

**Assignment : 01**

**MAD Theory**

|  |  |
| --- | --- |
| Submitted To | **Sir Kamran** |
| Submitted By | **Ameena Zahra** |
| Reg no | **Sp20-bse-005** |
| Date | **October 2,2022** |

**Question#01**

**Native Mobile Development vs Cross Mobile Development**

**Native development** basically refers to that app which is made for some specific Operating System i.e., Android, Mac, iOS. It makes apps for single platform. **Whereas Cross Mobile development** is used for creating apps which works on several platforms. This is done by using tools like Flutter and React Native.

Following is the comparison with respect cost,availaibilty and usability.

|  |  |
| --- | --- |
| **Native Deveolpment** | **Cross Mobile Development** |
| Native developer’s skills usually cost more and are difficult to obtain. | It easier to find the required expertise among great pool of web developers |
| In native development design is simplified by the services and support provided by the OS. | In a cross-platform environment developers have to add some features explicitly. |
| It presupposes the writing of app source code from scratch for each platform. | It reduces time-to-market, the code is highly reusable. |

**Question#02**

* Ionic is unquestionably one of the greatest hybrid app frameworks because it combines the desired qualities: it is open-source, simple to maintain, scalable, and easy to read. Ionic offers a library of HTML, CSS, and JS components that are mobile-optimized and aid in the creation of interactive apps.

Ionic includes a wide range of capabilities and tools, such as native-style mobile UI elements and layouts, out-of-the-box support for material design, and more. Additionally, it offers its clients frequent updates and tools from the developer community.

Applications built with Ionic have native features, targeted motions, and adaptable tools that improve user friendliness. To function as native apps, they depend on wrappers like Cordova or Phone Gap.

* A popular open-source, free platform for creating hybrid mobile apps is Xamarin. Any mobile platform can employ Xamarin-based applications, which offer the same performance and user interface as native ones.

This well-known Microsoft cross-platform mobile app framework is included with Visual Studio and is available under the MIT license. It depends on the C# programming language and the.NET framework.

**Question#03**

List of Frameworks/tech stack for cross platform mobile Application development.

**List of Frameworks**

* Node js
* Appcelerator Titanium
* PhoneGap
* Sencha touch
* Xamarine
* Native Script
* Corona SDK
* Ionic
* React Native
* Flutter