What exactly does Flutter build iOS do? Is this really necessary?
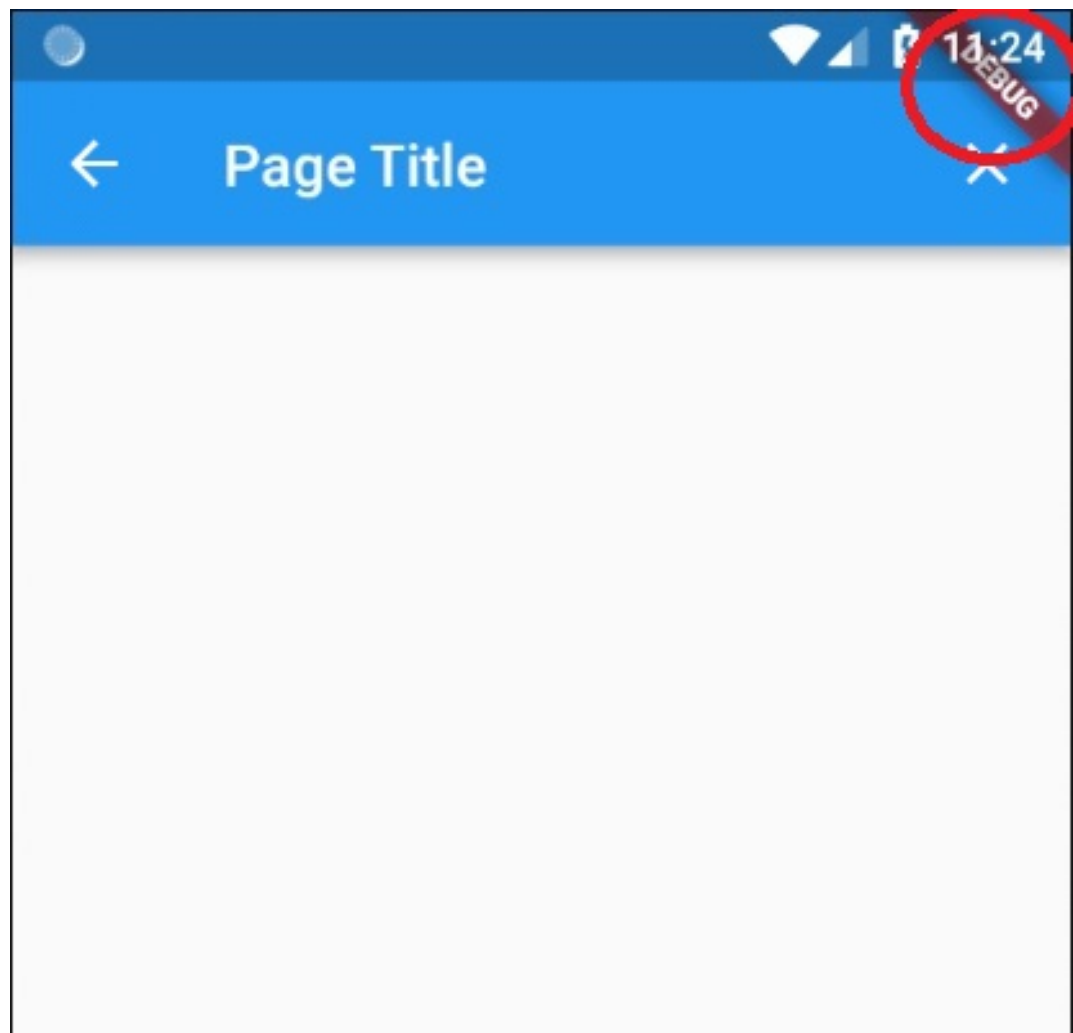
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I would like to fully understand this command and what happens behind the scenes. Here are a few pieces of information I've understood so far but somehow I cannot connect the dots:

- When deploying an iOS we need to go through these steps:

1. build a flutter app in release mode, which will make an .app file/folder

2. archive & sign the .app file which will convert it into .ipa

3. send the signed .ipa to the appstore

- flutter apps can have 3 modes: 1. debug 2. release 3. profile

- running `flutter build ios` creates a build/ios folder, including the Release-iphoneos/Runner.app

- Xcode creates its own .app in ~/Library/Developer/Xcode/DerivedData/Runner-...

Now, questions:

1. Is the build/ios/Release-iphoneos/Runner.app that Xcode converts into .ipa? I'm asking since I know that Xcode creates its own .app in ~/Library/Developer/Xcode/DerivedData, so I'm not sure if Xcode just copies build/ios/Release-iphoneos/Runner.app in here: ~/Library/Developer/Xcode/DerivedData/ or not

2. What happens if I don't run `flutter build ios` before? Will Xcode use only a debug mode of my app? If so, how come it removes the debug flag in the upper right corner?

3. When I clean my build folder in Xcode (shift+cmd+K) and then I archive the app and it will still build a new .app and then it converts it to .ipa. What mode was this .app created in? Was it a release app? If so,

again, why is it necessary to run `flutter build ios` before and why not just archive it from the Xcode?

Thanks to everyone who tries to unleash this big mystery for me and for everyone else wondering.

MD **ios** **flutter** **deployment** **command-line-interface**

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asked May 17, 2020 at 12:21

Tomas Baran
1,957 ● 2 ● 28 ● 45

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1   I would also like to know more, I wish there was some proper documentation. Sometimes I run into Xcode build errors, and the only way to fix it is to clean Xcode, close it, then run `flutter build ios` , then reopen Xcode and build again. Also sometimes I need to reinstall pods also. The whole process is a complete mystery to me – James Allen Oct 9, 2020 at 12:17

Also would like to better understand. Seems the internet doesn't really understand it either. – walkair Oct 28, 2021 at 7:38

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1 Answer

Sorted by: Highest score (default)   ⇕

The reason you should run a `flutter build ios` before archive is because archive uses the last build configuration from the results of running `flutter build ios`.

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