BOARD INFINITY

COURSE 2 OF 3 · HOLISTIC MOBILE APP DESIGN & DEVELOPMENT SPECIALIZATION

Advanced Concepts in React Native Development

Full course syllabus - every module, video lesson, reading and assignment, from animations and gestures to native APIs, testing and debugging.

Board Infinity
Instructor · Offered on Coursera

3	27	13	1 week
Modules	Video lessons	Assignments	At 10 hours a week

INSIDE THE COURSE

01	Advanced UI and User Experience	4 hours to complete
02	Native Features and Platform-Specific APIs	3 hours to complete
03	Testing and Debugging React Native Apps	3 hours to complete

Enroll on Coursera

https://www.coursera.org/learn/advanced-concepts-in-react-native-development

01 ABOUT THE COURSE

From polished UI to production-ready apps.

Advanced Concepts in React Native Development takes you beyond intermediate React Native. Across three modules you build advanced user interfaces with animations and gestures, integrate native device features and platform-specific APIs, and test and debug your apps with industry-standard tools.

Everything is delivered through short video lectures, readings and quizzes - 27 videos, 10 readings and 13 assignments in all. A basic understanding of React Native and JavaScript is recommended, and you'll need Node.js, npm and a code editor such as Visual Studio Code.

WHO IT'S FOR

React Native developers
Moving from intermediate apps to advanced ones.

Cross-platform developers
Adding platform-specific features to shared code.

Quality-focused professionals
Improving app reliability through testing and debugging.

Mobile engineers
Building visually dynamic, high-performing apps.

WHAT YOU'LL LEARN

01 **Design advanced UIs** Module 1
Design advanced user interfaces with animations, transitions and optimized layouts

02 **Integrate native features** Module 2
Integrate native device features and third-party libraries into cross-platform apps

03 **Debug, test and profile** Modules 1, 3
Analyze and improve app performance through debugging, testing and profiling

04 **Secure sensitive data** Module 3
Implement security measures that protect sensitive data and support privacy-regulation compliance

02 SYLLABUS

Three modules, from polish to production.

1 week to complete at 10 hours a week. Flexible schedule - learn at your own pace.

01 Advanced UI and User Experience

Advanced layouts, animations, gestures and performance

4 hours
12 videos

BY THE END OF THIS MODULE YOU CAN

- Build complex layouts with ScrollView, FlatList and UI component libraries
- Animate with the Animated API and Reanimated, including screen transitions
- Implement swipes, pinches, taps and custom gesture interactions
- Avoid re-renders, optimize lists and profile performance bottlenecks

CONTENTS: 12 videos (79 min) · 4 readings (40 min) · 5 assignments (120 min) · 1 plugin (5 min)

TOPICS: Advanced Layouts and Components · Animations and Transitions · Gesture Handling · Optimizing Performance · Quick Course Check-In (plugin)

You'll leave with: polished, animated, gesture-driven interfaces that stay fast as your app grows.

02 Native Features and Platform-Specific APIs

Native modules, device features and notifications

3 hours
8 videos

BY THE END OF THIS MODULE YOU CAN

- Explain the native module bridge, and create and link custom native modules
- Debug issues in native code
- Access the camera, media libraries, geolocation, maps and sensors
- Implement local notifications and push notifications with Firebase

CONTENTS: 8 videos (47 min) · 3 readings (30 min) · 4 assignments (105 min)

TOPICS: Integrating Native Code · Accessing Device Features · Handling Notifications

You'll leave with: the ability to reach beyond JavaScript - native modules, device hardware and notifications - from one codebase.

03

Testing and Debugging React Native Apps

Unit, integration and end-to-end testing, and debugging

3 hours
7 videos

BY THE END OF THIS MODULE YOU CAN

- ✓ Write unit tests for React Native components with Jest
- ✓ Test asynchronous code with mocks
- ✓ Set up Detox for end-to-end testing
- ✓ Debug with React Native Debugger and Flipper, and handle and log errors

CONTENTS 7 videos (54 min) · 3 readings (30 min) · 4 assignments (105 min)

TOPICS Writing Unit Tests for Components | Integration and End-to-End Testing | Debugging React Native Apps

You'll leave with: a testing and debugging workflow - Jest, Detox and Flipper - that keeps your apps reliable as they grow.

03 TOOLS & SKILLS

The themes that run through the course.

Animations & gestures — UI / UX

The Animated API, Reanimated, screen transitions and React Native Gesture Handler.
In this course: Module 1 builds them alongside advanced layouts.

Performance optimization — Performance

React.memo, useCallback, VirtualizedList and profiling.
In this course: Module 1 closes on finding and fixing bottlenecks.

Native modules & device APIs — Native

The native module bridge, camera, geolocation, sensors and notifications.
In this course: Module 2 integrates them into cross-platform apps.

Testing & debugging — Quality

Jest, mocks, Detox, React Native Debugger and Flipper.
In this course: Module 3 covers unit, integration and end-to-end testing.

SKILLS YOU LEAVE WITH

Advanced UI

- ScrollView & FlatList layouts
- Custom UI components
- Animated API & Reanimated
- Gesture handling

Native & performance

- React.memo & useCallback
- Custom native modules
- Camera, location & sensors
- Local & push notifications

Testing & debugging

- Jest unit testing
- Async tests with mocks
- Detox end-to-end testing
- Flipper & error logging

04 CERTIFICATE & CAREER

Finish with a shareable certificate.

Add it to LinkedIn
Add this credential to your LinkedIn profile, resume, or CV.

Share it anywhere
Share it on social media and in your performance review.

Earned, not attended
Awarded on completion of the graded assessments in all three modules.

Course 2 of 3
Part of the Holistic Mobile App Design & Development Specialization from Board Infinity.

ROLES THESE SKILLS SUPPORT

React Native Developer · Mobile App Developer · Cross-Platform Developer · Mobile UI Engineer · Mobile QA Engineer · Front-End Developer (Mobile)

Board Infinity
Instructor · Offered on Coursera

Intermediate level · Taught in English · 8 languages available · Flexible schedule

Ready to take your React Native skills further?

Enrollment, lessons, grading and the certificate all happen on Coursera.

Enroll on Coursera

Course page: coursera.org/learn/advanced-concepts-in-react-native-development

Want a coach alongside the course?

Board Infinity 1:1 coaching is a separate, optional Board Infinity offering - it is not part of the Coursera course.
Details: https://www.boardinfinity.com/career-coaching/

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