

# Can android apps be developed to allow users select what Fingerprint out of the multiple stored on the phone to use for authentication?

Asked 3 years, 2 months ago   Modified 3 years, 2 months ago

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A client recently added fingerprint authentication as an alternative form of signing in to their application which stores sensitive data.



Of course, the username and password are verified before allowing fingerprint authentication.



But this and other applications I've tested have had one major flaw which no one seems to talk about. All enrolled fingerprints on the phone are also allowed to have access to user accounts on the application. This means if I add my wife's fingerprint on my phone for some reason or the other, and I allow unlocking my banking application via my fingerprint, My wife is able to sign in freely to my banking application and perform operations on my behalf!

My question is, is there a way to bolster this feature for applications built to run on Android? Can developers integrate selecting what fingerprint (out of the multiple

stored on the phone) is actually allowed access to user accounts?

MD

authentication

android

fingerprint

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asked Oct 8, 2021 at 7:32



Bobola

1,035 ● 2 ● 9 ● 10

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If you look at the Android authentication API, you'll see that it is not possible, It's simply a call to the authentication subsystem. Your answer is in the developer guides.

[developer.android.com/training/sign-in/biometric-auth](https://developer.android.com/training/sign-in/biometric-auth)

– [schroeder](#) Oct 8, 2021 at 8:28

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And this is not a flaw. There is no design or security failure. The fact that someone can use `1111111` as their password is not a *flaw*. Adding multiple fingers to the list of allowed fingerprints is not a bug. That's opsec, not appsec.

– [schroeder](#) Oct 8, 2021 at 8:31



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While not the answer you're looking for, you might be able to find some useful information here:

[stackoverflow.com/a/58916974/9179412](https://stackoverflow.com/a/58916974/9179412) – [Elhitch](#) Oct 8, 2021 at 8:35

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"This means if I add my wife's fingerprint on my phone for some reason or the other" -- either you trust your wife or you should not do this. Note that this is not unique to married couples: only ever add another person's biometrics to your phone if you want them to have access to the phone and its apps. "is there a way to bolster this feature for applications built to run on Android?" -- sure. The fingerprint (or other device authentication) can be one factor of a multi-factor

authentication system. For example, the app could also ask for an app-specific PIN or passphrase. – CommonsWare   
Oct 8, 2021 at 11:01 

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Thanks for the answers, everyone. This helped a lot.  
@schroeder I can see how that is opsec concern and not for appsec. – Bobola Oct 13, 2021 at 18:34

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## 1 Answer

Sorted by:

Highest score (default)



2



No. The purpose of in-app biometric authentication is to verify that you own the device, not to identify the user because it is assumed that if there are more than one owners, each one of them will have their separate user account created by android **Multiple users** feature. Multiple users have their own personal space for custom home screens, accounts, apps, settings and more. If the device is enrolled with multiple biometrics under the same account, the device will assume the ownership whoever successfully authenticates with its biometrics.

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answered Oct 8, 2021 at 8:42



default

287 ● 2 ● 12