

React Native

A brief introduction

Building modern mobile applications

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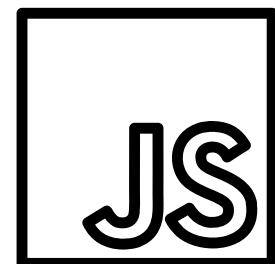
Introduction

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



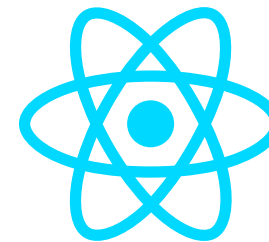
Developed by Facebook

React is created by Facebook in 2015. Is open source and has the largest community of mobile frameworks



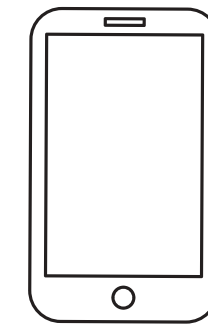
Write code with javascript language

Use Javascript to write apps with React Native and render to native Platform UI. Your app uses the same native platform APIs other apps do.



Use React

“Learn Once, Write Anywhere” is the mantra behind React. If you know develop with React principles, you develop web interfaces and mobile apps.



Make native ios and Android apps

React Native combines the best parts of native development with React, a best-in-class JavaScript library for building user interfaces.

Getting Started

<https://facebook.github.io/react-native/docs/getting-started>

If you are new to mobile development, the easiest way to get started is with **Expo CLI**. Expo is a set of tools built around React Native and, while it has many features, the most relevant feature for us right now is that it can get you writing a React Native app within minutes. You will only need a recent version of Node.js and a phone or emulator.

```
npm install -g expo-cli
```

```
expo init AwesomeProject  
  
cd AwesomeProject  
npm start # you can also use: expo start
```

If you are already familiar with mobile development, you may want to use **React Native CLI**. It requires Xcode or Android Studio to get started.

```
npm install -g react-native  
  
npm init MyApplication  
cd MyApplication && react-native run-ios # or react-native run-android
```

Getting Started

To develop apps with react-native you can use VsCode, JetBrains WebStorm and alternatively use online environments like Gitpod or Snack. If you are on macOS you can use XCode.

VsCode:

<https://code.visualstudio.com/>

JetBrains WebStorm (non-free):

<https://www.jetbrains.com/webstorm/>

Gitpod:

<https://www.gitpod.io/>

Snack:

<https://snack.expo.io/>

Learn The Basics



React Native is like React, but it uses native components instead of web components as building blocks. So to understand the basic structure of a React Native app, you need to understand some of the basic React concepts, like JSX, components, state, and props. If you already know React, you still need to learn some React-Native-specific stuff, like the native components. This tutorial is aimed at all audiences, whether you have React experience or not.

PROPS

Most components can be customized when they are created, with different parameters. These creation parameters are called props, short for properties.

STATE

There are two types of data that control a component: props and state. props are set by the parent and they are fixed throughout the lifetime of a component. For data that is going to change, we have to use state. In general, you should initialize state in the constructor, and then call `setState` when you want to change it.

Learn The Basics



STYLE

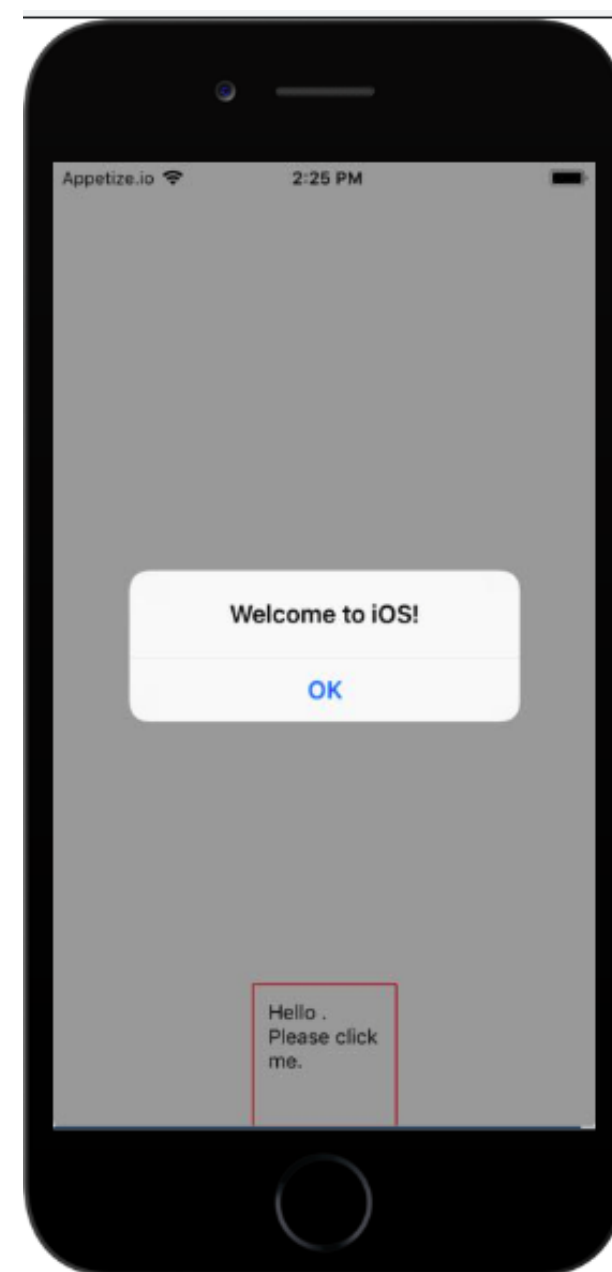
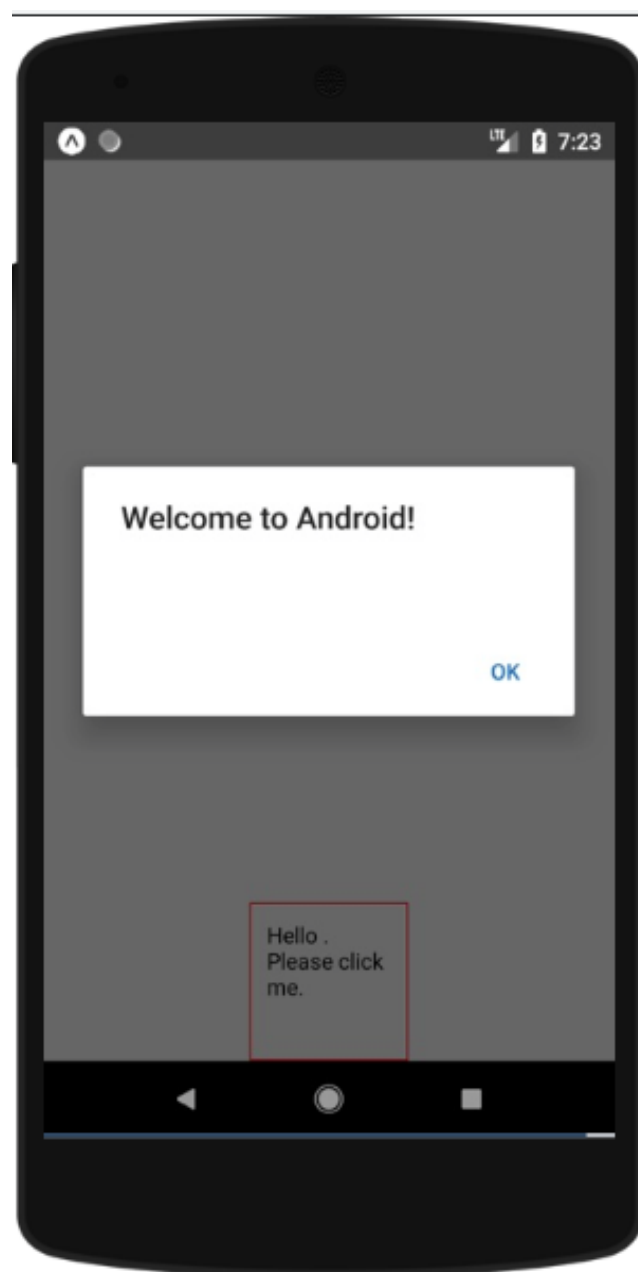
With React Native, you style your application using JavaScript. All of the core components accept a prop named style. The style names and values usually match how CSS works on the web, except names are written using camel casing, e.g. backgroundColor rather than background-color. The style prop can be a plain old JavaScript object. That's the simplest and what we usually use for example code. You can also pass an array of styles - the last style in the array has precedence, so you can use this to inherit styles. As a component grows in complexity, it is often cleaner to use StyleSheet.create to define several styles in one place.

FLEXBOX

A component can specify the layout of its children using the flexbox algorithm. Flexbox is designed to provide a consistent layout on different screen sizes. You will normally use a combination of flexDirection, alignItems, and justifyContent to achieve the right layout

First App

Now, let's develop our first app. And he should look like this:



First App

<https://gist.github.com/mferoc/f0bb4ce30fd53412969a0febda7e4dd5>

Open snack.expo.io in you browser and SHOW ME THE CODE!!!!

```
1  import React from 'react';
2  import {
3    View, Text, StyleSheet, TouchableOpacity, Alert, Platform
4  } from 'react-native';
5  export default class Hello extends React.Component {
6    clickMe() {
7      Alert.alert(Platform.select({
8        ios: 'Welcome to iOS!',
9        android: 'Welcome to Android!'
10     }));
11   }
12   render() {
13     return (
14       <View style={styles.container}>
15         <TouchableOpacity onPress={this.clickMe.bind(this)}>
16           <View style={styles.box}>
17             <Text>
18               Hello {this.props.platforms}. Please click me.
19             </Text>
20           </View>
21         </TouchableOpacity>
22       </View>
23     );
24   }
25 }
```

```
26  const styles = StyleSheet.create({
27    container: {
28      flex: 1,
29      justifyContent: 'center',
30      alignItems: 'center',
31      position: 'absolute',
32      bottom: 0,
33      left: 0,
34      right: 0,
35    },
36    box: {
37      borderColor: 'red',
38      backgroundColor: '#fff',
39      borderWidth: 1,
40      padding: 10,
41      width: 100,
42      height: 100,
43    },
44  });
45
```


The End

