***COMSATS UNIVERSITY ISLAMABAD ATTOCK CAMPUS***



**Assignment no:1**

Name:Ayesha Javed

Reg no:Sp20-bse-006

Dated:2 October,2022

Course:Mobile Application Development

**Question 1: a comparison between native and cross platform mobile app development.**

**Answer:**

**Native:**

* The native app development is all about building a mobile app for a single platform.
* Native apps are known for delivering best and high user experience as they are generally high performance.
* User experience is also enhanced as the visuals are tailored to the platform UX.
* It has broad functionality.
* A native app is easier to be published.
* Apps built for the native environment also tend to be more scalable
* **‍**Building native apps can be costly when you need to launch for both iOS and Android.
* Native app development is time-consuming as the work done for a platform cannot be duplicated for another.

**Cross-Platform:**

* Cross-platform development refers to creating an app that works on several platforms.
* While cross-platform development saves time and cost, and quality is sacrificed.
* Cross-Platform is **Less expensive as you can have only one team.**
* Only a single cycle of development is needed to create an app that runs on multiple platforms.

#### **It is single code base.**

#### The need for an additional abstraction layer and rendering process makes the cross-platform app slower than its native counterpart.

#### ‍It has **Limited Functionality.**

#### **It** ‍ **has Limited UX**

**Question 2: different scenarios where each native and cross platform mobile app development is preferred.**

**SCENARIO NO1:** if an app involves heavy processing or requires access to low-level APIs native development should be used. And if an app is building to just display displaying information fetched from the network, cross-platform development will be a good choice

**SCENARIO NO2:** If you have limited budget to work on then you should use cross platform development. Because Native is costly.

**SCENARIO NO3:** In some projects, you’ll want to get an MVP app up as soon as possible. This is where you’ll want to consider cross-platform development. You don’t have to work on two versions of the app. Instead, only a single cycle of development is needed for an app to be released for Android and iOS.

**SCENARIO NO4:** If you’re looking for stunning visuals and experience, the answer lies in native development. Developers have access to UI/UX components when developing in a native environment. Opting for cross-platform will greatly limit the UI/UX element of the app.

**Question 3: list of frameworks/tech stack for cross platform mobile application development.**

### React Native

### Ionic

### Xamarin

### PhoneGap

### Flutter