

EX1.

Pros & Cons between Android Studio, Ionic and React Native.

Android Studio vs Ionic:

Unlike Ionic Android Studio takes too much memory power and you need an above average laptop to run it optimally.

Android Studio uses Java or Kotlin where Ionic uses AngularJS, therefore you need knowledge of JavaScript HTML and CSS.

Android Studio design layout using only xml file.

Ionic design layout using HTML, CSS and SASS.

Android Studio is a IDE where IONIC is a framework for cross platform development.

Android Studio is a native app that has better performance with rendering and animation than hybrid apps as Ionic and React Native.

React Native vs Android Studio:

React Native is the most famous cross-platform framework, it uses 3 threads (UI, Virtual and JavaScript) that runs asynchronous/

React native is also a framework unlike Android Studio which is a IDE.

React native runs on JavaScript and you can develop both iOS and Android apps, where on Android Studio as the name says you can only develop Android apps.

React Native is better when you don't intend to build a complex app that requires complex internal API, it's much suited for apps such as a shopping cart for exemple.

It's much easier to transition to React Native if you come from Web Development than to Android Studio.

Ionic vs React Native:

Ionic is a hybrid application development frame that is open source, it uses web technologies to write and render the app and it require tools such as Cordova(As long as Ionic uses webView it doesn't have access to the device's hardware API, Cordova provide access to those API packed as plugins to get access to device functionalities.

Ionic is coded in Typescript(it's a typed superset of JavaScript that compiles to JavaScript) where React Native uses JSX(a preprocessor step that adds XML syntax to JavaScript)

Testing in Ionic can be done in web browser where in React Native can be done in a emulator or in a real device.

Performance is better on React Native as for Ionic performance issues can be caused by too many back calls to native code

Both Ionic and React Native are multi platform unlike Android Studio

Dragan Dragos Bogdan
1240F

.