

Mobile Apps



React Mobile Apps

- **We already know how to build web apps in React**
- **It turns out making a mobile app can also be done in React just as easily**
- **We just need to install a few things to test the app on our mobile devices**

What to Install

- **Node.js – we already installed this when we made our first React apps**
- **A vibe coder (Cursor, Codex, Claude Code, etc)**
- **Expo Go on your mobile device (Play Store, App store)**



- **Expo Go is a free app that lets you test your React mobile app**
- **How it works:**
 - **Run the app on your computer, you will see a QR code in your terminal**
 - **Install Expo Go app on your mobile device**
 - **Make sure your laptop and mobile device are on same wifi network**
 - **Scan QR code with your mobile device and you can run the app**

```
C:\Users\trz2\Dropbox\ChatGPTs\mgt575_apps\2026Spring\lecture_19_mobile_apps\test>npm start
> test@1.0.0 start
> expo start

env: load .env
env: export EXPO_PUBLIC_GEMINI_API_KEY
Starting project at C:\Users\trz2\Dropbox\ChatGPTs\mgt575_apps\2026Spring\lecture_19_mobile_apps\test
Starting Metro Bundler
```

A square QR code is displayed in the terminal window, used for scanning to launch the mobile application.

```
> Metro waiting on exp://192.168.1.200:8081
> Scan the QR code above with Expo Go (Android) or the Camera app (iOS)
```

Expo Go with iPhone and Android

- **Scanning the QR code is different of iPhone vs Android**
- **iPhone – scan QR code**
- **Android – open Expo Go app, and scan QR code from inside the app**

Creating a Mobile App

- From the terminal type:

```
npx create-expo-app@latest my-mobile-app  
cd my-mobile-app  
npm install
```

- Creates a folder my-mobile-app and puts the code in there
 - Change directory into the folder
 - Install all the dependencies
- Creating the basic mobile app is almost the same as making a basic React app:

```
npx create-react-app my-app
```

Modifying the App

- **With a vibe coder, you just tell the AI what you want the app to do:**
 - **Make mobile app calculator**
 - **Yo, make mobile app that reads steady stock prices and financial news and tells me what to buy and sell today**
 - **Yo, make mobile app chatbot TA for Probability and Statistics that uses Gemini for the brain, my EXPO_PUBLIC_GEMINI_API_KEY is in my .env file**
 - **Yo, make mobile app motivational coach that sends me voice alerts to believe in myself and never give up and it acts like John Cena and uses ElevenLabs for voice and Gemini for brain**
- **Once you have the basic expo app, the AI knows what to do from there**

Running the App Locally

- From your terminal, type:

```
npm start
```

- QR code will appear in terminal
- Scan QR code with phone and app will open
 - Must be on same wifi network as laptop

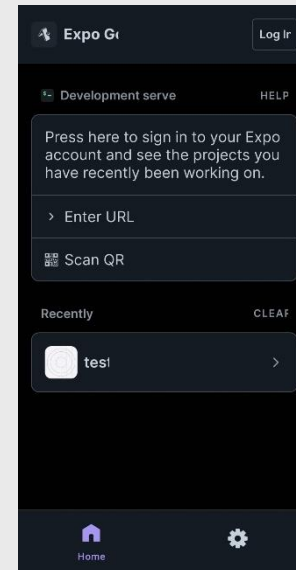
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```

QR code in terminal



Expo Go app (Android)

Deploying a Real Mobile App

- **Expo Go is great for testing and development**
- **To let people install your app on their mobile devices, you need to publish to the app stores**
 - **Build binary app file (.apk or .aab for Android, .ipa for iPhone)**
 - **EAS Build – how Expo produces production builds of apps (ask AI how to use this)**

Deployment: Android (Google Play)

- **Your app must be a .aab (Android App Bundle) file**
- **Google Play Console: pay a developer registration fee, create an app listing, and upload .aab file**
 - **Fairly straightforward process**

Deployment: iPhone (TestFlight/App Store)

- **Your app must be an .ipa file**
- **Apple Developer Program: paid annual membership in order to publish app in App Store**
- **TestFlight: invite testers by email for your app**
- **App Store: Apple reviews your app (guidelines, privacy, etc)**
 - **Slower and stricter than Google Play**

Coding Session

- **Create a simple mobile chatbot app**
- **Test the app using Expo Go**
- **Add some cool AI modifications to the app**