**Comparison and limitations of popular Cross platform development tools**

There are several popular cross-platform development tools available for building mobile applications, including:

**React Native:**

React Native is an open-source framework for building mobile applications using JavaScript and the React library. It allows developers to write code once and run it on both iOS and Android platforms. React Native has a large developer community and a rich set of third-party libraries and plugins, making it a popular choice for many developers.

**Limitations:**

React Native still has some limitations with regards to its performance compared to native apps, especially for more demanding applications.

Access to native APIs can be more limited and may require additional development effort.

**Xamarin:**

Xamarin is a cross-platform development tool that uses C# and the .NET framework to build native mobile applications for iOS, Android, and Windows. It allows developers to share code across platforms, reducing the amount of time and effort required to develop and maintain multiple versions of the same application.

**Limitations:**

Xamarin has a steeper learning curve compared to some of the other cross-platform tools, especially for developers who are not familiar with C# and the .NET framework.

The size of the Xamarin app can be larger compared to native apps due to the inclusion of the .NET runtime.

**Flutter:**

Flutter is a relatively new cross-platform development tool that uses the Dart programming language to build high-performance, visually appealing mobile applications for iOS and Android. It has a fast development cycle and a rich set of built-in widgets and tools, making it a popular choice for developers who want to create attractive user interfaces.

**Limitations:**

Flutter is still a relatively new technology and has a smaller developer community compared to more established cross-platform tools.

Access to platform-specific features and APIs can be more limited compared to native development.

**Ionic:** Ionic is a popular open-source framework for building hybrid mobile applications using HTML, CSS, and JavaScript. It provides a set of UI components and tools for building attractive and functional applications that run on both iOS and Android.

**Limitations:**

Ionic applications can have slower performance compared to native apps, especially for more demanding applications.

The user interface may not be as seamless and native-like compared to other cross-platform tools.

Each cross-platform development tool has its own strengths and limitations, and the best choice for a particular project will depend on the specific requirements and goals of the development team. It's important to carefully consider the trade-offs and limitations of each tool before making a decision on which one to use.