

React Native for Mobile Development

**Harness the Power of React Native to
Create Stunning iOS and Android
Applications**

Second Edition

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React Native for Mobile Development

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Table of Contents

About the Authors..... ix

About the Technical Reviewer xi

Acknowledgments xiii

Introductionxv

Chapter 1: Learning the Basics: A Whistle-Stop Tour of React..... 1

 Why React? 2

 Virtual DOM 3

 One-Way Data Flow..... 5

 Installation and Setup 8

 Create a Hello World Application 9

 Introduction to Components..... 10

 Deep-Dive into Components 13

 Properties 13

 State..... 16

 Summary..... 20

Chapter 2: The Simplest Program: Hello World with React Native 21

 What Is React Native? 22

 Installation 22

 Installing Node and npm..... 23

 Installing the React Native Package..... 23

 Updating React Native 23

 Your First App..... 24

 Creating a Basic Skeleton 25

TABLE OF CONTENTS

- Prerequisites for Running App on a Simulator 33
 - Running the App on a Simulator 34
 - It's Not a UIWebView..... 34
 - Enabling Live Reload 36
- What Makes React Native Different? 36
- Ejecting a React Native Application 37
- Debugging..... 42
 - Reload 43
 - Debugging in Chrome 43
 - Debugging in Safari..... 44
 - Showing Performance Monitor..... 45
 - The Inspect Element..... 46
- Summary..... 47
- Chapter 3: Solving Problems Differently with Flux and Redux 49**
 - MVC Pattern 50
 - Flux 51
 - Success of Flux 54
 - Flux Deep Dive 54
 - The Dispatcher 54
 - The Need for Dispatcher [dispatch() and waitFor()]..... 55
 - Stores 55
 - Actions..... 56
 - Redux 56
 - Redux Core Concepts..... 57
 - Action 58
 - Reducer 58
 - Store 59
 - Redux with React Native..... 59
 - Working with the Components 63
 - Summary..... 67

Chapter 4: Canvas, Brush, and Paint: Working with the User Interface.....	69
React Navigation.....	70
NavigatorIOS	76
Flexbox.....	77
flexDirection	80
Flex.....	82
Images	86
TouchableHighlight.....	88
ListView.....	94
ScrollView	98
<ScrollView> vs. <FlatList>	99
Animations	99
Summary.....	101
Chapter 5: Exploring Device Capabilities.....	103
MapView and GeoLocation.....	103
Reviewing the GeoLocationMap Code	106
Adding Annotation on a Map	108
Displaying the Latitude and Longitude of the Current Location	110
AsyncStorage.....	116
Reviewing the AsyncStorage Code	120
Native Alert	123
Reviewing the NativeAlert Code	126
Extending the NativeAlert Example	127
WebView	130
Reviewing the WebView Code	132
Deep Linking	133
Summary.....	139

TABLE OF CONTENTS

Chapter 6: Communicating with Servers..... 141

XMLHttpRequest 142

WebSocket..... 142

Fetch 143

Getting Data from a Server 145

Saving Data to a Server 149

Summary..... 163

Chapter 7: Native Bridging in React Native 165

Native Bridge 166

 Prerequisites for the Example 166

 Native Bridge for Android 179

Summary..... 186

Chapter 8: Testing..... 187

Flow 187

 Benefits of Using Flow..... 188

Jest 188

 Jest with React Native..... 189

Snapshot Testing with Jest 192

Summary..... 197

Chapter 9: Getting Ready for the World 199

Apple Developer Account 199

Google Play Console..... 200

iOS Build Process..... 201

 Create a CSR File 203

Generating iOS .ipa(iPhone Application Archive)..... 208

Generating Android .apk(Android application package)..... 219

Beta Testing with TestFlight 222

Summary..... 223

Chapter 10: The Ecosystem: Extending React Native	225
Popular React Native Libraries.....	225
UI	226
Forms	226
Type Checking and Linting.....	227
Testing	227
Interacting with APIs and Back End.....	228
Routing	229
Utilities	229
Where to Get Help	230
React Native Repository	230
Stack Overflow	231
Stay Updated with React Native	231
React Native Communities	231
Knowledge.....	232
Discussions and Proposals.....	232
Summary.....	232
Index.....	233

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Introduction

React is one of the most popular JavaScript framework as of 2019. It took web development by storm when first introduced and its popularity has been increasing among the developer community ever since.

React Native took this one step further when first introduced in 2015 and helped build Native iOS apps with common knowledge of web technologies like JavaScript. In just a few years, React Native has become an important player in native mobile development, and extending its support for both Apple iOS and Google Android was a game changer. This required us to write second edition of this book, which covers both platforms end to end to help you create stunning React Native apps.

This book is divided into ten chapters and each one teaches a unique aspect of building React Native applications. By end of this journey we believe you will be a master developer with React Native and will be able to publish your app to the Apple App Store or Google Play Store. We commence our journey with an introduction to React in Chapter 1, where you learn about core React concepts like Virtual DOM, one-way data flows, props, and state, and also build a small React application. In Chapter 2 we cover how to set up React Native and start building a simple Hello World program. This chapter also cover the anatomy of a React Native project and how to debug the application. In Chapter 3 we discuss design patterns like MVC, as well as new programming paradigms such as Flux and Redux. In this chapter you learn about Redux core concepts, how to use Redux with React Native, and the benefits of including it in a React Native application. Chapter 4 covers how to build a user interface (UI) with the help of Flexbox, navigation with React Navigation, and few critical UI components, such as touchable highlight, listview, scrollview, and more. In Chapter 5 we address how to implement device capabilities, including creating apps to use features like GeoLocation, MapView, Native Alert, WebView, and deep linking.

Chapter 6 covers a key feature that is essential to any real-world application: communication with back-end servers. In this chapter you learn how to make requests to get data from a server and post data back to a server using various available React Native options. In Chapter 7, we discuss how to access native application programming

INTRODUCTION

interfaces (APIs) that do not have a corresponding JavaScript library; this is building Native Bridge. This skill helps us harness all the features of native iOS and Android development. Chapter 8 covers how to write tests for our React Native application using Jest, and also introduces snapshot testing. This chapter also introduces a static type check commonly used in the React Native world, called Flow. In Chapter 9, once you have learned how to create a full-featured React Native application, it is equally important to test it with users and push it onto the Apple App Store and Google Play Store. This chapter describes how to beta test a React Native application with the distribution systems available for iOS and Android. We also cover how to create builds for iOS and Android, which is essential for submitting an application to the Apple App Store and Google Play Store. In the final chapter, Chapter 10, you learn about some popular React Native libraries and where to go next, how to get help, and how to stay in touch with the amazing React Native community.

In all, we hope that by end of this book you are confident in building your next mobile application with React Native and launching it for both iOS and Android. All the best!