

App Development Frameworks

Task 01

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Mobile Application Framework

1. Framework - Native app

Why I chose native app is it is the fastest and most responsive. Also it doesn't require internet connection. Since the 'ToDoNotes' app has to use offline, this is the best solution for that. Also there are another few reasons to select Native Apps.

- Can tap into functionality of a device, like Gestures.
Tap to add a 'New Note'
Tap/slide to delete a note etc.
- Responsive.
Adding a 'New Note' quickly etc.
- Good User Experience.

2. Compare and Contrast

- Native Apps

Pros	Cons
Faster and good performance	Can be use only on one platform
Better functioning	More expensive
Support for device APIs	When adding a new feature has to add them separately
Better UX	Need a bigger team of specialists since native languages are very distinctive
Easier to prevent bugs	Takes more time to add into different operating systems
Layouts for each platform	Has to maintain separately (IOS & Android)
Highly secure	Need frequent updates and Lengthy downloading process

➤ Hybrid Apps

Pros	Cons
Lower cost for development	Limited functionality
Easy maintenance	Some complex apps won't support properly
Adding new features are simple	Might get problems with using certain features
Shorter time-to-market period	Browser needed. So the user require more steps to use the app.
Instant access	Slow performance
No need for approval	Takes time for a new feature
Automatic updates	Lack 3D support <i>(quality issues when using eye catching graphics and 3D elements)</i>

➤ Progressive Web Apps

Pros	Cons
Can work offline	Limitations when it comes to some features
Not getting issues when accessing on different platforms	Not available on App Store
Cheaper and faster development	High battery usage
Easily adopt to different screen sizes	Limited hardware and software support
No installation process	Not support with older mobile devices
Inclusion of push notifications	Lack of User Experience
Accessed through a web address	No room for business <i>(It is a challenge to develop advertising opportunities)</i>

3. Suggest a value-added feature

Sync Option

From this option you can have access to your to-do list wherever you are. And anywhere you work. It can be another mobile phone, desktop or a laptop etc. You can add a 'New Note' from one of your devices and it can be shown from the other devices you're using. This can save your time also you won't miss anything.

For desktops and laptops developers can develop a desktop application so you can sync your mobile phone into the desktop app.

4. Considerations

- Development costs - Budget, estimation
- Time to market - How much time will it take to finish the app
- Maintaining costs - Annual/Monthly subscription, adding new features
- Performance
- Availability
- Security - Security of the personal details (addresses, contact details, passwords etc.)
- Hiring - How many developers do you need to complete this app?
- UX and UI

5. Favorite mobile application

Instagram

Currently I use Instagram for 2 purposes. One is to share my personal life with my friends and the other one is to promote my business.

Personal

- It allows me to connect with my friends and share my day with pictures. Because I personally loves to take pictures of the work I do.
- The main thing I love this app is you need to follow each other to check others one's profile. Even if someone accepts my request yet they can't see my profile. They need to follow me back.
- Instagram stories. (boomerang)
- IG TV - it's like you're watching Netflix.
- Photo filters they have.
- Algorithm - In Facebook if you like someone's picture or a video it appears on the news feed. But on Instagram it won't.
- Finally the UI. Their UI is so eye catching and can turn on dark mode.

Business

- Since I'm running a music production studio I can share small clip of videos and photos instantly.
- Social engagement

- Direct response ads - You can pay and share your business video or picture ads on Instagram. And also with a click your clients can access to your business page or message you.
- Algorithm - Someone loves music? Then your music studio's videos will appear on their global feed even if they won't follow you.
- Editing feature - You can add filters and crop the videos before uploading it.

Task 03 - Running App

