Assignment No: 4

Title: List of Most Popular Mobile App Development Tools

1. Flutter

It is an open-source software development kit. It is an excellent choice for cross-platform mobile apps. It enables developers to create apps for both iOS and Android without having to write code for each platform separately. Both platforms require a single codebase. Flutter is becoming increasingly popular among developers, enterprises, entrepreneurs, and end consumers.

It is a cross-platform user interface toolkit that allows you to create native-like applications for mobile, web, and desktop from a single codebase. Dart is used, as well as Material Design and Cupertino widgets. Flutter programmers may create stunning user interfaces using the same codebase. It appears and feels natural on all platforms.

Flutter includes a mobile SDK that enables responsive design without the need for a JavaScript bridge.

Key Features:

Cross platform development
Highly customized user experience
Widgets
Layered architecture
Smooth performance

Cost: *It is free, even for commercial use. Some of the tools can be availed with payment.*

2. React Native

This is a JavaScript-based open-source, cross-platform application development tool created by Facebook. It just has one motto: "Learn once, write anywhere." You may use React Native to port your app to both Android and iOS using the same base code. What distinguishes React Native from the other technologies on our list is that apps produced with it will have the look and feel of native apps, resulting in a compelling user experience. This programme is really simple to comprehend and use, especially if you are already familiar with JS. It also expedites the initial development phase by enabling quick prototyping.

Keep in mind, though, that JavaScript scripts use a lot of memory when doing sophisticated calculations. There is, however, no better tool than this if you have already adopted Agile development or plan to do so soon.

Key features:

UI component
SEO friendly
Support for third party libraries
Support of large community

Cost: For 1 user React native is free of cost and for 10 users it is priced at \$19 for all core features and basic support.

3. Ionic

Ionic is an HTML5 mobile development framework that simplifies the creation, testing, publishing, and monitoring of cross-platform apps for web developers. Because Ionic is an open-source SDK, it can also be used to build hybrid mobile apps that employ web technologies like CSS, HTML5, and SASS. The tool includes a number of pre-configured CSS and JavaScript components for constructing interactive mobile apps.

One of the main reasons it succeeds is that it allows web developers to continue using their favorite framework, Angular. This also facilitates the transition from internet to mobile programming.

To deliver a pleasant cross-platform mobile app development experience, Ionic blends Angular with its own user interface library. Ionic is frequently used interchangeably with cross-platform hybrid development since the experience is so fluid.

If you're looking for a free, open-source framework with a magnificent default UI that's also easily customizable, this is the tool for you.

Key features

Java script component
Web standard based
Cross platform mobile application
High performance

Cost: Team plan costs \$49/month/team member and the starter pack is free with limited features.

4. Xamarin

When it comes to mobile app development, Xamarin is one of the most widely used tools. It's a cross-platform solution that allows Xamarin developers to transfer more than 90% of their code between main platforms. Developers can choose from a choice of free and commercial components. Of course, it is the preferred solution for native apps. It is a mono framework that aids in the communication with mobile device APIs. It also enables mobile app developers to build scalable and sophisticated apps with the help of its QA and testing features. Xamarin is built on the NET framework and uses the C# programming language. It is frequently used in the development of programmes for the iOS, Windows, and Android operating systems.

One of the biggest benefits of Xamarin is that it has a shorter time-to-market and produces fewer defects.

Key features

Native user experience Simple maintenance Fast app development cycle Use similar codebase **Cost:** For small organizations, a few fully fledged Visual community products with OSS development capabilities are available for free. Professional versions include enterprise features and are paid on a per-quote basis.

5. Appery

Appery.io is a low-code app development platform. It is used to simplify the creation of hybrid mobile apps, internet apps, and progressive web apps (PWAs).

The Appery.io build server generates HTML5, jQuery Mobile, AngularJS, Bootstrap, and Apache Cordova code, whilst the Appery.io code generator creates apps for iOS, Android, Windows Phone, and HTML5. Hosting, a MongoDB database, push notifications, JavaScript server code, and a secure proxy are all included with the Appery.io MBaaS. HTML hosting is available on its own cloud, Heroku, and third-party hosting providers (on a case-by-case basis).

The Appery.io app builder includes tabs for app settings, your model and storage, your pages as you create them, dialogues, templates, styles, CSS, whatever services you set up, your JavaScript, and any custom components you specify.

Key features

Drag & Drop
No code
Compatibility testing

Debugging

Cost: Appery.io pricing starts at \$30.00 per month. They do not have a free version. Appery.io offers a free trial.

6. Felgo

Felgo is a native cross-platform application development SDK built on the Qt framework. Create modern, adaptive, and attractive apps with Felgo that are natively compiled from a single code base.

Hot reload and more advanced tooling for all supported platforms can aid in building time. You may save up to 90% on code by using true cross-platform components, service integrations, and native UI/UX out of the box.

You can simply add leading third-party services without having to deal with native framework connectors.

Key features

APIs & controls

QML and hot reload

Cloud build CI/CD

Cost: For developers on limited budget the app is free with limited services, it has startup plan for ϵ 79 and business plan for ϵ 245.

7. Corona

It is a powerful tool for creating creative mobile applications. Some tools are more versatile, simple, and simple to configure, allowing users to make their ideas a reality. Others are more difficult to operate yet provide faster and more precise results. There is a tool for every need, but choosing the right tool is critical to the end outcome.

Key features
Monetization plugins
fast FPS
No IDE
Uses Lua

Cost: *It's free, powerful, and allows you to write code once and publish it on all the platforms.*