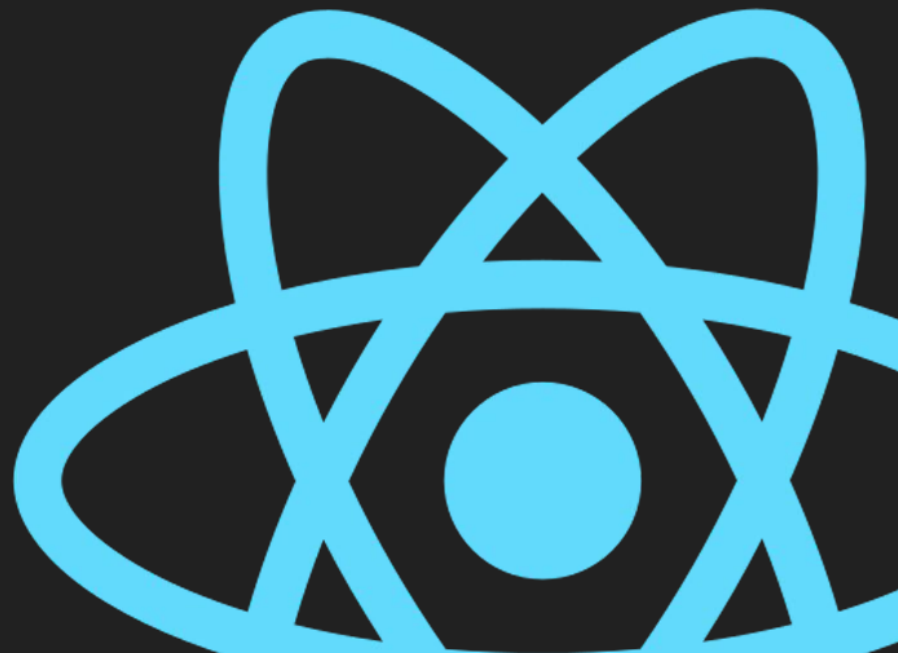


INTRO TO

REACT NATIVE



Questions we hope to cover

What is React Native and how does it differ from React?

Does React Native really mean native?

How does React Native differ from other mobile app solutions like Cordova?

Are there limits to React Native vs. native languages (Swift, Java, etc.)?

Can React and React Native apps share any of the same code? If so, to what degree?

Should React Native be used in a production app?

Who is using React Native?

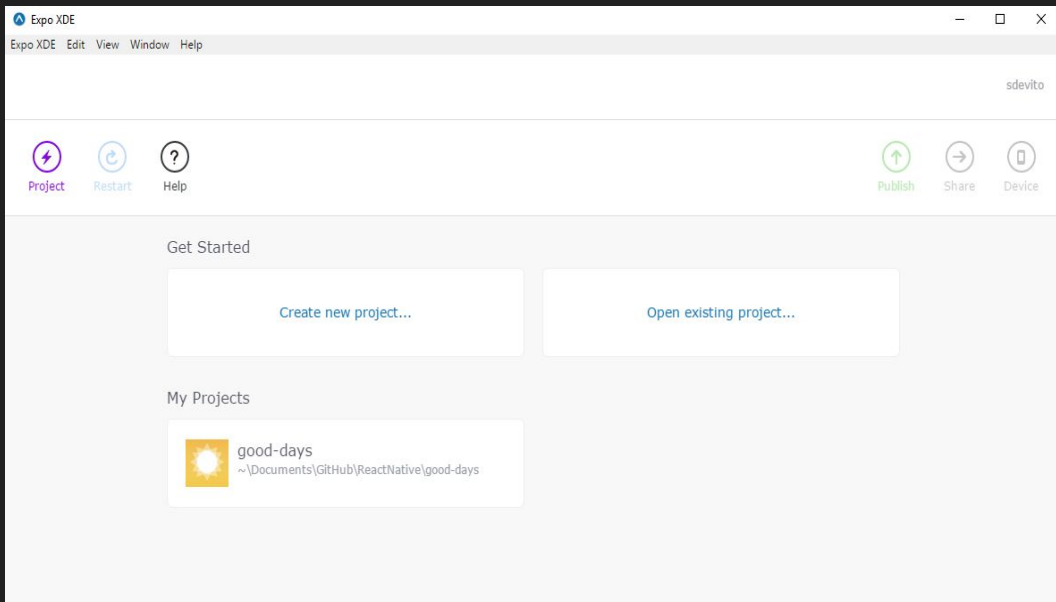
What is Expo, what does it offer that React Native does not, and how does it work with React Native?

What is React Native?

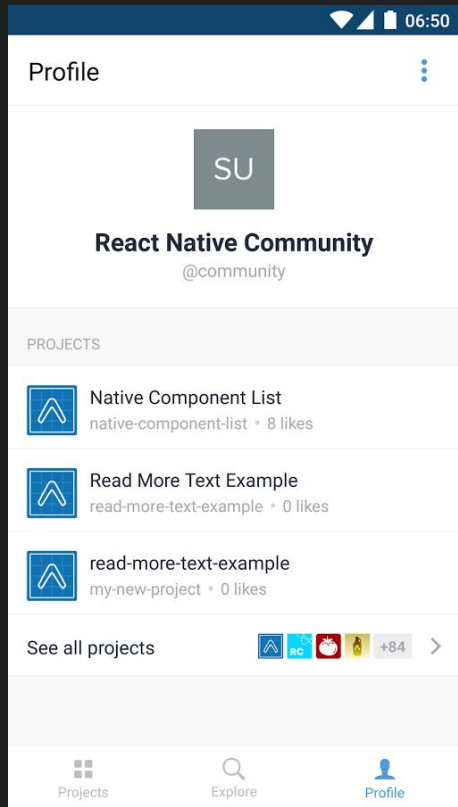
What is Expo/Why is it Useful?

Software components of Expo

Expo XDE (runs on your PC)



Expo mobile app (runs on your phone)



Three ways to debug with Expo

- Run an emulator on your PC
 - Need to install Swift/Android SDKs
- Connect your phone directly to your PC and use the Expo app
- Connect your phone and PC to wifi

Expo Snack

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

React Native Basics

A Few Differences

React

- Uses html DOM elements
 - div, span, p, etc.
- Many ways to create styles
- Doesn't typically use screens
- Navigation typically via uri

React Native

- Comes with a list of components that are useful for building a UI and interacting with native features
 - View, Text, ScrollView, etc.
- Styling done with Javascript (camelCase) via passing an object as props or to `StyleSheet.create()`
- Screens instead of just components
- Navigation typically via stack

Flexbox

Learn the Basics of Flexbox

<https://medium.freecodecamp.org/learn-css-flexbox-in-5-minutes-b941f0affc34>

Flexbox Online Course by Wes Bos:

<https://flexbox.io/>

Online Flexbox Playground:

<https://demos.scotch.io/visual-guide-to-css3-flexbox-flexbox-playground/demos/>

Question answers

- What is React Native and how does it differ from React?
 - **React Native uses Javascript to construct a UI comprised of native components. It is different from React in a few ways but mainly in the fact that there is no DOM to interact with.**
- Does React Native really mean native?
 - **Yes, React Native uses Javascript as hooks to call on native building blocks when your app runs.**
- How does React Native differ from other mobile app solutions like Cordova?
 - **Apps like Cordova allow you to create apps for mobile with Javascript but unlike React Native, they create a webview inside of a mobile container and run your Javascript app within it. The main complaint with this method is that the performance is considerably slower.**
- Are there limits to React Native vs. native languages (Swift, Java, etc.)?
 - **Yes, there are limits if you're only looking to use Javascript to create apps. If you're willing to dive into Swift or Java, you can create native modules that you are able to interact with. However, as time goes on, more native modules are being open sourced.**

Question answers cont.

- Can React and React Native apps share any of the same code? If so, to what degree?
 - **Yes, depending on what libraries you use and how you write your code. Companies have touted up to 85% code reuse.**
- Should React Native be used in a production app?
 - **React Native is totally production ready. There are a few notable large companies, such as Instagram and AirBnB, that use React Native in production.**
- Who is using React Native?
 - **A wide range of teams spanning from large companies like Facebook, Instagram, AirBnB, Walmart and, Skype to smaller startups/dev shops looking to create cross platform experiences quickly**
- What is Expo, what does it offer that React Native does not, and how does it work with React Native?
 - **Expo is a company that aims to curb the difficulty of creating a React Native app. The company provides a quick way to start up a project, they provide an easy solution for deploying your app to the app stores, and they've developed a lot of components that you would typically need in order to interact with native functionality.**

Further Questions?

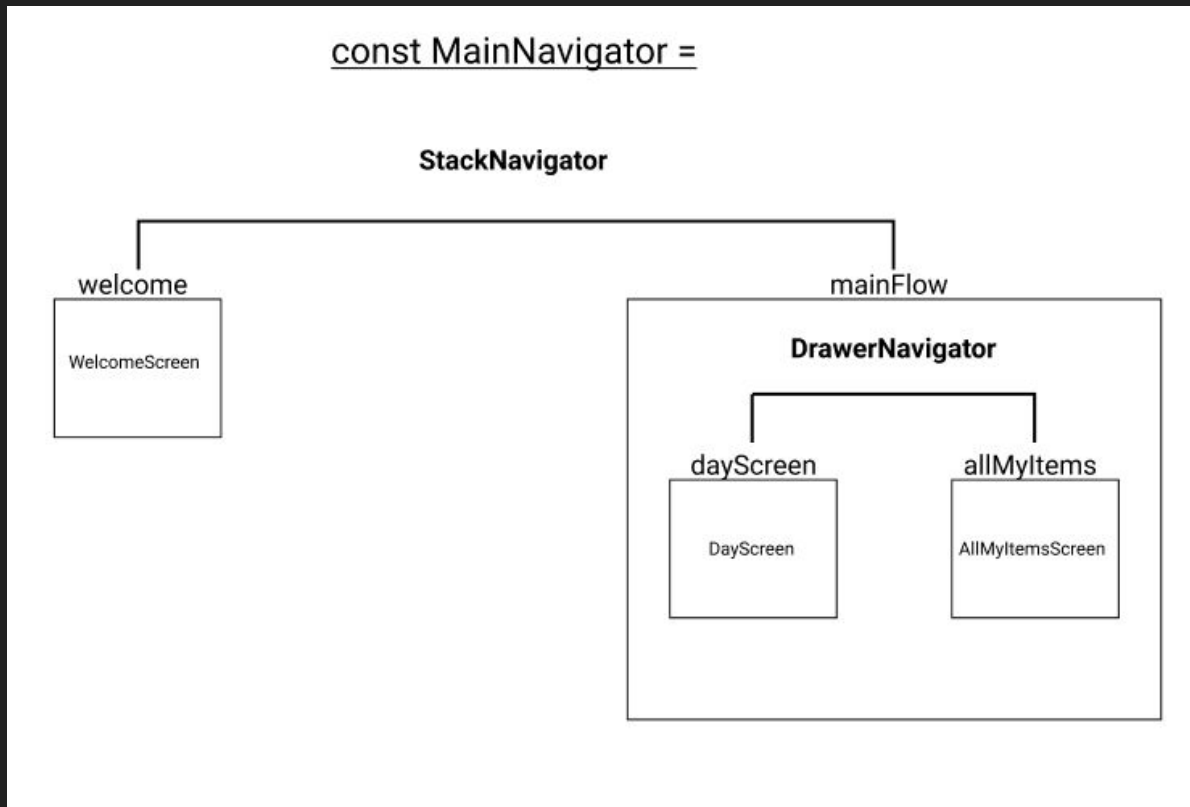
Starting a Project With React Native/Expo

Project Demo - Good Days App

Project Libraries

- React Navigation
 - Stack navigator/drawer navigator
 - <https://reactnavigation.org/>
- React Native Elements
 - Button, CheckBox, etc.
 - <https://react-native-training.github.io/react-native-elements/>
- React Native Collapsible
 - Collapsible components
 - <https://github.com/oblador/react-native-collapsible>

Diagram of MainNavigator



Good Day Component Map

