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TOP 5 MISTAKES DEVELOPERS MAKE WHEN GOING MOBILE

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With mobile's unparalleled growth rate and unmatched subscriber counts, there's no doubt that nearly every developer is either already going mobile, or thinking about it. Even tried and true desktop apps and large-scale enterprise systems have companion mobile apps that let users interact with desktop files or large systems while on the go.

To help you create an awesome mobile user experience for your application, we've prepared a list of common mistakes developers make when going mobile - and how you can avoid them.

MISTAKE #1

Trying to fit a desktop experience onto a mobile device

Let's state the obvious. Mobile devices are powerful (and getting more so), but they lack the convenience of a PC for things like a large screen display for easy viewing, a robust in-memory cache for fast data processing, and an external keyboard for easy typing. While none of this is breaking news, it's amazing how often developers try to build overly complex capabilities into their mobile apps that end up cluttering the screen, draining device resources and ultimately impacting the end user experience.

How to Avoid it: Identify a handful of high value actions within your app that people are most likely to do while mobile. Design only for these requirements and ensure that your users can complete them with as few taps as possible. Set a maximum tolerance for the number of steps a user has to take to complete any of your most common use cases – and stick to it.

Mistake #2

Not making the mobile user experience your top priority

With all the mobile apps in the world, your users have literally hundreds of thousands of ways to spend time while on their smartphones and tablets. If your app is not easy to use, people will avoid using it – and they might not come back later after a poor initial user experience.

How to Avoid it: When it comes to mobile apps, you must have a maniacal focus on good user experience design. Don't leave it to chance. Show key users prototypes of your app on actual mobile devices to ensure that you've satisfied their main requirements before releasing your app into the wild.

Mistake #3

Letting too much get between your app and the OS and hardware

Going beyond user interface design, if you want your app to stand out from the crowd, you must shave every possible millisecond off of response time and utilize all relevant capabilities offered by that device. While it's tempting to use a mobile app development platform that abstracts away device details, most of these platforms deliver only the lowest common denominator of functionality across devices – making your apps pay the price of being just like everyone else.

How to Avoid it: Build a "true native" app – meaning that your app is not only built for a particular operating system, but it is also optimized for that particular piece of hardware. Skip wrappers like JVMs that abstract away control of fine-grained capabilities and code directly to the device whenever possible.

Mistake #4

Building separate apps for different platforms

Building different apps with separate codebases for different platforms can lead to multiple issues. The first is user experience. Many of your end users own multiple devices that employ different platforms. Imagine how confusing it will be if your app performs differently on those devices! With separate apps, features get released and bugs get fixed on one platform before another – it's just the nature of development. Whenever you have different apps, you will almost certainly run into this out-of-sync scenario, which can be confusing for your users.

The second area of concern when managing multiple mobile codebases is extra development work. Building and maintaining multiple codebases results in higher overhead for you as a developer.

How to Avoid it: Leverage a single codebase that is compiled and optimized for different platforms and device form factors. You'll be able to deliver a better and more consistent user experience to your users across all their devices. You can also potentially realize significant savings with fewer resources required for development, QA and bug fixing when using a single codebase.

Mistake #5

Not doubling down on security

Relying on device or network security measures to protect your app data can land you in hot water. Your app must take active measures to protect data that lives on the device and the data passed in communications and service calls that happen within your app. Java and JavaScript are notorious hacker targets.

How to Avoid it: For key interactions, code directly to the device and include your own security precautions to reduce the risk of third party attacks. Don't forget to encrypt sensitive data stored on the device.

Want to make it easy to avoid these mistakes?

Embarcadero Technologies created RAD Studio with just these key challenges in mind. RAD Studio is the app development suite for companies that need to create true native apps for PCs, tablets, and smartphones and get them to market fast. You manage one codebase, one team, and one schedule without sacrificing performance. True native apps give you more control, tighter security, and a better user experience. On-device rapid prototyping lets you get user feedback early in the process so you know you'll have happy users when you release.

Want to see for yourself? Visit https://www.embarcadero.com/products/rad-studio to see how you can use RAD Studio 11 to create a single app for iOS, Android, macOS, and Windows in just a few minutes.