**ASSIGNMENT #01**

**MOBILE APP DEVELOPMENT**

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**Q1: Explore different frameworks available for cross mobile app development?**

**Ans:** Cross-platform is appertained to as the type of software compatible with multiple computing platforms, for illustration Android, Blackberry Windows, iOS, etc. The present- day digital sphere has impelled inventors to look for better results with minimum cost and trouble. The one of a kind technology bedded incross-platform allows the inventors tocode.Developers use programming languages to develop cross platform operations. The most common toolkit includes JavaScript, HTML, CSS and Java.

**Some platforms for mobile app are given below:**

**1. Flutter:**

Flutter reactive frame eliminates the need to modernize the UI contents homemade. Flutter app inventors need to do now updates the variables, and the UI changes will appear Developers may snappily and fluently recreate a contrivance tree and understand the law changes.. Flutter encourages using a movable GPU, which renders UI power and allows it to serve with over to the nanosecond interfaces.

**2. React Native:**

A JavaScript frame enables druggies to produce factual law and associate a native sense with the app. Because of its outstanding capabilities, reply native isn't only favored by inventors but also by businesses that believe in contriving productive results. It’s fortunate that Reply Native, like Ionic, is an open- source,cross-platform app frame. As a result, it has a vast community to help it grow and ameliorate by addressing issues, perfecting, and adding new features. Reply Native combines the advantages of JavaScript andReact.JS and the capability for inventors to write modules in ideal- C, Swift, or Java. Likewise, inventors can perform complex operations like image editing, videotape processing, and other conditioning that aren't part of the frame APIs by using native modules and libraries in React Nativecross-platform systems.

**3. Cordova:**

Cordova is an open- source platform used for erecting mobile operations using JavaScript, HTML, and CSS. It offers a ground between mobile bias and web operations.

**4. ionic:**

Ionic is across- platform app frame predicated on AngularJS and is one of the most unique and popular options available in the space. It enables formulators to pierce native platform controllers using a combination of languages, including HTML5, JavaScript, CSS, and a Cordova wrapper. Ionic allows formulators to produce a beautiful user interface while also including user-friendly functionality in their app.

**5. Xamarine:**

Xamarine is a streamlined frame primarily used for developing Windows, Android, and iOS with the help of. Net andC#. inventors can use 90 of the law for creating new platforms while using Xamarine.

**6. Native Script:**

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**7. Phone Gap:**

Phone Gap( Cordova) is the coming significant miracle forcross-platform app development using HTML5, CSS, and JavaScript. Developers also gain access to pall results to partake the app development process within the community for feedback. Another pressing advantage of Phone Gap is that it supports in- erected device features similar as cameras, storehouse, GPS, and so on.

**Q2: Different Scenarios where each native and cross platform mobile app development is preferred.**

**Ans:** The term native app development refers to erecting a mobile app simply for a single platform. The app is erected with programming languages and tools that are specific to a single platform. For illustration, you can develop a native Android app with Java or Kotlin and choose Swift and Objective- C for iOS apps.

Native apps are known to deliver exceptional stoner experience as they're generally high performance. stoner experience is also enhanced as the illustrations are acclimatized to the platform UX. still, startups are concerned about the high cost of native app development as they need to run concurrent development for both platforms.

**Benefits Of Native App Development**

* Broad Functionality
* Better Store Support
* Increased Scalability

**Cross Mobile app development:**

Cross-platform development points to the process of creating an app that works on several platforms. This is done by using tools like React Native, Xamarin, and Flutter, where the apps created can be deployed on both Android and iOS.

Whilecross-platform development saves time and cost, you risk immolating quality in the process. It's delicate to conform an app that runs optimally on colorful platforms, and the app will need an fresh abstraction subcaste when running, therefore performing in lower performance. Still, you ’ll need to bear in mind that it might be more delicate to customize the app beyond what’s allowed in the frame.

**Benefits of cross mobile app development**

* ‍Less Costly
* ‍Single Code Base ‍
* Faster Development

**Q3: List of framework stack of cross platform mobile application development.**

**Native App Development:** A native app is software that has been created for a particular operating system, meets its conditions fully as well as utilizes SDK and tackle of a device. For illustration nippy and objective- c are employed for the IOS platform and Apple bias. Kotlin and java are used for a design that operates on android zilches. Native mobile apps are preferred for colorful reasons. substantially for superior stoner experience and exceptional app performance. Native app technologies provides further control over the UI UX of the app, hence making them more desirable when it comes to casting exquisite mobile operation.

**Cross Platform Mobile App development:**

Cross mobile app conservation is much easier because updates made to your single law base can be synced and stationed across all platforms and mobile bias. An app is a great way to help the stoner experience and give a way for druggies to knitter an operation to suit their requirements

**Q4:**

**Ans:** Cross platform app development has come one of the most popular ways to make mobile operations. A cross platform or multiplatform, approach allows inventors to produce apps that run on different mobile app platforms.Some important frameworks of cross platform mobile app development are:

1. Flutter

2. React Native

3. Cordova

4. Xamarine

5. Ionic

6. Native Script

7. Phone Gap

8. Kivy