**Native/Hybrid/Web app development**

**1. Guidelines**

This week, you’re going to create a comparative table of Native/Hybrid/Web app development. These are the different steps:

a. Keep this document open because you’ll need it while watching the video and reading the text. You’ll type your answers in this document.

b. Watch the video “1b. Video: Native/Hybrid/Web Apps” and fill in the comparative table below.

c. You are now allowed to read the transcript of the video I’ve made: “1c. Video Transcript (Open after viewing the video)”

d. Read the text “1d. Reading: a guide to mobile app development: Web vs. Native vs. Hybrid” and complete your comparative table + answer the additional questions

e. Submit your comparative table + answers on Moovin’ → “1e. Submit your Comparative table + Answers”

**2. Comparative table**

|  |  |  |  |
| --- | --- | --- | --- |
|  | **What is it? / How does it work?** | **Pros / Advantages** | **Cons / Downsides** |
| **Native** | An app downloaded from the playstore, it is installed on the device. Devs write the source code and package to APK for android or IPA for Apple | Best user experience, app icon available on the device, can receive push notification. Can use the platform API (camera, audio, network,..) | Need to understand the platform’s languages. |
| **Hybrid** | Written in html, CSS, JS.  Single code base.  Middleware layer (translate and run on IOS, android, windows) | Single source code,  Access to all platform api, less time to deployement,  Can be updated  Available in the app stores,  Application icon on the device | Depend on middleware.  More bugs, slower |
| **Web** | Designed for mobile. The languages are HTML, CSS, JS.  Single source code, responsive web design.  Using a web browser. The app in on a server | Cross-plateform, single code-base, fast production, lower development cost | Sluggish performance(depending on the device), require a lot of loading, network connections are required. Not available on the playstore. Not access on the API. No application icon |

**3. Additional questions (about the text)**

a. What are progressive web apps?

Progressive Web Apps are hybrids of web pages and mobile apps, Web app don’t have functionality of native web apps (notification push, working offline, …) But progressive web app has similar features to native app: send push message, use touch gestures and phone accelerometer,

Vibration,… Progressive app work only on Google chrome

b. What are the two platforms that could be classified as another type of native app development? + What do they allow you to do?

Xamarin and React native;

Xamarin : build one app that runs on many platform in C#. With one codebase, the app can run on IOS, Android, Windows with native user interfaces

React Native: let’s dev build real, native IOS and Android apps with only one codebase. With React Native you use JS and React.