Abstract

React Native is an Open-Source UI software Framework created by Meta Platforms, in 2015. It is Used to Develop Applications for Android and IOS By enabling developers to use React Framework along with native platform capabilities. It is also being used to develop virtual reality applications at Oculus. The Working Principle of React native are virtually identical to React except that React Native does not manipulate the DOM via the Virtual DOM. It runs in a background process (which interprets the JavaScript written by the developers) directly on the end-device and communicates with the native platform via serialized data over an asynchronous and batched bridge. React Components wrap existing native code and interact with native API's via React's declarative UI paradigm and JavaScript. While React native styling has a similar sytax to css it does not use HTML or CSS. Instead, messages from the JavaScript thread are used to manipulate native views. React Native also allows developers to write native code in languages such as Java or kotlin for Android, objective-c or swift for ios, and C++/WinRT or for Windows 10, Which makes it even more flexible Microsoft builds and maintain React Native for windows and React native for macOs.