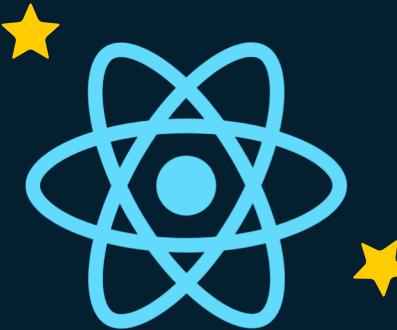


React Native WORKSHOP



Developing *cross-platform* mobile apps



STC Committee Recruitment

Apply today



Apply today till 5th Oct 2018

<http://bit.ly/stc-joincommittee>

Contact info

[fb.com/sunwaytechclub/](https://www.facebook.com/sunwaytechclub/)

[sunwaytechclub@gmail.com/](mailto:sunwaytechclub@gmail.com)

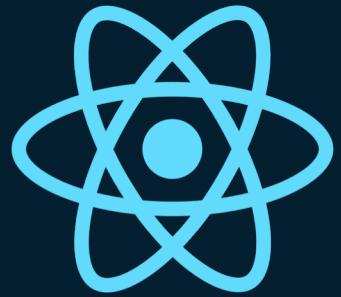
[instagram.com/sunwaytechclub/](https://www.instagram.com/sunwaytechclub/)

Organized by:



Owned and governed by the





facebook.com/sunwaytechclub



What is React Native?





Using ReactJS to develop Native apps





What is ReactJS?



ReactJS

is a  framework *

created by  for
developing websites





***“Why do
we need a
framework for
JavaScript?”***



ReactJS

is just one of many
JavaScript frameworks



meteorJS



polymerJS



AngularJS



VueJS



EmberJS

that replace **HTML/CSS/JS** &
make **web development** easier



ReactJS

Website

React Native

Mobile app

iOS

Android

Desktop app

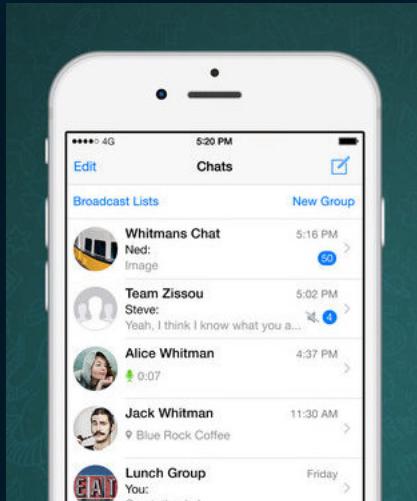
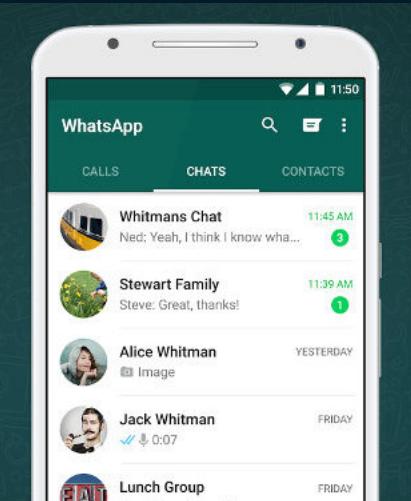
Windows

Mac

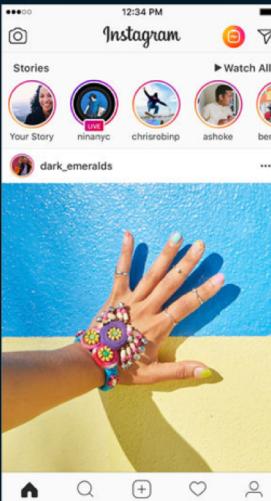


“Why
cross-platform?”

WhatsApp



Instagram



Android Studio



Xcode



React Native

Cross Platform

- › Single code base
- › One team for both platform
- › Consistent design



React Native Apps



*“I keep hearing
the word **Native**,
what exactly
does it **means**? ”*

Native vs Hybrid apps



Native

Hybrid

- Built with SDK
- Android Studio
(Java/Kotlin)
- Xcode (Swift)
- Runs in webView
- HTML/CSS/JS
- Ionic, Cordova,
Xamarin, PWA



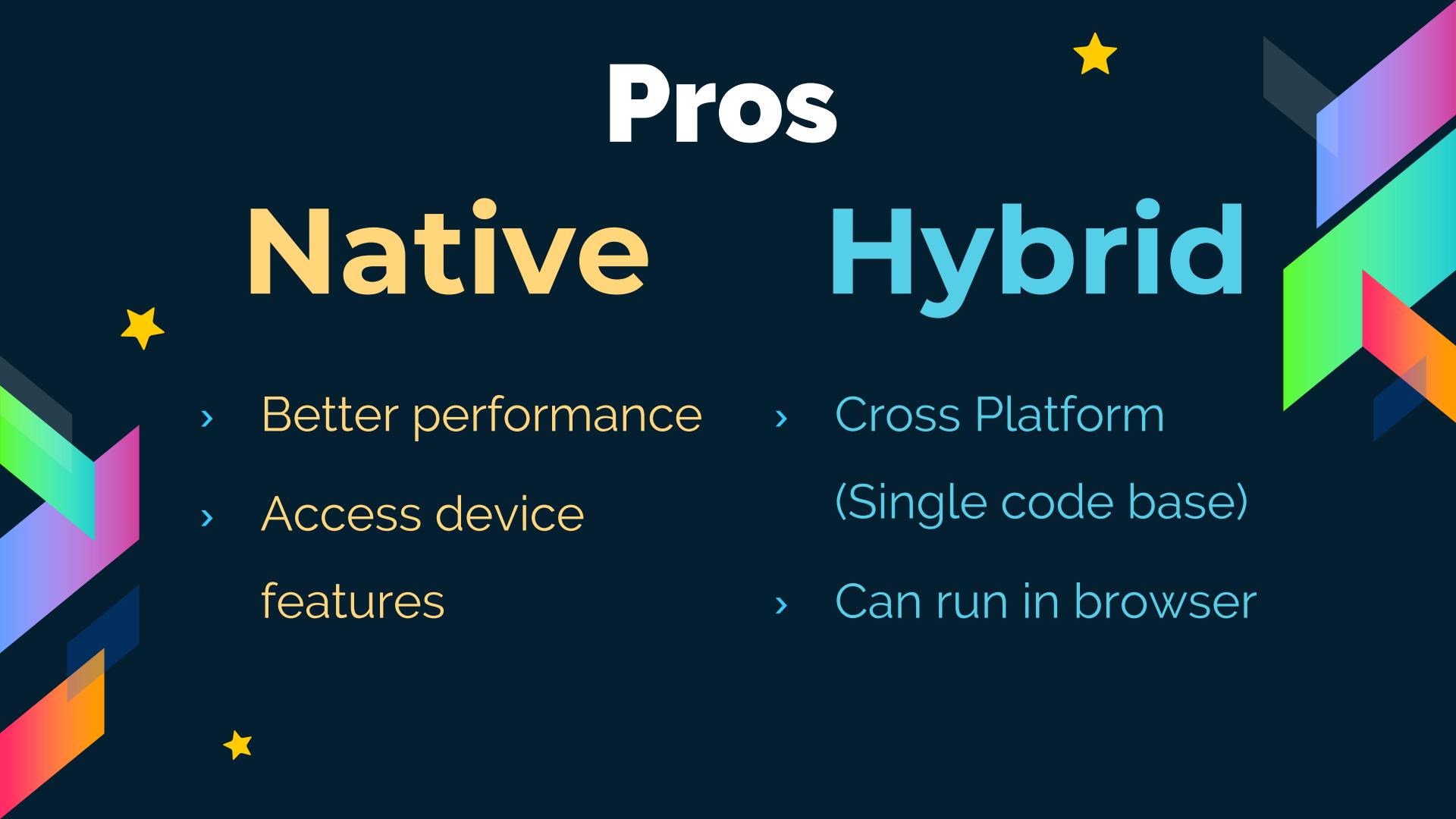
Pros

Native

- › Better performance
- › Access device features

Hybrid

- › Cross Platform
(Single code base)
- › Can run in browser



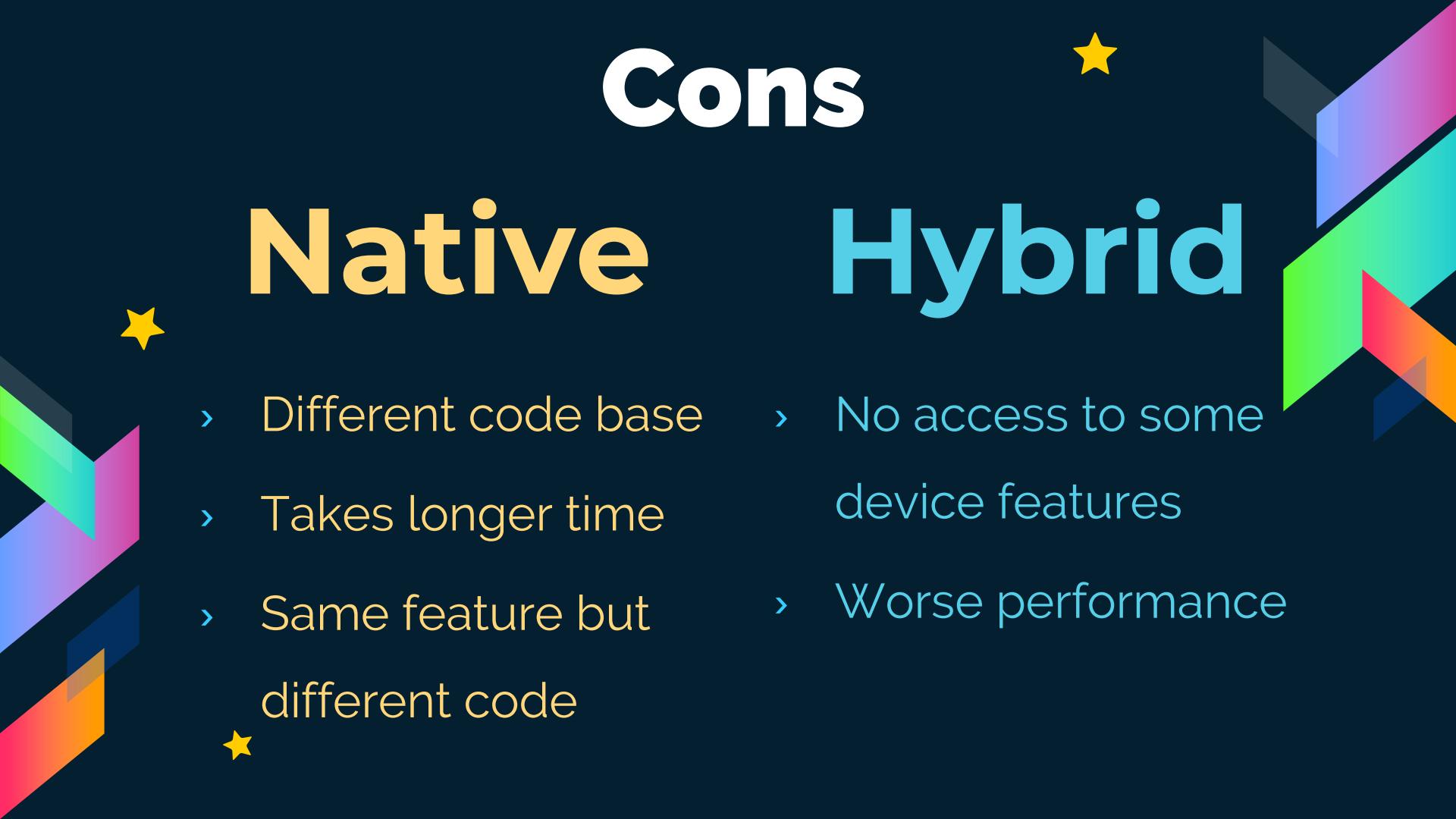
Cons

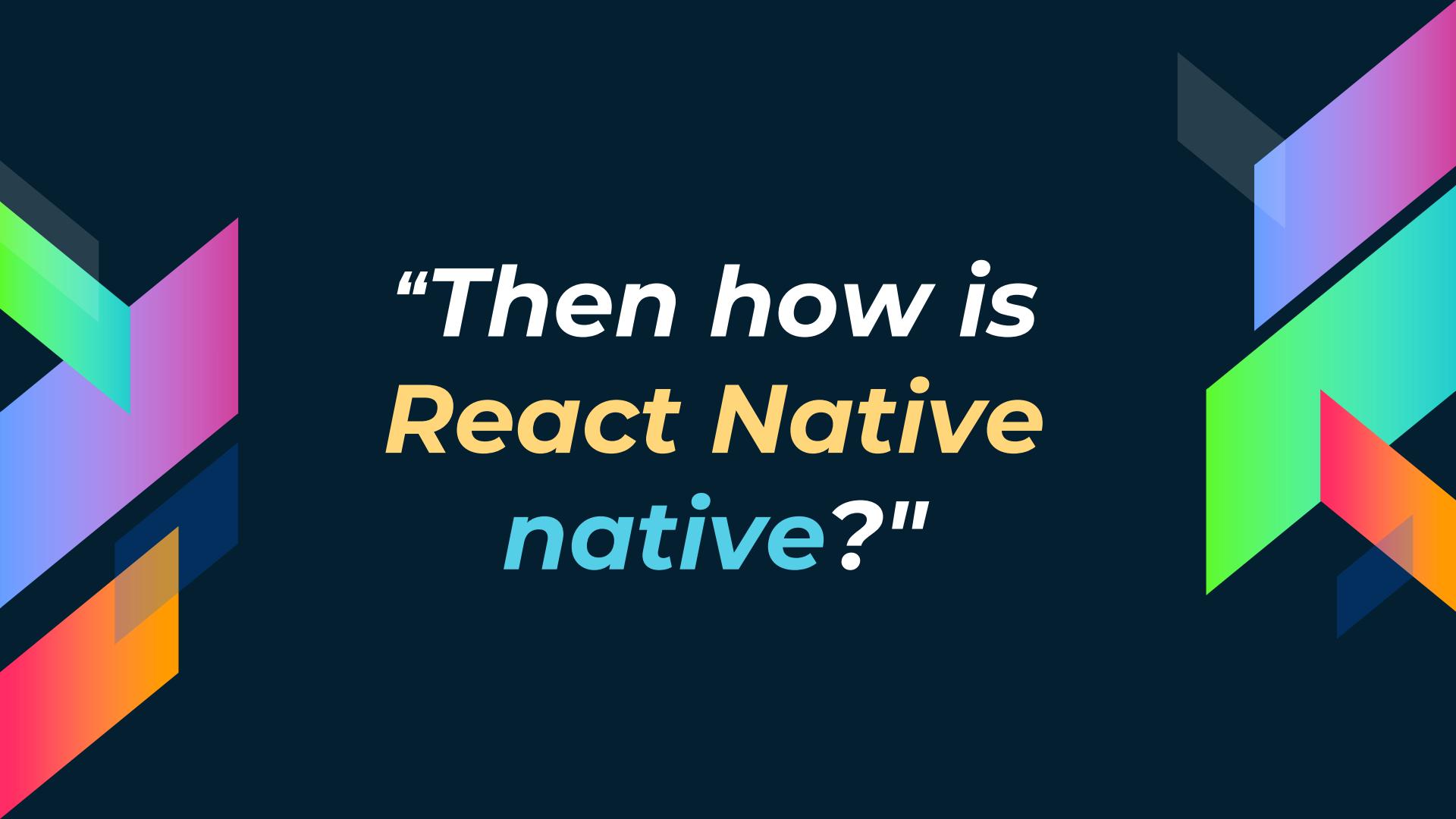
Native

- › Different code base
- › Takes longer time
- › Same feature but different code

Hybrid

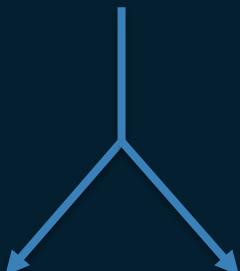
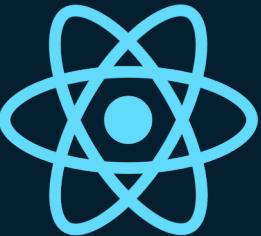
- › No access to some device features
- › Worse performance



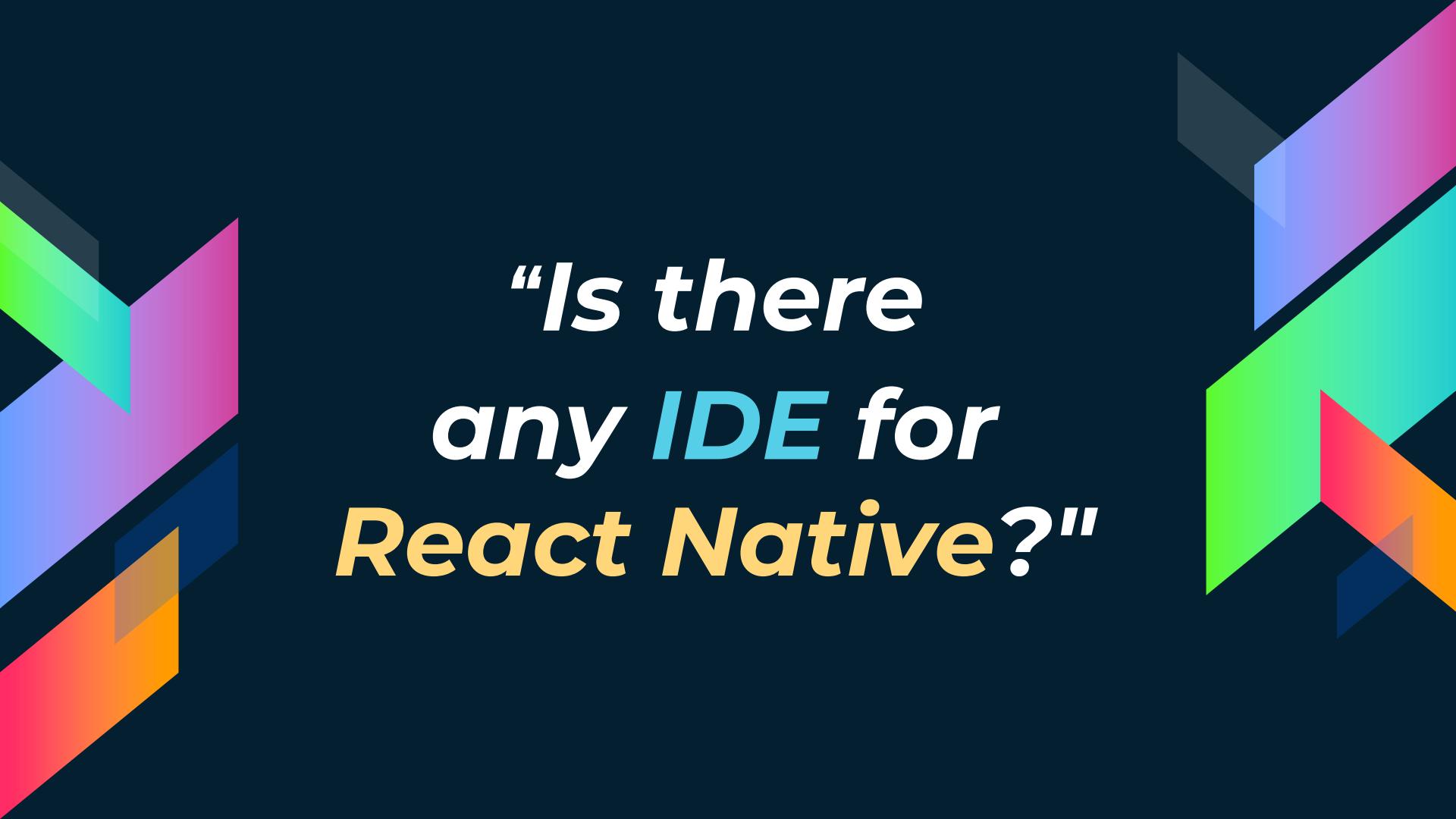


*“Then how is
React Native
native?”*

Development & Testing



App Deployment



**“Is there
any *IDE* for
React Native?“**

IDE



WebStorm

Text Editor



Sublime
Text



VS Code

How to develop with **React Native**



3 ways of developing with React Native

- › `react-native init`
- › `create-react-native-app`
- › Expo Snack

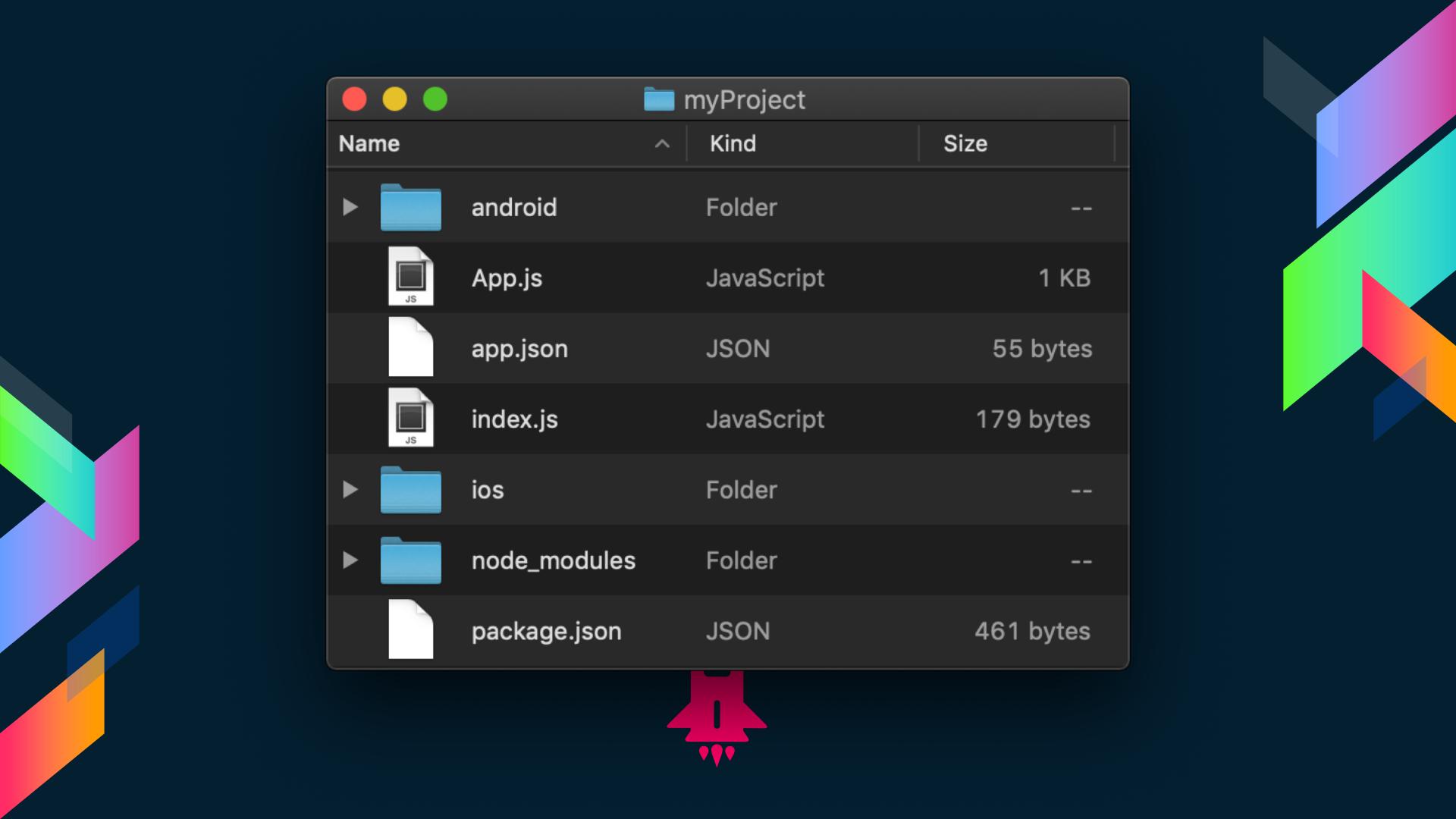
`react-native init`

- › Requires NPM/yarn
- › Integrates React Native to existing app
- › Requires Android Studio/Xcode
- › Runs on device/simulator
- › Contains native project files (iOS, Android)



```
$ npm install -g react-native-cli  
$ react-native init myProject  
$ cd myProject  
$ react-native run-ios/android
```





A screenshot of a macOS-style file browser window titled "myProject". The window shows a list of files and folders:

Name	Kind	Size
▶ android	Folder	--
▶ App.js	JavaScript	1 KB
▶ app.json	JSON	55 bytes
▶ index.js	JavaScript	179 bytes
▶ ios	Folder	--
▶ node_modules	Folder	--
▶ package.json	JSON	461 bytes

create-react-native-app

- › Requires NPM/yarn
- › Does not require Android Studio/Xcode
- › Runs on device/simulator with Expo app
- › Does not require internet (except when installing)
- › Does not contain native project files

```
● ● ●  
$ npm install -g create-react-native-app  
$ create-react-native-app myProject  
$ cd myProject  
$ npm start
```





Name	Kind	Size
 App.js	JavaScript	580 bytes
 app.json	JSON	47 bytes
 App.test.js	JavaScript	228 bytes
 node_modules	Folder	261.4 MB
 package.json	JSON	617 bytes
 README.md	Markdown Document	12 KB

Expo Snack

- › Web IDE
- › Runs on device/simulator with Expo App
- › Requires internet (files are stored online)
- › Fastest reload time among the 3
- › <http://snack.expo.io>

The screenshot shows the Snack Expo editor interface. At the top, there's a header with the URL snack.expo.io, a refresh button, and a save changes button. To the right of the save button is a portrait of Charles Darwin.

The left sidebar has two sections: "Open files" and "Project". Under "Open files", "App.js" is selected. Under "Project", "assets", "components", and "package.json" are listed. There are also three small icons: a plus sign, a folder, and three dots.

The main area is a code editor with syntax highlighting for JavaScript and React Native. The code in "App.js" is:

```
1 import * as React from 'react';
2 import { Text, View } from 'react-native';
3 import styles from './Styles';
4
5 export default class App extends React.Component {
6   render() {
7     return (
8       <View style={styles.view}>
9         <Text style={styles.text}>
10           Hello World
11         </Text>
12       </View>
13     );
14   }
15 }
```

At the bottom left, there's a "No errors" status message with a checkmark icon. On the bottom right, there are buttons for "Prettier" and a menu icon.

App Deploy

Expo Snack
↓
create-react-native-app

react-native eject

react-native *init*

