React Native

Platform Overview

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What is React Native?

- An open source platform for developing native mobile apps using Javascript (React)
- It is NOT a hybrid platform such as Ionic and PhoneGap
- Code is NOT transpiled like in Xamarin
- Maintained by Facebook Inc. (originated from Instagram)

COMPARATIVO FERRAMENTAS MOBILE

	WEB APPS	NATIVO	HÍBRIDO	REACT NATIVE
	Apps contruídas para rodar no navegador	Utilizam linguagem nativa em forma de app.	WebView renderizada em um app nativo.	JavaScript controlando interface nativa.
FACILIDADE DE CRIAÇÃO Curva de aprendizado, tempo para masterizar	🙂	☹️	😐	😐
CUSTO DE PRODUÇÃO Valor agregado aos projetos	🙂	☹️	🙂	🙂
LINGUAGENS Facilidade de dominar as linguagens	🙂	☹️	🙂	🙂
COMPATIBILDADE Compatibilidade com todos dispotivos	😐	☹️	🙂	🙂
INTERFACE É possível obter interface nativa? Ou parecida?	😐	🙂	😐	🙂
API'S NATIVAS Integração com câmera, acelerômetro, etc	☹️	🙂	😐	🙂
APP STORE (PAY/PUSH) Conseguimos colocar o app na store?	☹️	🙂	🙂	🙂
PERFORMANCE Não tem descrição, é performance mesmo	☹️	🙂	☹️	🙂

Project Structure

- JavaScript code (React components, JSX)
- Android Project + native code (Java)
- iOS (XCode) project + native code (Objective C)

Environment

- Open Source on Github, maintained by Facebook
- Many individual developers contribute with patches and packages
- Companies such as Microsoft, Wix and AirBNB also contribute

Tools

- React Native CLI + Packager
  - `npm i -g react-native-cli`
  - `react-native init AwesomeProject`
  - `cd AwesomeProject && react-native run-android`
- CodePush by Microsoft
- Expo
- Ignite by Infinite Red
- Native Base

Testing

- Unit/Component: Jest + Enzyme
- End-to-end:
    - Calabash + Cucumber
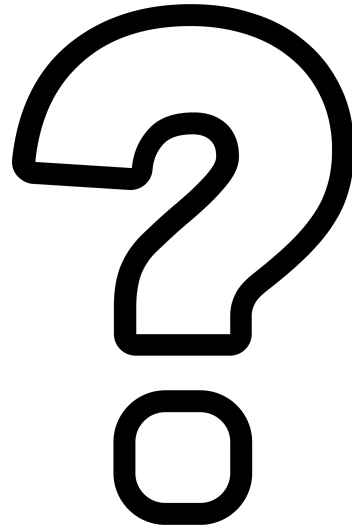   - Detox by Wix (iOS only, Android under development)

Pros/Cons

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- Community support
- Developer productivity
- Short TTM
- Native performance

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- Maintaining tests
- Platform updates
- Breaking changes
- Hiring

Questions?

Links

https://facebook.github.io/react-native/

https://facebook.github.io/react-native/showcase.html

https://expo.io/

https://microsoft.github.io/code-push/

https://nativebase.io/

https://github.com/infinitered/ignite