

Tarea 2

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Types of Mobile Applications

1. Native App

Native apps are developed for a specific mobile operating system (usually iOS or Android) using the platform's specific programming language. This means that a native app created for Android cannot be used on an iOS device and vice versa.

It is the most well-known type of mobile application. To function, it must be downloaded from app markets such as the App Store or Google Play and installed on the device.

Advantages:

- Best performance: Native apps are the fastest and outperform other types of apps, as they are optimized specifically for the device's hardware and operating system.
- Full access and integration with the device's hardware functions: Native apps make the most of mobile functionalities, including the camera, microphone, fingerprint biometric reader, sensors, and wireless networks (Wi-Fi, Bluetooth, etc.).
- Offline functionality: They can operate without internet access if designed for it.

Disadvantages:

- High development costs: To make an app available for both systems, separate development lines are required since the code used for one system is not reusable for another.
- Development complexity: Expert teams are needed for each specific system language, such as Kotlin for Android and Swift for iOS.
- Longer development time: Typically, 4 to 6 months.

Examples of Native Apps:

- WhatsApp.
- Facebook.
- Twitter.
- Netflix.
- Spotify.
- Pokemon Go.
- Shazam.

2. Hybrid App or non-native

Hybrid or cross-platform applications combine elements of native and web applications. These apps are developed using web technologies such as HTML, CSS, and JavaScript but packaged in a format that can be installed on a mobile device like any other native app. Therefore, a single development effort can result in an application for multiple platforms.

React Native has become the most widely used framework. It enables developers to create native applications for Android and iOS using JavaScript and React, allowing them to expedite the development process and provide performance similar to native applications.

Advantages:

- Lower cost due to the use of well-known programming languages, with a greater availability of professionals in the market.
- Cross-platform nature with a single development line.
- Access to some mobile device functionalities.
- Reduced development time to 3 months.
- Uploadable to application markets (App Store and Google Play), gaining benefits such as the option to monetize through downloads or visibility and accessibility.

Disadvantages:

- Inferior performance compared to a native app. They tend to have a considerable size and are generally slower.
- Limited access to device functions.

Examples of Hybrid Apps:

- Amazon.
- Instagram.
- Uber.
- Gmail.
- Evernote.

1 Bibliography

- Nunez, L. (2023, enero 4). Tipos de aplicaciones, características, ejemplos y comparativa. — EMMA. <https://emma.io/blog/tipos-aplicaciones-caracteristicas-ejemplos/>