

Simple World Documentation

Simple World is a Social App built in Flutter and Firebase with both android and ios app. This application can be used to post pictures in timeline, chat with other users and can be logged in using google accounts.

Features

- Users can use Email and Google Authentication to login.
- Posts Images and Text
- Upload Videos and PDF
- Users can Chat with each other.
- Users can Add Stories
- Users can see all users using application from user's page
- Users can see all users posts from posts page
- Profile account with edit capability.
- Change profile picture.
- Add and Change cover picture.
- User can Comment and like each other's post.
- Users can Follow and unfollow each other to see each other's posts in their timeline.
- Users Searching setup
- Push Notification via FCM.
- Simple UI

Project Setup

Install Flutter:

Visit flutter official website: <u>flutter.dev</u> for full install guide. if you prefer video tutorials, we recommend this playlist that will guide throw the full installation process: https://www.youtube.com/playlist?list=PLSzsOkUDsvdtl3Pw48-R8lcK2oYkk40cm

Set up your editor Install the Flutter and Dart plugins.

To install and get ready to build IOS application visit this link.

Please make sure you have the latest flutter stable version.

Setup:

- 1. Open Code in visual studio.
- 2. To get the packages run the following command

Command: flutter pub get

3. To change the app icon replace icon.png in assets/ folder and run the command below it would change icons for both Android and IOS

Command: flutter pub run flutter_launcher_icons:main

- 4. To change the android app name
 - Change android label in AndroidManifest.xml file

```
EXPLORER
                           AndroidManifest.xml
Strings.dart
OPEN EDITORS 1 UNSAVED
                           android > app > src > main > ▲ AndroidManifest.xml
SOCIALO-MASTER [ ] [ ] [ ] [
                             4 <uses-permission android:name = "android.permission.INTERNET permission "/>
                              > .vscode
                             6 cuses-permission android:name="android.permission.WRITE_EXTERNAL_STORAGE" />

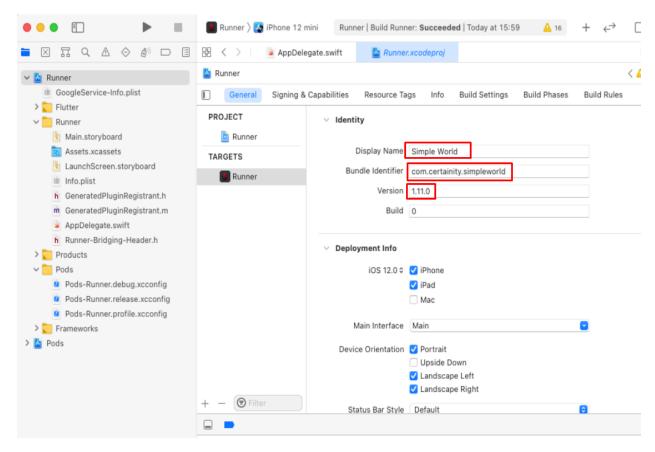
✓ android

                             > .gradle
                                   android: hardus
   > debug
                                      android:icon="@mipmap/ic_launcher">

✓ main

    > java
    > kotlin
                                        android:theme="@style/LaunchTheme"
android:configChanges="orientation|keyboardHidden|keyboard|screenSize|smallestScandroid:hardwareAcce|arated="true"
    ∨ res
     > drawable
                                          android:hardwareAccelerated="true
     > drawable-v21
                                         android:windowSoftInputMode="adjustResize">
     > mipmap-hdpi
                                      <meta-data
    android:n
    android:n
</pre>
     > mipmap-mdpi
                                            android:name="io.flutter.embedding.android.NormalTheme"
     > mipmap-xhdpi
                                            android:resource="@style/NormalTheme
     > mipmap-xxhdpi
     > mipmap-xxxhdpi
     > values
     > values-night
                                            android:name="io.flutter.embedding.android.SplashScreenDrawable"
                                            android:resource="@drawable/launch background"
    AndroidManifest.xml
   > profile
  w build.gradle
```

- 5. To change IOS app name
 - Open the default Xcode workspace in your project by running open ios/Runner.xcworkspace in a terminal window from your Flutter project directory.
 - Within Xcode change Display name, bundle id and version as need



6. Customize app theme

- To customize your app theme, go to app.dart file in the main lib folder, change the colors as you prefer.
- Color codes related to theme are saved in palette.dart file in lib/config folder

```
lib > config > 🐧 palette.dart > ધ Palette
   3 ∨ class Palette {
         static const Color primaryColor = Color(0xFFC62828);
          static const Color apptitlecolor = Color(0xFFC62828);
         static const Color backgroundColor = Colors.white;
         static const Color appbarbackgroundColor = Colors.white;
         static const Color appbariconcolor = Color(0xff495057);
         static const Color tabbarlabelColor = Colors.black;
         static const Color iconThemeColor = Colors.black54;
12
         static const Color scaffoldBackgroundColor = Color(0xfff2f6f9);
13
         static const Color cardColor = Colors.white;
         static const Color shadowColor = Color(0xFFE0E0E0);
14
15
         static const Color inputfillcolor = Color(0xfff8f8f8);
18
         static const Color apptitlecolordark = Colors.white;
         static const Color backgroundColordark = Color(0xff464c52);
         static const Color appbarbackgroundColordark = Color(0xff242526);
21
         static const Color appbariconcolordark = Color(0xffffffff);
22
         static const Color tabbarlabelColordark = Colors.white;
23
         static const Color iconThemeColordark = Colors.white70;
         static const Color scaffoldBackgroundColordark = Color(0xFF18191A);
         static const Color cardColordark = Color(0xFF3A3B3C);
         static const Color shadowColordark = Color(0xFF424242);
         static const Color inputfillcolordark = Color(0xff242526);
          static const Color simpleWorldText = Color(0xFF161f3d);
```

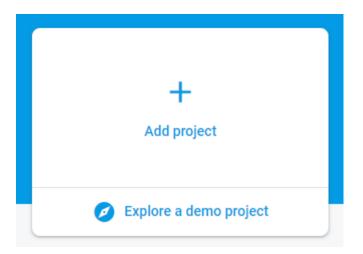
Create a Firebase Project

To know more about how to add Firebase to your Android project visit the link below:

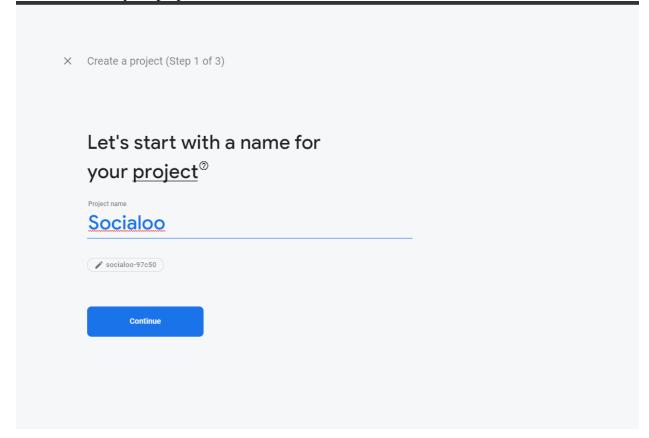
https://firebase.google.com/docs/android/setup

Step by step guide to make firebase setting to use this app

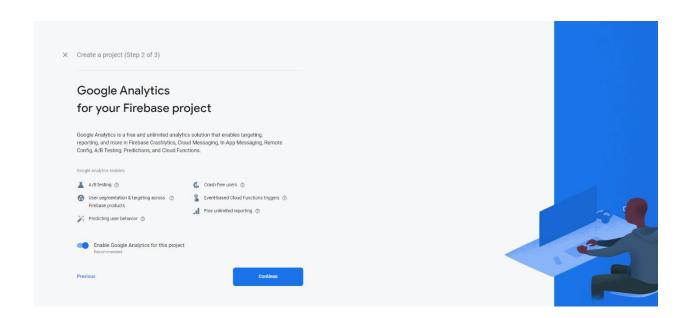
1. Go to Firebase dashboard, select the "Create new project" button and give it a name:



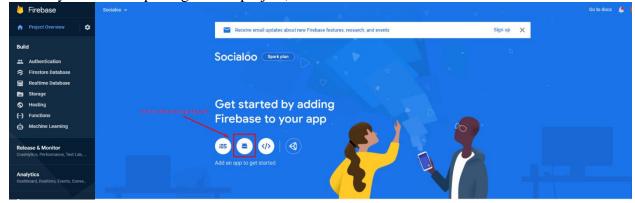
2. Give a name for your project and click to continue



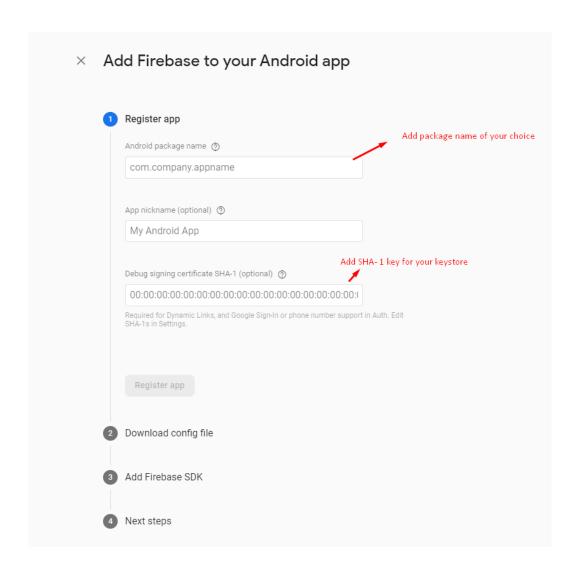
3. After that, we have the choice of enabling Google Analytics. It isn't required for what we're trying to do, so do whatever seem right for your use-case.



4. To add your android package to the project, click the android icon



5. Add package name and SHA-1 key for your



The most important thing here is to match up the **Android package name** that you choose here with the one inside of our application. The structure of this is done like so: com.example.app.

Once you've decided on a name, head over to android/app/build.gradle and update the applicationId.

Also you have to change applicationid in androidmanifest.xml file

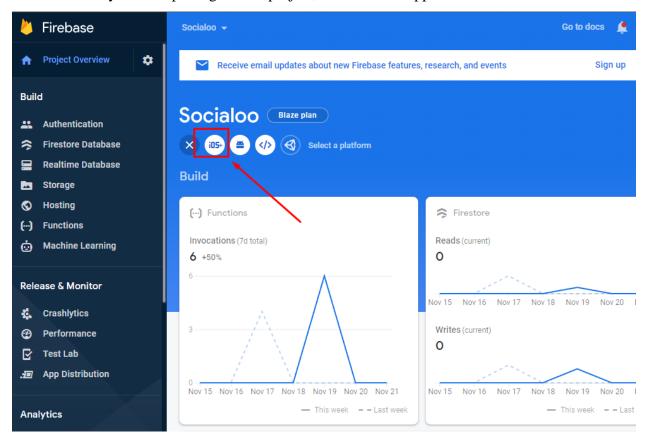
Select "Register app" to continue.

6. Download "google-services.json" and place it inside of the android/app directory within the Flutter project and it must replace the existing one.

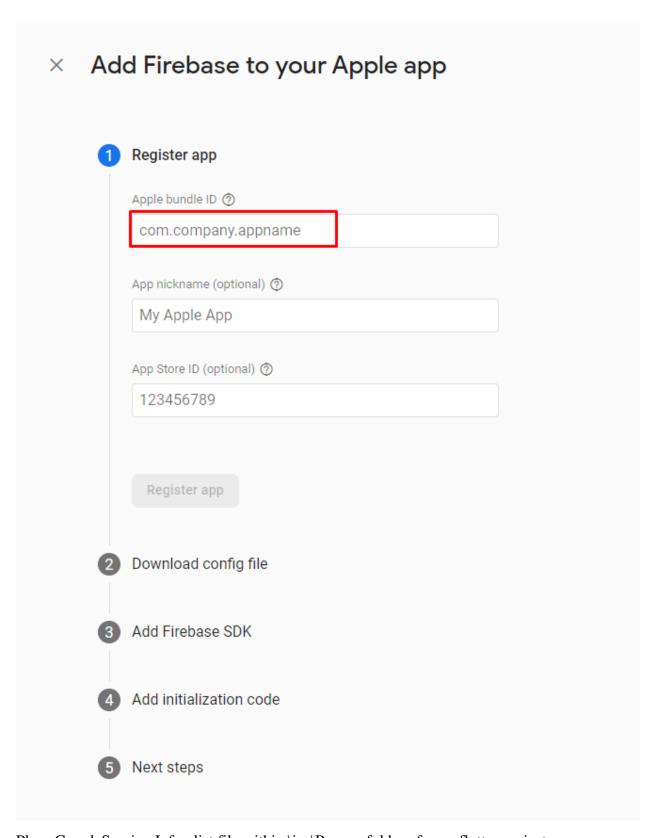


Note: Before you run app, make sure to setup Google Auth and Cloud Functions

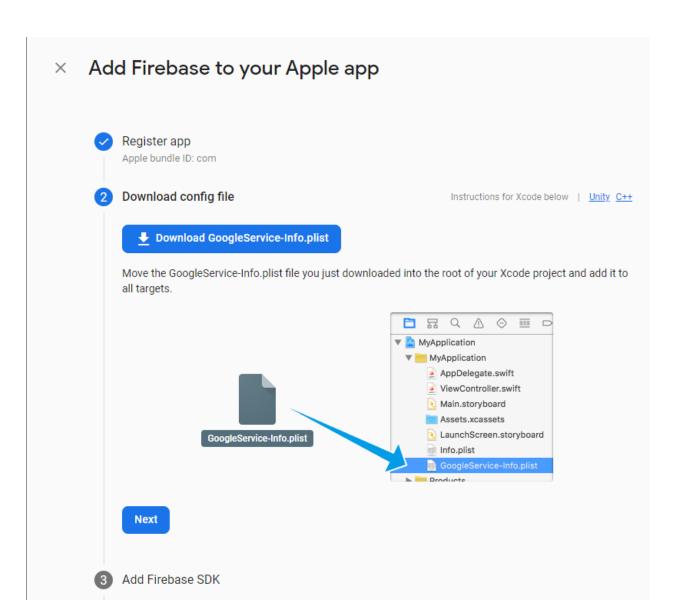
7. To add your IOS package to the project, click om add app button and select the IOS icon



Enter a unique bindle id

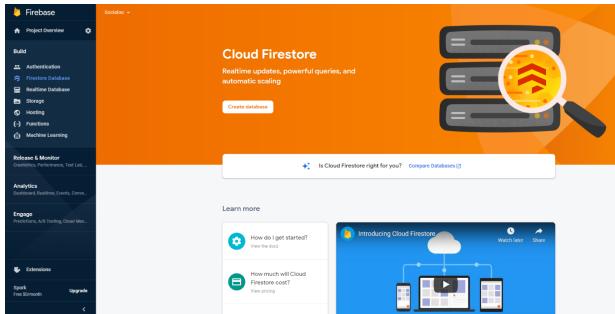


Place GoogleService-Info.plist file within \ios\Runner folder of your flutter project

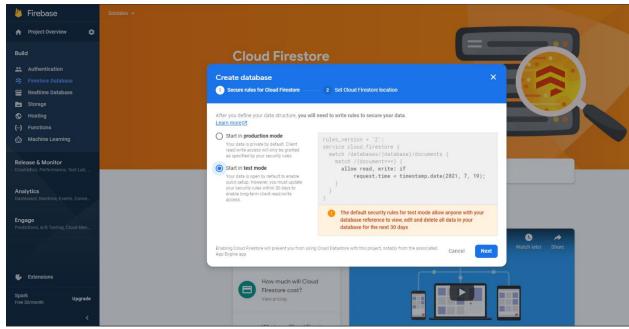


Setup Firestore:

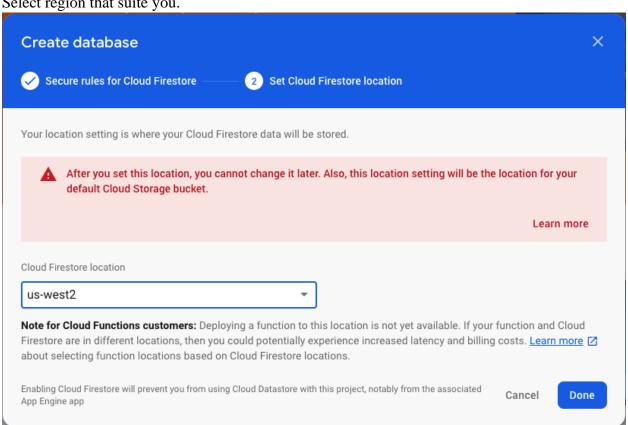
1. Select Cloud Firestore tab and click on create database



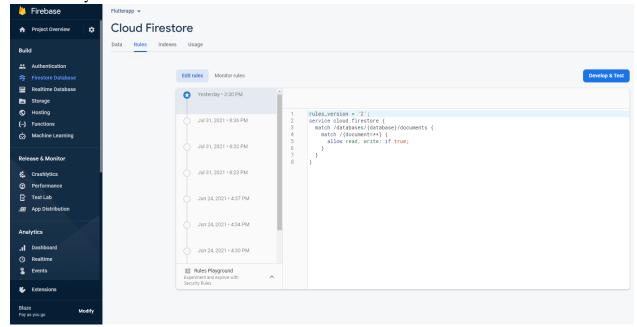
2. Select test mode then hit Next



3. Select region that suite you.

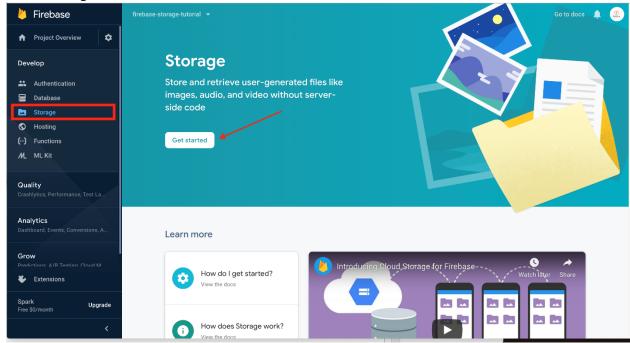


4. Add security rules like show below

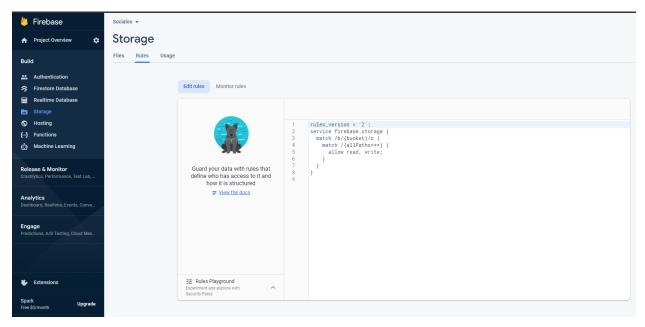


Setup Storage:

1. Select storage tab



2. Add security rules like show below



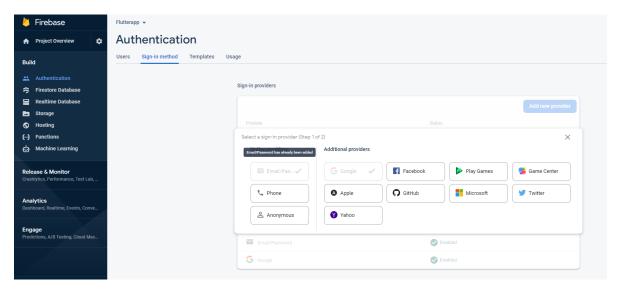
```
rules_version = '2';
service firebase.storage {
  match /b/{bucket}/o {
   match /{allPaths=**} {
```

```
allow read, write;
}
}
```

Setup Email Authentication

Enable "Google Authentication" on the Firebase console.

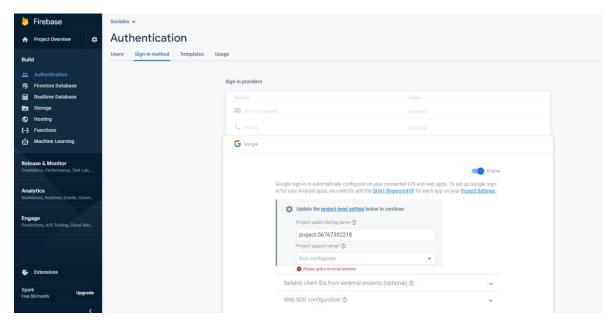
Firebase Console -> Develop (on the left menu) -> Authentication -> Sign-In Method -> Email Password is enabled.



Setup Google Authentication

Enable "Google Authentication" on the Firebase console.

Firebase Console -> Develop (on the left menu) -> Authentication -> Sign-In Method -> Google is enabled.



Add SHA certificate to Firebase console

This step is necessary for Android Google Authentication, without that authentication will not work.

SHA-1 key is required to use google login in your app from the below link you can find a detailed guide on how to create SHA-1 key

https://developers.google.com/android/guides/client-auth

To get the debug certificate fingerprint:

Command: keytool -list -v -alias androiddebugkey -keystore %USERPROFILE%\.android\debug.keystore

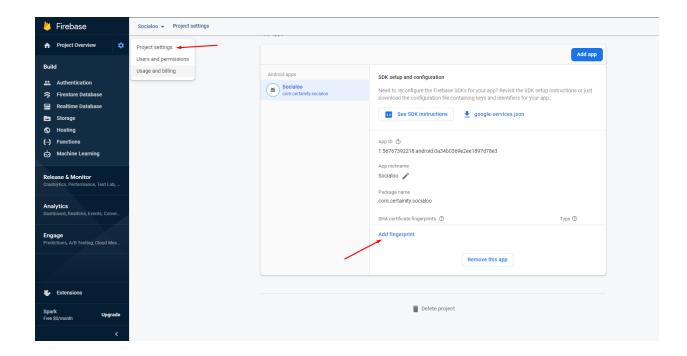
password: android

you have to copy the SHA1

The same thing is for release, you have to refer to your keystore location, the one below is for testing purposes.

Command: keytool -list -v -alias key0 -keystore ./android/app/test_keystore

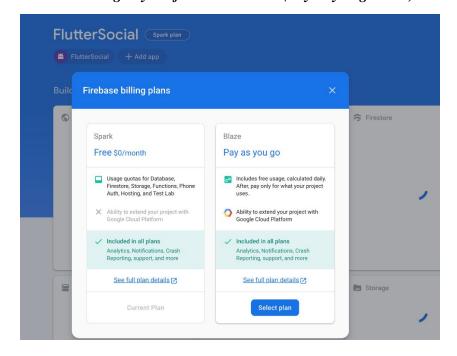
Copy the two SHA1 and SHA-256 keys to Firebase Console



Deploy Firebase config

In this section, we are going to config firebase which will allow Push notifications and generate all Firestore rules and indexes

Note: You need to enable billing in your firebase account (Pay as you go Plan)



Environment setup

First of all, you need have installed Node.js, at least the version 6.9.x or higher. You can download and install <u>from the Node.js project website</u>. When you have done it, you can install the Firebase CLI in order to init a new project and setup functions feature. You can install it globally using npm:

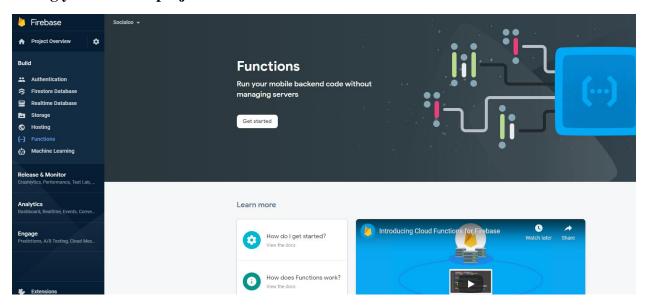
Command: npm install -g firebase-tools

You can verify if it is correctly installed whit the command:

Command: firebase version

> 3.9.1

Config your firebase project



1. Run firebase login to log in via the browser and authenticate the firebase tool.

Command: firebase login

2. Command: firebase init functions

- Are you ready to proceed? Yes
- What language would you like to use to write Cloud Functions? JavaScript
- Do you want to use ESLint to catch probable bugs and enforce style? No
- File functions/package.json already exists. Overwrite? No
- File functions/index.js already exists. Overwrite? No

- File functions/.gitignore already exists. Overwrite? No
- Do you want to install dependencies with npm now? Yes

•

3. Do firebase use --add with:

Command: firebase use --add

- 4. Then select your project and hit Enter
- ? Which project do you want to add?
 flutter-app-969bd
 flutterapp-f75ac
 simple-world-43bda
 > socialoo-97c50
- 5. make project alias as default
- ? What alias do you want to use for this project? (e.g. staging) default
- 6. Install dependencies inside functions folder

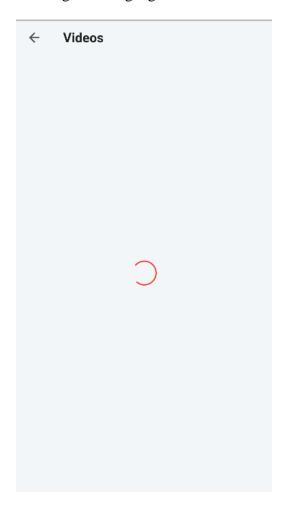
Command: cd functions **Command**: npm install

7. Deploy

Command: firebase deploy --only functions

To Get Videos and pdf

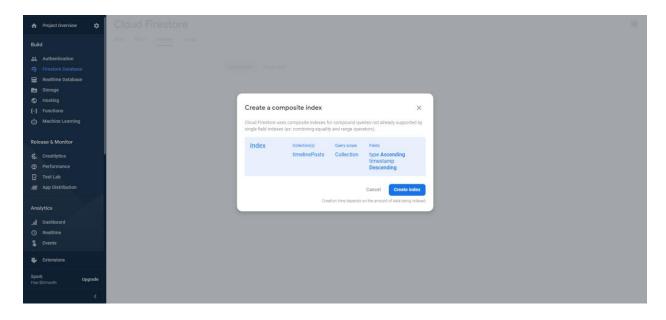
Run your app from VS code go to videos page or documents page in your application it will keep showing a loading sign as shown below



Now go back to VS code and check debug console, it will show a firebase link as shown below,



Click on it to create index for your query



Build & Publish Flutter App

To build and publish Android App, follow the official Documentation Android

Or follow steps below

- 1. Place your keystore file in android\app folder
- 2. Open android > app> build.gradle and change the keystore name with your keystore

```
EXPLORER
                                                        search.dart
                                                                                             key.properties
OPEN EDITORS
                              android > app > R build.gradle
SOCIALO-MASTER
                                              disable 'InvalidPackage'
> .dart_tool
                                              checkReleaseBuilds false
> .idea
> .vscode
                                          defaultConfig {

✓ android

                                              applicationId "com.certainity.socialoo"
 > .gradle
                                              minSdkVersion 21

√ app

                                              targetSdkVersion 30
                                              versionCode flutterVersionCode.toInteger()

✓ debug

                                              versionName flutterVersionName
    AndroidManifest.xml
   > main
                                          signingConfigs {
   > profile
                                              release {
 🗬 build.gradle
                                                  keyAlias keystoreProperties['keyAlias']
 {} google-services.json
                                                  keyPassword keystoreProperties['keyPassword']

≡ socialoo-keystore.jks

                                                  ctoraDaccword kavetoraDronartias['storaDassword']
                                                  storeFile file("socialoo-keystore.jks")
 > gradle
                               58
 gitignore
puild.gradle
 flutterappnew_android.iml
                                          buildTypes {
gradle.properties
                                              release {

≡ gradlew

gradlew.bat
                                                  // Signing with the debug keys for now, so `flutter ru
key.properties
                               66 🗸
                                                 signingConfig signingConfigs.debug
                                                  signingConfig signingConfigs.release
local.properties
settings.gradle
> assets
```

- 3. Open key.properties file and add your alias and password for your keystore
- 4. Then run the command below

Command: flutter build appbundle

1. (Running flutter build defaults to a release build.)

The release bundle for your app is created at [project]/build/app/outputs/bundle/release/app.aab.

By default, the app bundle contains your Dart code and the Flutter runtime compiled for <u>armeabi-v7a</u> (ARM 32-bit), <u>arm64-v8a</u> (ARM 64-bit), and <u>x86-64</u> (x86 64-bit).

For more information visit docs.flutter.com

To build and publish IOS App follow the link below https://docs.flutter.dev/deployment/ios

open ios/Runner.xcworkspace

How to update your app

V1.10

- If you are using a previous version below v 1.9 we recommend you to build the app from start, follow above instruction to make firebase setups.
- If you are using version 1.9 you don't need to make any changes in firebase setup, just download the script and connect to your own firebase and customize you app by following project setups

V1.11

- To add your IOS package to the project, click om add app button and select the IOS icon
- Add a unique bundle id to create GoogleService-Info.plist file then place it within \ios\Runner folder of your flutter project

V1.12

- To update you code from V1.11 to V1.12 you have to make many changes in Firestore Database hence we recommend to clean your current database post collection and add new posts
- However if you have users and don't want to remove the current posts follow the steps below to make changes in posts you already have for your users
- Go to profile.dart file in your old script (code form version 1.11) add the given codes within the widget shown below and enter each of your users profile and load all their posts

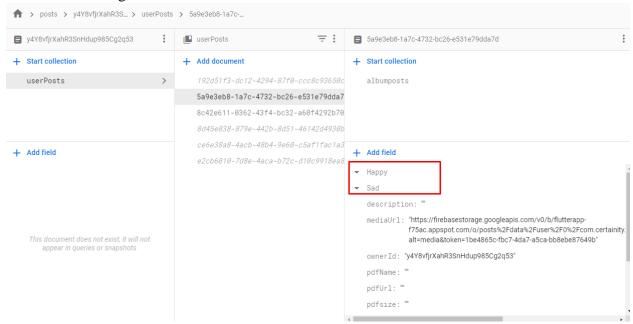
Step 1

Code 1

TO CREATE HAPPY AND SAD FIELDS IN EACH POST FOR THE USER

```
postsRef
   .doc(post['ownerId'])
   .collection("userPosts")
   .doc(post['postId'])
   .set(
    {'Happy': [], 'Sad': []},
    SetOptions(
       merge: true,
    ),
).then((value) {
    print('New fields Added');
});
```

- To check if new fields are added go to your Firestore Database and check posts collection
- You should have got 2 new fields as shown below



Step 2

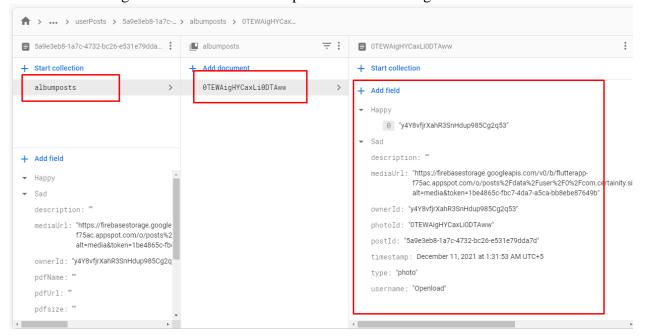
Code 2

IF HAVE A IMAGE IN CURRENT POST CREATE A SUB COLLECTION AND TO MAKE NEW POST FOR THE IMAGE

```
bool hasMedia = post['mediaUrl']?.isNotEmpty == true;
   if (hasMedia) {
   var photoId = postsRef
       .doc(post['ownerId'])
       .collection('userPosts')
       .doc(post['postId'])
       .collection("albumposts")
       .doc()
       .id
       .toString();
  postsRef
       .doc(post['ownerId'])
       .collection("userPosts")
       .doc(post['postId'])
       .collection("albumposts")
       .doc(photoId)
       .set({
```

```
"mediaUrl": post['mediaUrl'],
  "postId": post['postId'],
  "ownerId": post['ownerId'],
  "username": globalName,
  "description": '',
  "timestamp": timestamp,
  "type": 'photo',
  "Happy": [],
  "Sad": [],
  "photoId": photoId,
});
}
```

- While using this code be careful not to load each post 2 time, if it loads 2 times, 2 sub posts will be created in your subcollection
- To check if new collection is added go to your Firestore Database and check posts collection
- You should have got a subcollection for the posts contain an image as shown below

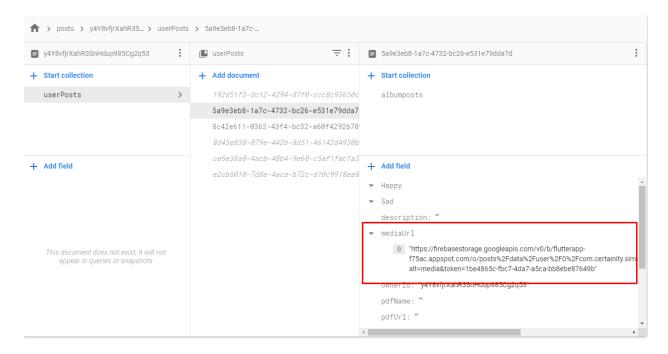


Step 3

Code 3

CONVERT MEDIALURL FIELD FROM STRING TO A LIST

• To check if mediaUrl string is changed to an array check a post in your posts collection it should have changed as shown below,



If the post is other then an image an empty mediaUrl array should have been created

+ Add field

- ▼ Happy
- ▼ Sad

description: "hi"

▼ mediaUrl

- The above steps will help you to change your current posts to the new version of code
- After completing each step remove the code used to change the posts for that step

V1.13

- To update you code from V1.12 to V1.13 we don't need much changes in firebase, however if you have stories delete the stories collection so that new format of stories would appear
- Easiest way to update it is download code from codecanyon and connect it to your firebase
- However, if you want to make manual changes, we have added changed files below
 - New Files
 - All files in lib/widgets/count folder
 - All files in lib/story folder
 - Changed files
 - new_timeline.dart
 - profile.dart
 - all_pdfs.dart
 - all videos.dart
 - login_page.dart
 - reaction_data.dart
 - upload.dart
 - video_upload.dart
 - pdf_upload.dart
 - add_post.dart
 - post_box.dart
 - login_page.dart
 - home.dart
 - app.dart
 - palette.dart

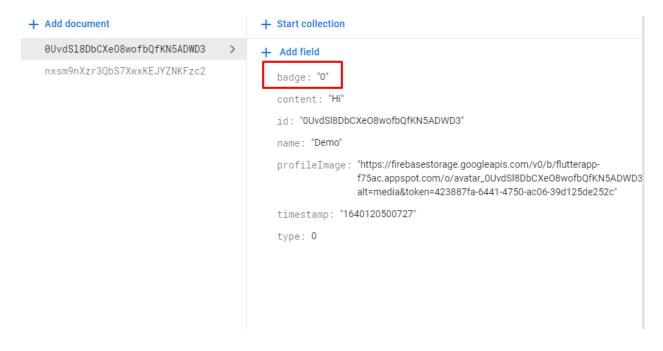
V1.14

- To update you code from V1.13 to V1.14 many changes were made in firebase.
- Easiest way to update it is download code from codecanyon and connect it to your firebase
- However, if you want to make manual changes, we have added changed files below

- New Files
 - post_layout.dart
 - simpleworld_chat_main.dart
 - suggested_users_tile.dart
 - messages_count.dart
- Changed files
 - new_timeline.dart
 - profile.dart
 - all_pdfs.dart
 - all_videos.dart
 - upload.dart
 - video_upload.dart
 - pdf_upload.dart
 - add_post.dart
 - post_box.dart
 - home.dart
 - palette.dart
 - all_stories.dart
 - suggested_users.dart
 - all_simpleworld_stories.dart
 - simpleworld_stories.dart

Note: As we have brought major changes in post time and how its being displayed, the posts in your post collection wont'work, you'll need to change t

For messages count to work in your code you'll need to add a new field in all existing documents under messenger collection as badge: '0' as shown below



V1.14.1

- To update you code from V1.14 to V1.14.1 many no changes were made in firebase.
- Easiest way to update it is download code from codecanyon and connect it to your firebase
- However, if you want to make manual changes, we have added changed files below
 - o Changed files
 - new_timeline.dart
 - activity_feed.dart
 - story folder