TECNOLOGÍAS DE LA INFOMACIÓN ÁREA DESARROLLO DE SOFTWARE

GROUP: 4toD

CLASS:

DISEÑO DE APLICACIONES

ACTIVITY:

NATIVE, NON-NATIVE AND CROSS-PLATFORM APPLICATIONS

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DATE:

10/01/25

Native, non-native and cross-platform applications

To deliver the best user experience, developers construct mobile apps with the smartphone's operating system in mind; either Android or iOS. There are two ways of developing mobile applications:

Native development: targeting a specific operating system.

Cross-platform development: targeting multiple operating systems.

Native applications

Native mobile apps are applications developed to target either Android or iOS. Developers usually code applications in a specific programming language depending on the operating system they are developing for.

In addition to having operating system-specific software development kits (SDKs), native mobile development requires an integrated development environment (IDE). For Android apps, is necessary to use Android Studio or IntelliJ IDEA. These tools work on Windows, macOS, or Linux. For iOS apps, you need to use Xcode or AppCode as your IDE. These tools work only on macOS.

Benefits:

- High performance
- Intuitive user experience
- Access to the full feature set of a particular device

Limitations

- High cost
- Big development team
- Lack of code reusability

Cross-platform applications

Cross-platform app development, also called multiplatform development, is the process of building mobile apps that are compatible with several operating systems. Instead of

creating separate applications for iOS and Android, mobile engineers can share some or all of the source code between multiple platforms. This way, the applications will work the same on both iOS and Android.

Benefits:

- Shareable code
- Faster development
- Cost-effectiveness

Limitations

- Performance issues
- Difficult to access native features of mobile devices
- Difficult integrations

Bibliographies

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