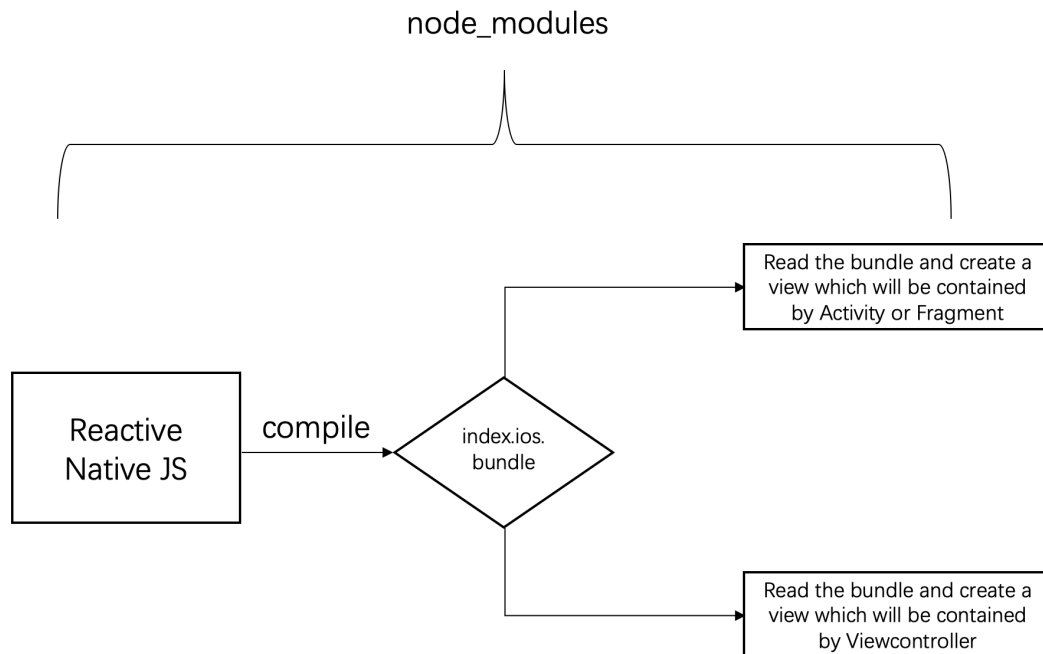


# React Native versus iOS

## The connection between react native and native application

When you use react native to build a project, you need to write the RN javascript code firstly. Then by react-native bundle order we can compile the js code into index.android.bundle file and index.ios.bundle file. Then we can put this file into native android project or native iOS project. Then by some codes we can read the js code into a view which will show in the native project. And this is view will be contained by ViewController. Then we can open the native app and see the reactive native content. And there is also a file folder named node\_modules which include source code, library and component of react native and iOS. The structure is shown below.



## The advantagement of react native

1. Cross-platform development. The same Javascript code can be used on both iOS and Android platforms. Compared to maintaining a similar set of code for iOS and Android App, React Native's development, testing and maintenance costs are much lower.
2. Fast compilation. Compared with the long compilation in Xcode, React Native uses the hot reloading (Hot Reload) real-time compilation mechanism, which greatly improves the development experience of App UI, almost to the same effect as the web development.

3. Quick release. JSBundle allows React Native to update apps instantly. Compared with the original lengthy review and upload process, the efficiency of publishing and testing new features has been greatly improved.
4. Rendering and layout are more efficient. React Native can directly apply the CSS and flex mechanisms developed by webpages, eliminating the tedious mathematical calculations in autolayout and frame layout, and more direct and simple.
5. Easy to learn. Compared to the complex knowledge system of iOS and Android, React Native is essentially a state machine, which is not difficult for developers to understand, and the actual operation can be described as easy to get started and easy to use. If you are a front-end developer, then you already have a corresponding understanding of Javascript, and developing mobile applications with React Native is even more natural.

## **The disadvantage of react native**

1. Third party dependencies. React Native relies heavily on Facebook maintenance. Every technical update and policy change of Apple on iOS will affect the original use of the React Native code base, and waiting for Facebook and community fixes will hinder App updates and user experience.
2. Difficulties in joint tuning. The introduction of React Native for native iOS and Android apps will increase the complexity of the entire code base. It is also difficult to debug the underlying native code for debugging. It can be said that the cost of development and maintenance has increased.
3. It is not possible to completely block the native platform. As far as the current React Native official document can be found, there are still some components and APIs that distinguish between Android and IOS versions. Even shared components will have platform-exclusive functions. In other words, it is still not possible to truly implement "a set of code for multiple platforms".

## **Summary**

For the time being, when rapid development is needed and business functions are simpler, React Native can play a greater advantage. However, there are still certain risks and disadvantages in using React Native in the development of core, complex or required features.