Troubleshooting — Firebase x Flutter

Making a Flutter App work with Firebase Cloud Firestore is no simple feat, it relies on a lot of setup steps to be carried out successfully. If you experience errors/warnings at any point in the upcoming setup lessons, be sure to try some of the fixes here.

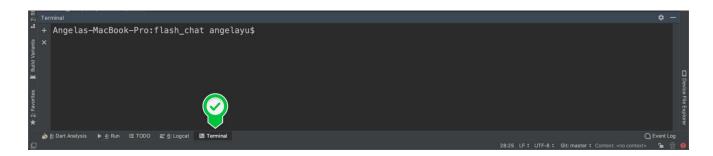
- Problems Running on iOS (Simulator or Device)
- Errors relating to FIRAuthErrorUserInfoNameKey.
- Errors relating to Mismatched Bundle ID
- Error Relating to junit.version and animal.sniffer.version
- Errors relating to Android X
- Errors relating to MultiDex
- Warnings and Log Messages

1. Problems Running on iOS (Simulator or Device)

e.g. Incompatible block pointer types sending 'void (^)(FIRAuthDataResult * __strong, NSError *_strong)' to parameter of type 'FIRAuthResultCallback _Nullable' (aka 'void (^)(FIRUser *_Nullable __strong, NSError * _Nullable __strong)')

It's likely that the version of cocoapods you have is out of date. Follow the steps below to fix this:

1. Open the terminal in Android Studio:



- 2. Type pod repo update then hit enter.
- 3. Wait until you see your prompt again to know that the process has been completed.

Angelas-MacBook-Pro:flash_chat angelayu\$



4. Type sudo gem install cocoapods then hit enter.

You will need to enter your mac login password.

- 5. Once step 4 is complete and you see your prompt again, type pod setup and hit enter.
- 6. Verify that you're using the latest versions for the Firebase related packages as specified in the installation for firebase <u>core</u>, <u>auth</u> and <u>firestore</u>.
- 7. Copy and paste this into the terminal in Android Studio cd ios/Runner; pod update

Once that's complete, you can run your app again and the errors should go away.

2. Errors relating to FIRAuthErrorUserInfoNameKey.

e.g.

```
28 warnings generated.

=== BUILD TARGET cloud_firestore OF PROJECT Pods WITH CONFIGURATION Debug ===
/Users/angelayu/Development/flutter/.pub-cache/hosted/pub.dartlang.org/firebase_auth-0.8
.4+3/ios/Classes/FirebaseAuthPlugin.m:10:37: error: use of undeclared identifier 'FIRAuthErrorUserInfoNameKey'; did
you mean 'FIRAuthErrorUserInfoEmailKey'?
NSString *code = [error userInfo][FIRAuthErrorUserInfoNameKey];

FIRAuthErrorUserInfoEmailKey
In file included from /Users/angelayu/Development/flutter/.pub-cache/hosted/pub.dartlang.org/firebase_auth-0.8
.4+3/ios/Classes/FirebaseAuthPlugin.m:7:
```

Review the installation page of the 3 flutter packages firebase <u>core</u>, <u>auth</u> and <u>cloud firestore</u>. Make sure that the versions you are using in your pubscpec.yaml file match the latest version you see on the installation page.

Example



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README.md

FLUTTER

CHANGELOG.md

Installing

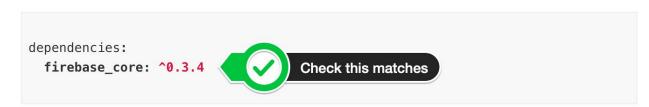
Versions



Use this package as a library

1. Depend on it

Add this to your package's pubspec.yaml file:



3. Errors relating to Mismatched Bundle ID

e.g. No matching client found for package name. Running on Android:

```
FAILURE: Build failed with an exception.

* What went wrong:
Execution failed for task ':app:processDebugGoogleServices'.
> No matching client found for package name 'co.appbrwerwerewery.flashchat'
```

Running on iOS:

```
Error output from Xcode build:

*** BUILD FAILED **

Xcode's output:

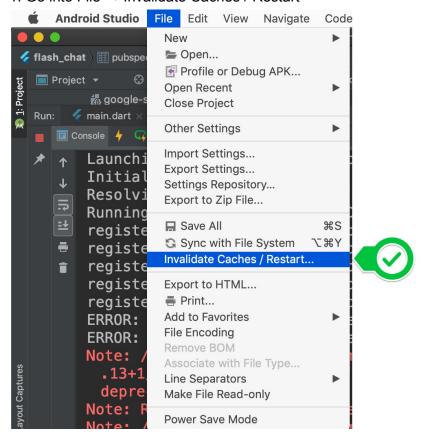
In file included from /Users/angelayu/Documents/LAB/OnlineCourse/Project
Code/FlutterDev/flash_chat/ios/Pods/gRPC-ProtoRPC/src/objective-c/ProtoRPC/ProtoRPC.m:22:
In file included from /Users/angelayu/Documents/LAB/OnlineCourse/Project
Code/FlutterDev/flash_chat/ios/Pods/Headers/Private/Protobuf/GPBProtocolBuffers.h:44:
/Users/angelayu/Documents/LAB/OnlineCourse/Project
Code/FlutterDev/flash_chat/ios/Pods/Headers/Private/Protobuf/GPBWellKnownTypes.h:40:10: warning: non-portable path to file '<protobuf/Any.pbobjc.h>'; specified path differs in case from file name on disk [-Wnonportable-include-path]
#import <Protobuf/Any.pbobjc.h>
```

Be sure to repeat the steps shown in the last video and make sure your bundle ID or package name matches what you gave to Firebase. If it does not, be sure to regenerate the google-services plist or JSON file from scratch and repeat the steps to incorporate it into your project as shown in the video.

4. Error Relating to junit.version and animal.sniffer.version

```
ERROR: [TAG] Failed to resolve variable '${junit.version}'
ERROR: [TAG] Failed to resolve variable '${animal.sniffer.version}'
Note: /Users/angelayu/Development/flutter/.pub-cache/hosted/pub.dartlang.org/cloud_firestore-0.9
.13+1/android/src/main/java/io/flutter/plugins/firebase/cloudfirestore/CloudFirestorePlugin.java uses or overrides a deprecated API.
Note: Recompile with -Xlint:deprecation for details.
Note: /Users/angelayu/Development/flutter/.pub-cache/hosted/pub.dartlang.org/cloud_firestore-0.9
.13+1/android/src/main/java/io/flutter/plugins/firebase/cloudfirestore/CloudFirestorePlugin.java uses unchecked or unsafe operations.
```

1. Go into File → Invalidate Caches / Restart



2. Re run your app and the error should go away.

5. Errors relating to Android X

e.g. error: failed linking references

Android code often uses the <u>android.support</u> libraries to ensure backwards compatibility. The android.supportlibraries are deprecated, and replaced with <u>AndroidX</u>. AndroidX has feature parity with the old libraries with some additional capabilities but, unfortunately, these two sets of libraries are incompatible.

Gradle crashes when trying to build an APK that relies on both sets of libraries. This page explains how you can workaround this issue.

To solve this issue, you'll need to follow the instructions at the page below to upgrade your project to AndroidX using Android Studio.

https://medium.com/@swhussain110/how-to-migrate-your-flutter-app-to-androidx-9a78eaaa924b

6. Errors relating to MultiDex

e.g D8: Cannot fit requested classes in a single dex file

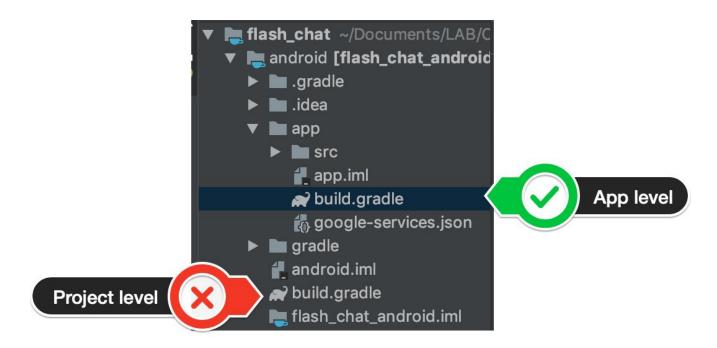
```
Note: /Users/angelayu/Development/flutter/.pub-cache/hosted/pub.dartlang.org/firebase_core-0.3
    .4/android/src/main/java/io/flutter/plugins/firebase/core/FirebaseCorePlugin.java uses unchecked or unsafe operations.
Note: Recompile with -Xlint:unchecked for details.
D8: Cannot fit requested classes in a single dex file (# methods: 67449 > 65536)

FAILURE: Build failed with an exception.

* What went wrong:
Execution failed for task ':app:transformDexArchiveWithExternalLibsDexMergerForDebug'.

> com.android.builder.dexing.DexArchiveMergerException: Error while merging dex archives:
    The number of method references in a .dex file cannot exceed 64K.
    Learn how to resolve this issue at <a href="https://developer.android.com/tools/building/multidex.html">https://developer.android.com/tools/building/multidex.html</a>
```

1. Open your app level gradle file: android/app/build.gradle



2. Under defaultConfig add the line:

multiDexEnabled true

```
defaultConfig {
    // TODO: Specify your own unique Application ID (https://developer.android
.com/studio/build/application-id.html).
    applicationId "co.appbrewery.flashchat"
    minSdkVersion 16
    targetSdkVersion 27
    versionCode flutterVersionCode.toInteger()
    versionName flutterVersionName
    testInstrumentationRunner "androidx.test.runner.AndroidJUnitRunner"
    multiDexEnabled true
}
```

7. Warnings and Log Messages

Though we're not really used to seeing so many messages in the console. Not all of them indicate a problem. You will see some deprecation warnings and some log messages from the Flutter framework. As long as your app is up and running then you can move on and you have successfully setup your Flutter project with Firebase.