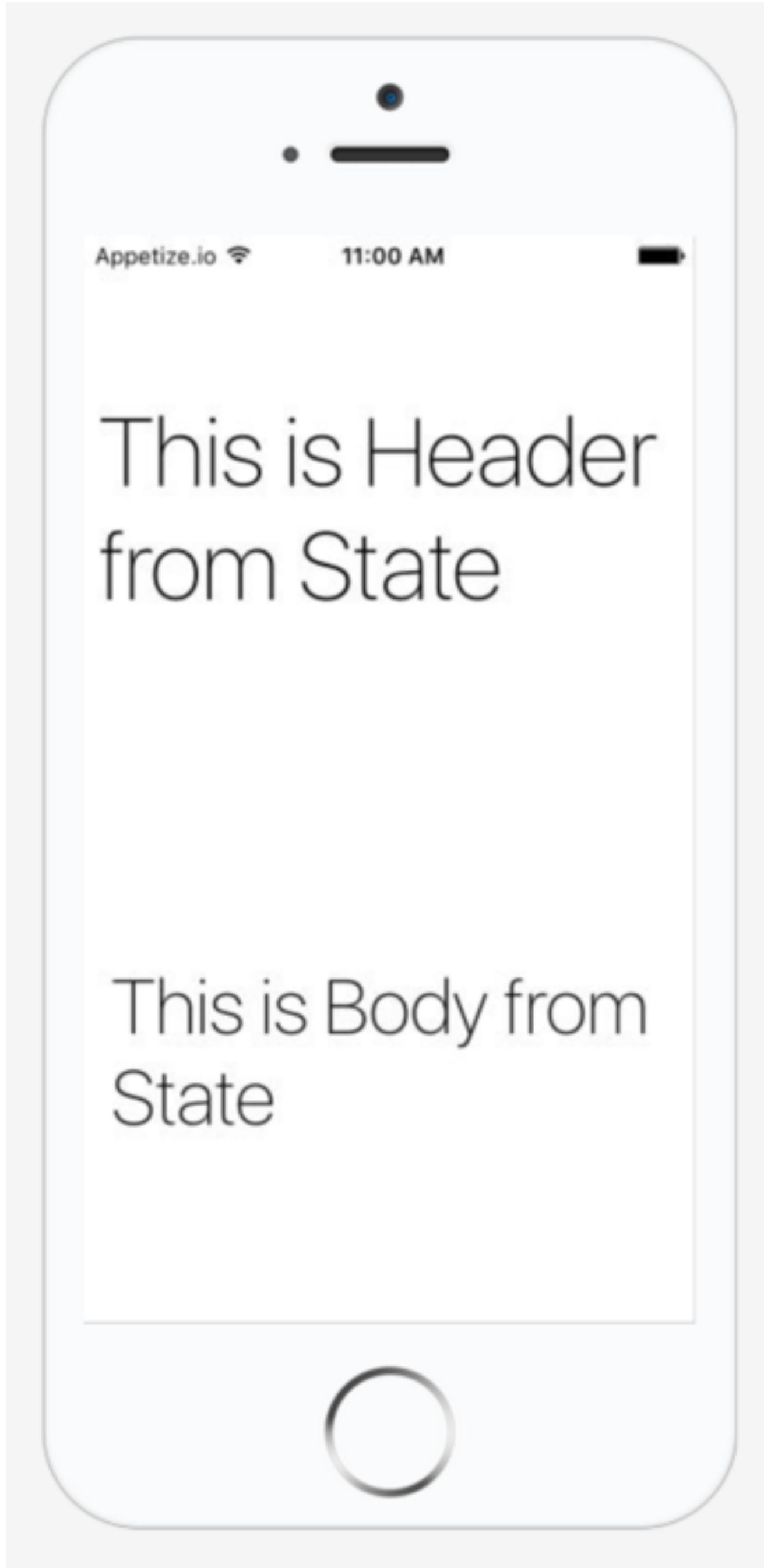
<https://rnplay.org/apps/nAEOLA>

## React Native-Dimmer



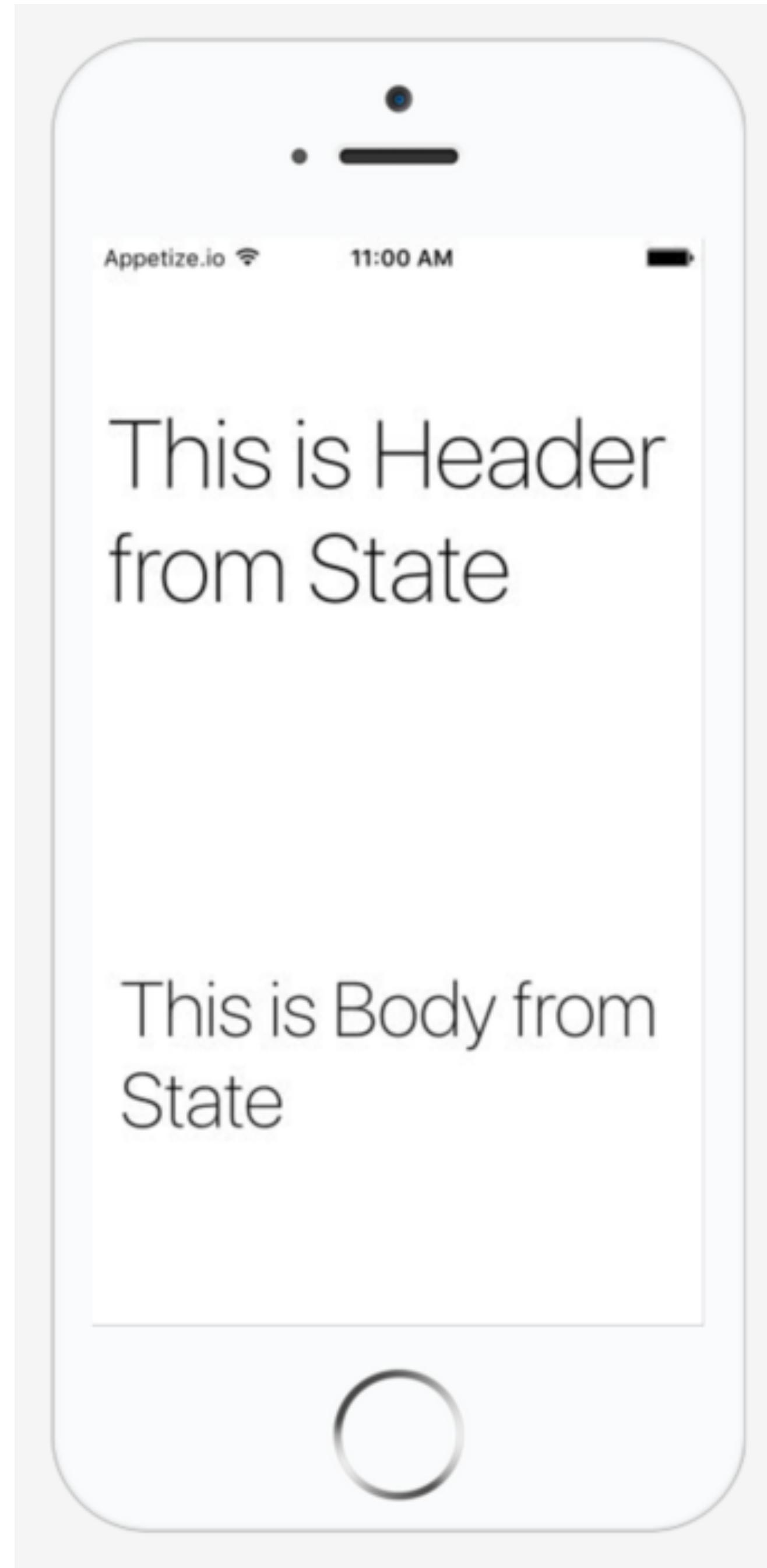
<https://rnplay.org/apps/S5AjHw>

## React Native-RealTimeSensor



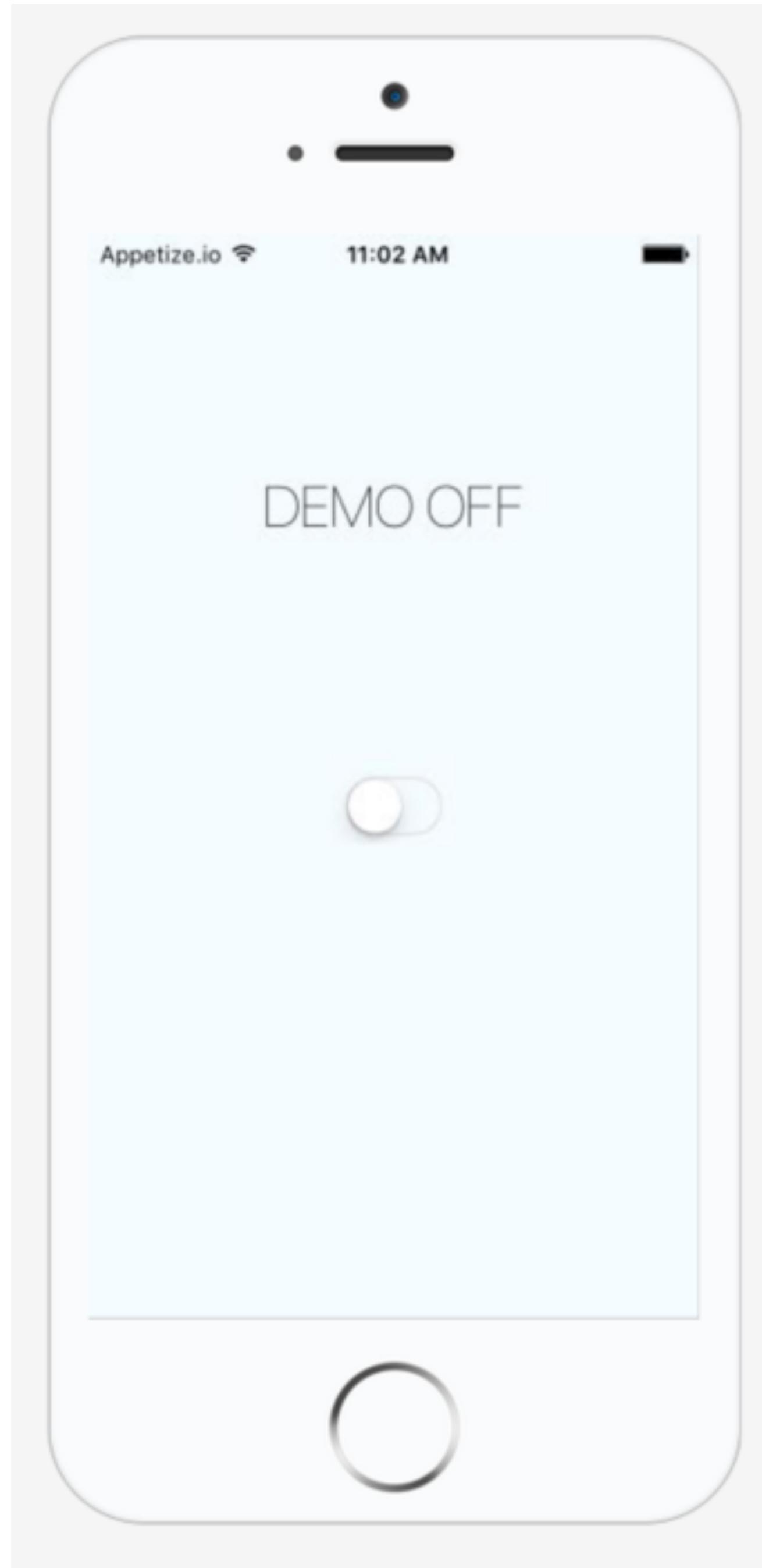
<https://rnplay.org/apps/F8Sw0g>

React Native-Tutorial Layout



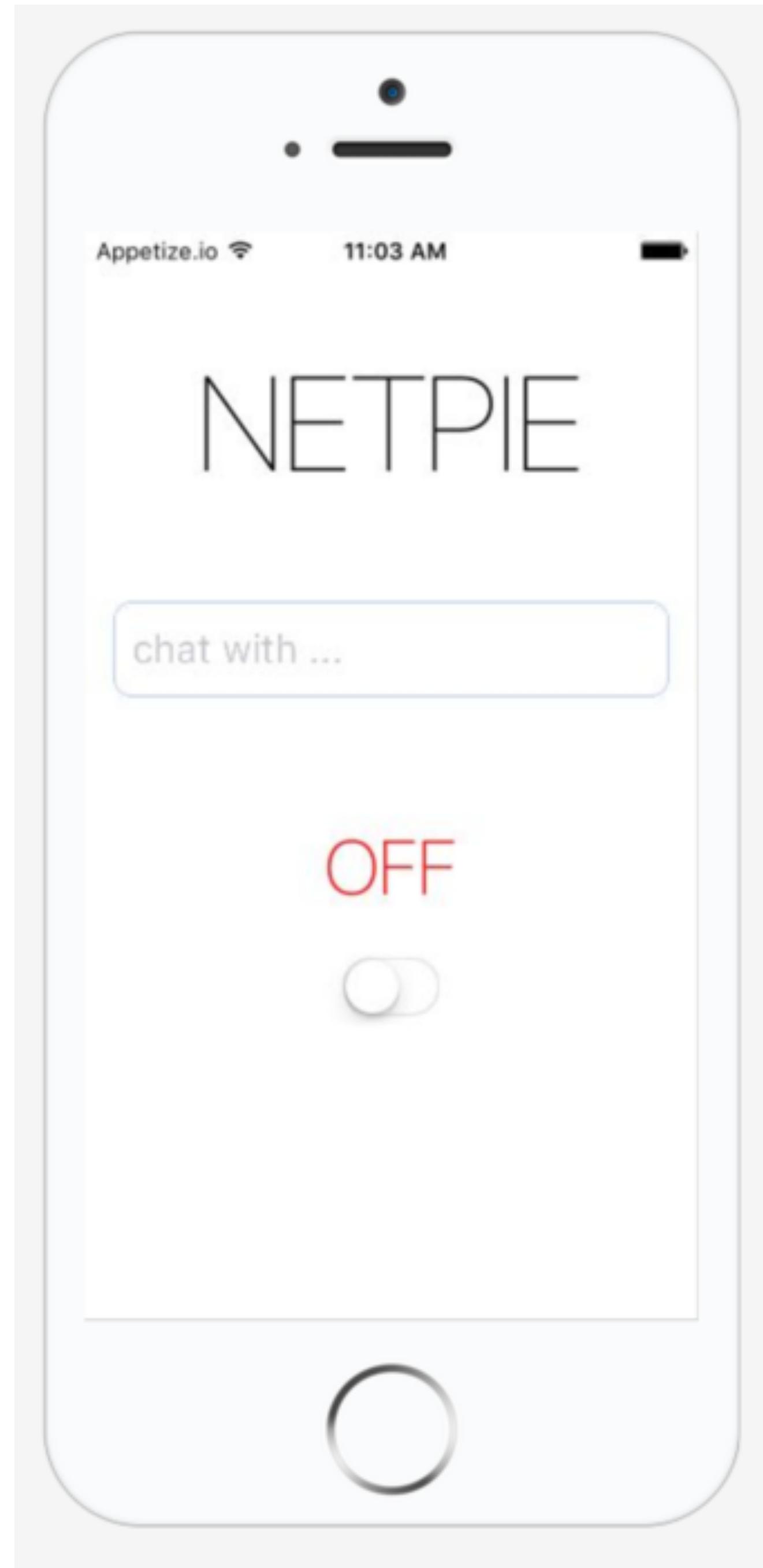
<https://rnplay.org/apps/Y1hx0A>

React Native - Tutorial State



<https://rnplay.org/apps/qjiTCg>

React Native - Tutorial Switch



<https://rnplay.org/apps/mG5MLA>  
WorkShopNETPIE-ReactNativeSwitch



<https://rnplay.org/apps/G23wfw>

React Native - Tutorial Message & State