Download Expo Go and the Repository

Android

iOS

Repository

- https://github.com/briazzi64/intro-to-react-native

Insight

React Native and Expo CLI

Creating and Testing Your First App

Download Expo Go and the Repository

Android

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Repository

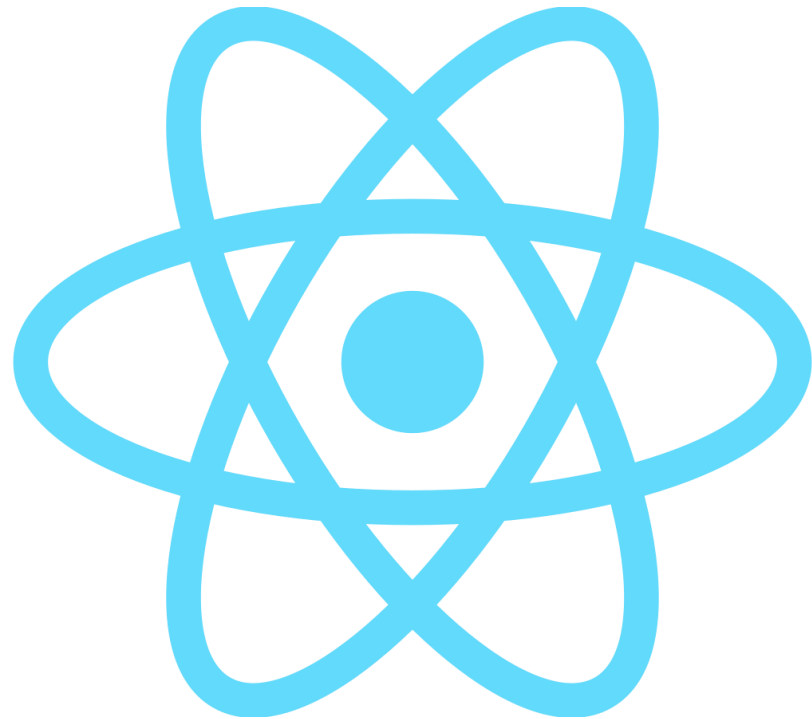- https://github.com/briazzi64/intro-to-react-native
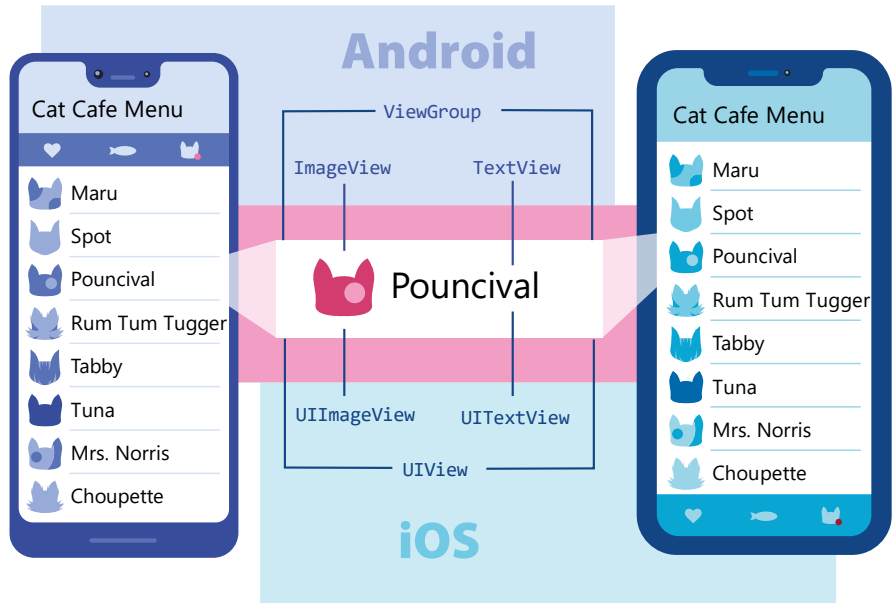
Insight

Focuses of this presentation

- Introduction to React Native

- Who is Using React Native?

- Pros and Cons of React Native

- When to use React Native

- Airbnb Stopped Using React Native. Why Should I?

- What are Expo, Expo CLI and Expo GO?

- Creating a React Native App with Expo CLI
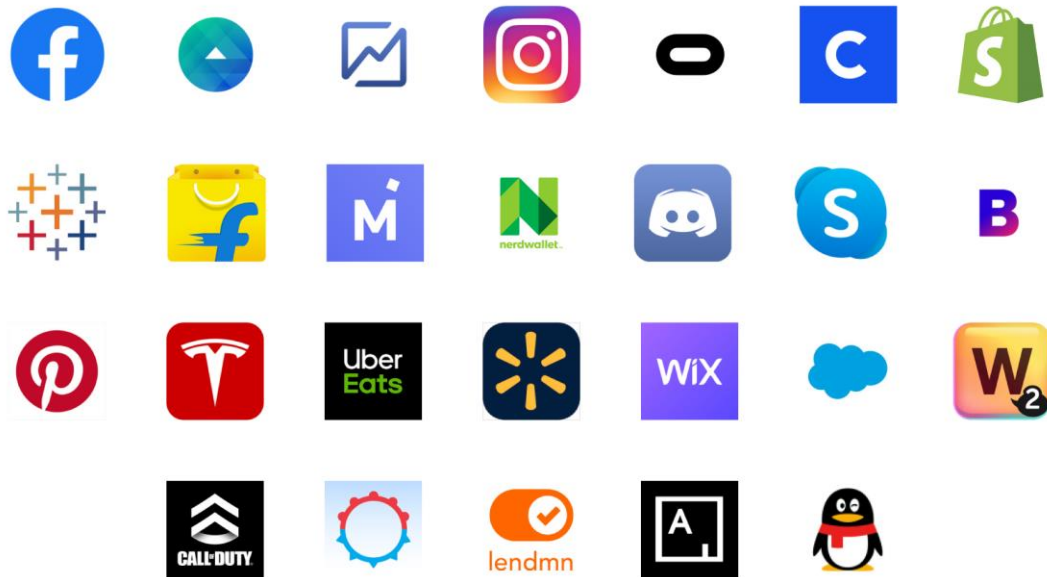
- Core Components

Introduction to React Native

- JavaScript framework for writing natively rendering apps for iOS and Android
- Based on Meta's React JavaScript library
- Goal was to move away from apps that are just a web view
- Grown in market share over the past two years
- Used by many Fortune 500 companies
  - Meta
  - Microsoft
  - Walmart
  - Shopify
  - NFL

Who is Using React Native?

Apps using React Native

Pros and Cons of React Native

Pros

- One framework for both ecosystems
- JavaScript is #1 most used language
- React experience translates easily to React Native
- Large set of packages that already support native functionality (like camera)
- Ability to write Native code if necessary
- Hot reload for better developer experience

Cons

- Not as performant when using resource intensive operations (3D, AR, gaming, etc.) or when on old devices
- Reliance on community made packages to access native functionality
- Cross platform design makes it hard to specialize on one ecosystem

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When to Use React Native

When to:

- You are starting a new app project and cost is a major factor

- Your app needs a quick turnaround time

- You have a team of experienced JavaScript developers

- You want your iOS and Android apps to be identical

- You lack the resources to run two dedicated teams

When NOT to:

- You already have a native app with no major changes in the pipeline

- Your app is a video game

- You don't trust or can't trust 3rd party plugins to access native functionality

- Your app needs to use new OS features the moment they are released

- You hate JavaScript

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But Airbnb Stopped Using It? Why Should I Use It?

- React Native is now production ready
- Uses the Hermes JavaScript engine for quicker startup, decreased memory usage, and smaller app size.
- Hermes became the de facto JavaScript engine in September 2022 but has been usable since January 2022
- Larger selection of prebuilt native components to use
- Much larger community with more in-depth resources available
- Phones are better. Hermes helps but the sheer power of new phones also helps
- Expo can handle all your build needs

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What are Expo, Expo CLI and Expo Go?

- Expo is a company that maintains Expo CLI, Expo Go, and Expo Application Services

- The main goal is to keep you writing JavaScript and out of native code.

- Expo CLI are developer tooling and NPM libraries built on top of React-Native.

- Handles setting up permissions, accessing native phone functionality, setting up development environments, etc.

- Expo Go is an app that allows you to run your code on a real device without app store authentication or credentials

- Allows you to test your app without a Mac! All you need is an iOS device

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Creating a React Native App with Expo Cli

- Download Expo Go
  - Android
  - iPhone
- Connect your computer and phone to the same WiFi
- `npx create-expo-app ProjectName`
- Open the created folder
- `npx expo start`
- **iPhone**: Open the camera app and scan the QR code in your console
- **Android**: Open the Expo Go app and tap "Scan QR Code". Then scan the code.
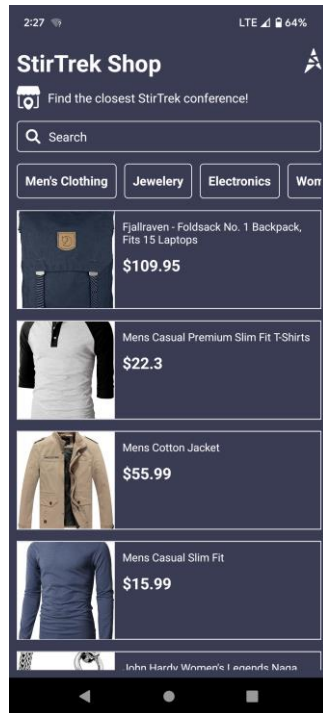- …
- That's it! You've setup your first mobile app!

```
npx create-expo-app AwesomeProject

cd AwesomeProject
npx expo start
```

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Core Components

Best to see these in action so let's write code!

- View
- Text
- Stylesheet
- Image
- TextInput
- Button
- Pressable
- FlatList

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Interacting With Your Phones Native Functionality

- Expo comes with a whole SDK for interacting with your phone's native functionality

- **Camera**: `npx expo install expo-camera`
- **Geolocation**: `npx expo install expo-location`
- **Face Detection:** `npx expo install face-detector`
- **Linking:** `npx expo install expo-linking`

Questions?

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  - LinkedIn: https://www.linkedin.com/in/brian-riazzi-a7592222/
- React Native: https://reactnative.dev/docs/getting-started
- Expo: https://docs.expo.dev/get-started/installation/
- Repo: https://github.com/briazzi64/intro-to-react-native

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