Single Radio

Documentation

Thank you for purchasing my product.

Welcome to the setup guide for your Flutter application. This document contains all the necessary information to help you get started with your app. If you encounter any issues during the setup process, please do not hesitate to contact me at support@cheebeez.com. For efficient troubleshooting, your email should contain:

- **Subject:** The complete title of the project, as listed on CodeCanyon.
- **Description:** Attach a screenshot of the problem and include the output of "flutter doctor -v" for a detailed analysis. Also, please provide a brief description of the issue.

Interested in exploring more of my work? Feel free to visit my portfolio at https://codecanyon.net/user/cheebeez/portfolio.

Contents

- Getting Started
- Import Project
- App Name
- Package Name
- App Icon
- Splash Screen
- Admob
- Firebase Cloud Messaging
- Config
- Color Theme
- Assets
- Build the Release
- Known Issues
- Support

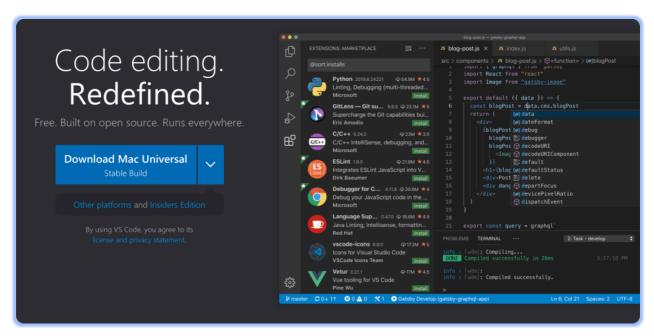
Getting Started

This section is crucial for those setting up a Flutter development environment for the first time. However, if you have previous experience building apps in Flutter, feel free to skip this part.

Visual Studio Code Installation

VS Code is a lightweight editor with Flutter app execution and debug support.

You can download it here: https://code.visualstudio.com/



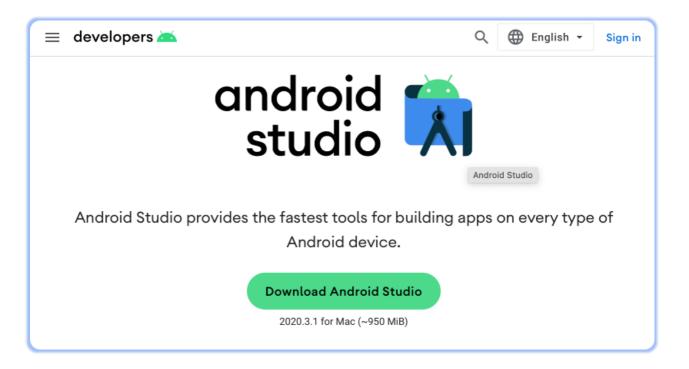
Install the Flutter and Dart plugins:

- Start VS Code.
- Invoke View > Command Palette....
- Type "install", and select Extensions: Install Extensions.
- Type "flutter" in the extensions search field, select Flutter in the list, and click Install.
 This also installs the required Dart plugin.

Android Studio Installation

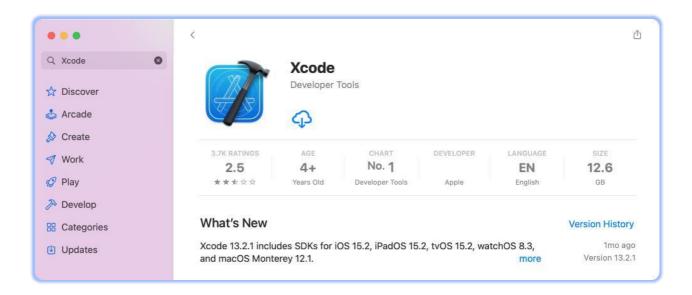
Download and install the latest Android Studio from this URL:

https://developer.android.com/studio/



Xcode Installation

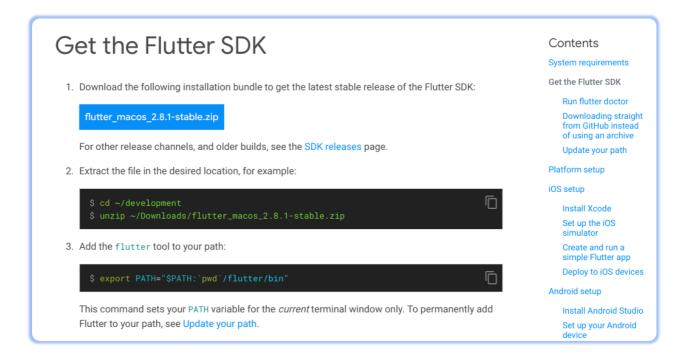
Launch the App Store application on your Mac, sign in with your Apple ID, and download the latest version of Xcode.



Flutter Installation

You can download the stable release of the Flutter SDK from this URL:

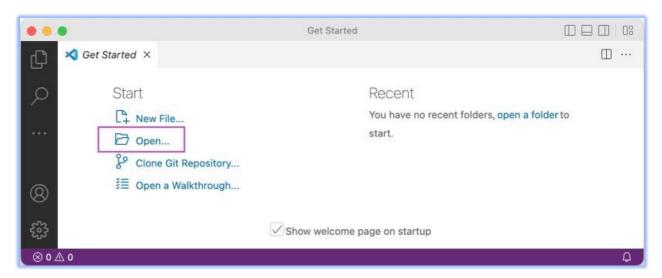
https://docs.flutter.dev/get-started/install



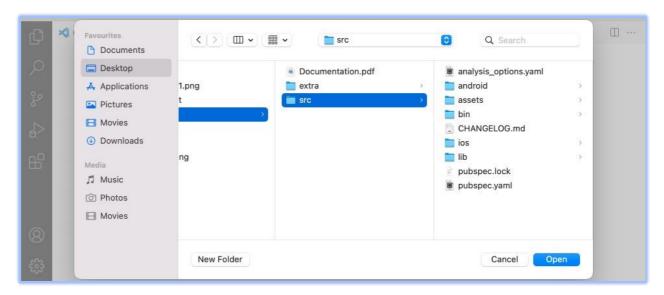
Complete all installation steps.

Import Project

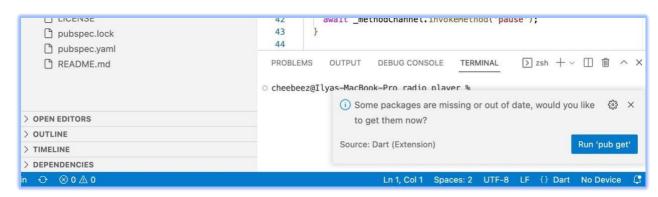
Launch Visual Studio Code and click "Open..."



Select the location of the src directory.



Click on "Run pub get" in the dialog box and wait for the packages to be downloaded.

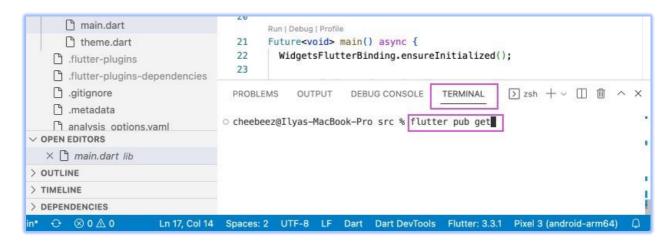


On the first build, VS Code automatically installs dependencies, including the Android SDK and Pods for Xcode.

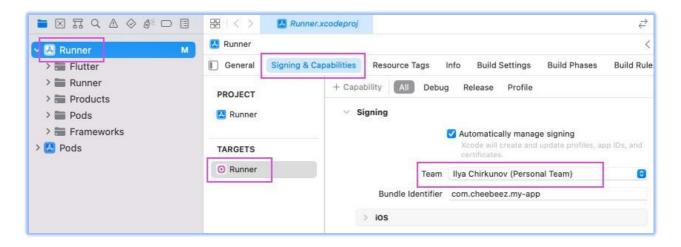
To install them manually, open the terminal (Ctrl+`) and run the commands below.

flutter pub get

pod install --project-directory=ios



To develop iOS apps, you must be a member of the Apple Developer Program. Open the ios/Runner.xcworkspace file in Xcode and select your Apple Developer account.



Now you can run the app.

```
P lib
                                        Run | Debug | Profile
> PT extensions
                                  21
                                        Future<void> main() async {
                                  22
                                          WidgetsFlutterBinding.ensureInitialized();
> 🖹 screens
                                  23
> 🖹 services
                                  24
                                          // Set device orientation.
> 🗎 widgets
                                  25
                                          await SystemChrome.setPreferredOrientations([
  config.dart
                                          DeviceOrientation.portraitUp,
                                  26
                                  27
  [] language.dart
                                          ]);
                                  28
     main.dart
                                          // Init services.
  1 theme.dart
```

App Name

Users will see this name under the application icon.

Change the "label" value in the android/app/src/main/AndroidManifest.xml file.

```
EXPLORER
                                    AndroidManifest.xml ×
∨ SRC
                                     android > app > src > main > [ ] AndroidManifest.xml
                                            <manifest xmlns:android="http://schemas.android.com/apk/res/android"</pre>
 > 🗎 .dart_tool
                                                package="com.cheebeez.single_radio">

∨  android

                                       3
                                                <application
   > 🗎 .gradle
                                       4
                                                    android: label="Single Radio"
   ∨ 🗁 app
                                       5
                                                    android:name="${applicationName}"
                                                    android:icon="@mipmap/ic_launcher">
      ∨ 🗁 src
                                       6
        > 🖹 debug
                                       8
                                                        android:name=".MainActivity"

∨ 

 main

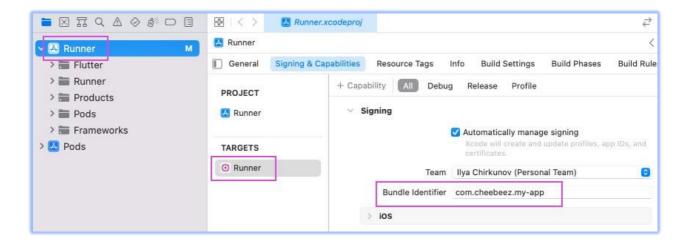
                                       9
                                                        android:exported="true"
          > 🗎 java
                                      10
                                                        android: launchMode="singleTop"
          > 🖹 kotlin
                                                        android:theme="@style/LaunchTheme"
                                      11
                                      12
                                                        android:configChanges="orientation|keyboardHidden|keyboard|
          > 🖹 res
                                      13
                                                        android:hardwareAccelerated="true"
             AndroidManifest.xml
                                      14
                                                        android:windowSoftInputMode="adjustResize">
        > 🖹 profile
                                      15
                                                        <!-- Specifies an Android theme to apply to this Activity a
        build.gradle
                                      16
                                                             the Android process has started. This theme is visible
    > 🗎 gradle
                                      17
                                                              while the Flutter UI initializes. After that, this the
                                      18
                                                             to determine the Window background behind the Flutter
      ி .aitianore
                                      19
                                                         <meta-data
> OPEN EDITORS
                                      20
                                                          android:name="io.flutter.embedding.android.NormalTheme"
> OUTLINE
                                                          android: resource="@style/NormalTheme"
                                      21
> TIMELINE
                                                          />
> DEPENDENCIES
                                                         <intent-filter>
                                                                                                 Dart DevTools
  Ln 4, Col 1 Spaces: 4 UTF-8 LF XML
```

For iOS, change the strings under "CFBundleDisplayName" and "CFBundleName" in the ios/Runner/Info.plist file.

```
<string>$(PKODOCI_BONDLE_IDENIIFIEK)</string>
Flutter
                               10
                                         </arrav>
Pods
                               11
                                         <key>CADisableMinimumFrameDurationOnPhone</key>
Runner
                               12
                                         <true/>
                               13
                                         <key>CFBundleDevelopmentRegion</key>
> P Assets.xcassets
                               14
                                         <string>$(DEVELOPMENT_LANGUAGE)</string>
> 🖹 Base.lproj
                               15
                                         <key>CFBundleDisplayName</key>
  AppDelegate.swift
                               16
                                         <string>App name</string>
  ☐ GeneratedPluginRegistra...
                               17
                                        <key>CFBundleName</key>
                               18
                                        <string>App name</string>
  ☐ GeneratedPluginRegistra...
                                         <key>CFBundleExecutable</key>
                               19
  GoogleService-Info.plist
                               20
                                         <string>$(EXECUTABLE_NAME)</string>
  Info.plist
                        M
                               21
                                         <key>CFBundleIdentifier</key>
  Runner-Bridging-Header.h
                               22
                                         <string>$(PRODUCT_BUNDLE_IDENTIFIER)</string>
  Runner.entitlements
                               23
                                         <key>CFBundleInfoDictionaryVersion</key>
                               24
                                         <string>6.0</string>
  RunnerDebug.entitlements
                                         <kev>CFBundlePackageTvpe</kev>
```

Package Name

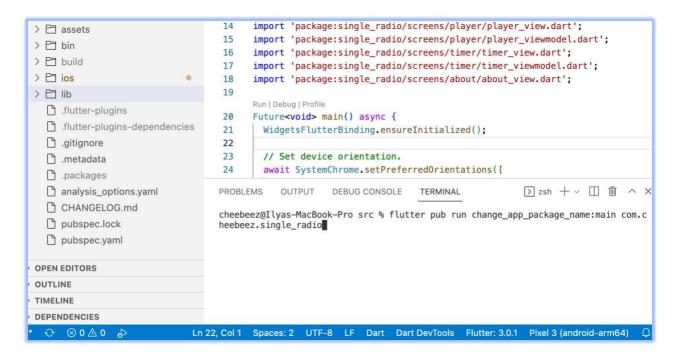
Open the ios/Runner.xcworkspace file in Xcode and change the "Bundle Identifier" on something unique. Standard naming procedure: com.yourdomainname.appname



For Android, open the terminal (Ctrl+`) and run this command:

dart run change_app_package_name:main com.cheebeez.my_app --android

Where com.cheebeez.my_app is the new package name that you want for your app.

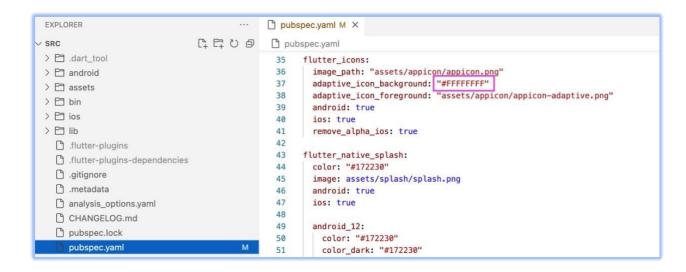


App Icon

Icons are located in the assets/appicon/ directory.

- appicon.png is a regular 1024x1024 pixel image.
- appicon-adaptive.png is a 1024x1024 pixel image with transparent background for the latest Android versions.

The background color of the adaptive icon is set separately in the pubspec.yaml file in <u>ARGB</u> format.



To create icons, you can use the extra/templates/appicon.fig which can be edited in Figma.

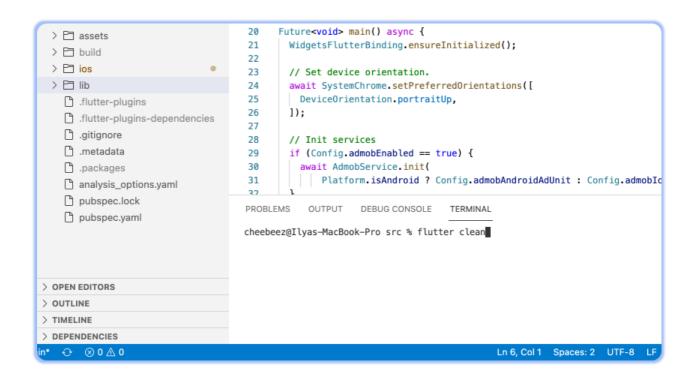


After changing the icons, all that is left to do is open the terminal (Ctrl+`) and run the commands below.

flutter clean

flutter pub get

dart run flutter_launcher_icons:main



Beta: To enable monochrome icons in Android 13+, add the line <monochrome android:drawable="@drawable/ic_launcher_monochrome"/>
to the android/app/src/main/res/mipmap-anydpi-v26/ic_launcher.xml file as shown in the screenshot below.

```
∠ □ arawapie-night-xxxnapi

                                    <?xml version="1.0" encoding="utf-8"?>
> drawable-v21
                                    <adaptive-icon xmlns:android="http://schemas.android.com/apk/res/android">
                                2
                                3
                                     <background android:drawable="@color/ic_launcher_background"/>
> 🛅 drawable-xhdpi
                                      <foreground android:drawable="@drawable/ic_launcher_foreground"/>
> 🗖 drawable-xxhdpi
                                > 🗎 drawable-xxxhdpi

∨ ☐ mipmap-anydpi-v26

                                7
    ic_launcher.xml
                         M
> 🛅 mipmap-hdpi
```

Then you can replace the android/app/src/main/res/drawable/ic_launcher_monochrome.png icon with yours.

Splash Screen

Splash screen provide a simple initial experience while your mobile app loads.

As with icons, you need to change images located in the assets/splash/ directory.

- splash.png is the default 728x671 pixel image. This size is chosen for the best compatibility with most devices.
- splash12.png is an 1152x1152 pixel image with transparent background for the latest Android versions (12+). The visible part should fit within a circle of 768 pixels in diameter.

The background is set separately in the pubspec.yaml file in RGB format.

```
EXPLORER
                                                pubspec.yaml X
                                 日の日打
                                                pubspec.yaml
                                                       flutter_native_splash:
color: "#172230"
image: assets/splash/splash.png
> 🗀 .dart_tool
> 🛅 android
> 🖹 assets
                                                          android: true
> 17 bin
                                                   48
                                                           ios: true
> 🗀 build
                                                   49
                                                          fullscreen: false
> 🗀 fonts
                                                   50
                                                           android_gravity: center
                                                   51
                                                          ios_content_mode: center
> 🛅 ios
                                                   52
> 🗀 lib
                                                   53
                                                         android_12:
  flutter-plugins-dependencies
                                                          color: "#172230"
color_dark: "#172230"
                                                   55
  gitignore .
                                                   56
                                                            image: assets/splash/splash12.png
  .metadata
                                                   57
                                                           image_dark: assets/splash/splash12.png
  analysis_options.yaml
                                                   58
  CHANGELOG.md
                                                   59
                                                        flutter:
  pubspec.lock
                                                          uses-material-design: true
                                                   60
                                                           assets:
    pubspec.yam
                                                             - assets/text/
```

To create splash screen, you can also use the extra/templates/splash.fig template which can be edited in Figma.

If you want the splash.png image to stretch fullscreen, you will need a higher-resolution image (e.g., 2732x2732 pixels) and to update the settings in pubspec.yaml .

```
/ □ IOS
                                                     flutter_native_splash:
> 🗀 lib
                                                       color: "#172230"
                                                45
 flutter-plugins-dependencies
                                                46
                                                       image: assets/splash.png
  :gitignore
                                                47
                                                       android: true
  netadata
                                                48
                                                       ios: true
                                                      fullscreen: true
                                                49
  analysis_options.yaml
                                                50
                                                       android_gravity: fill
  CHANGELOG.md
                                                       ios_content_mode: scaleToFill
                                                51
  pubspec.lock
                                                52
    pubspec.yaml
                                                       android_12:
                                                53
                                                         color: "#172230"
```

The splash12.png image cannot be stretched fullscreen. This is a system requirement from Google for all apps on Android 12 and newer.

After changing the images, open a terminal (Ctrl+`) and run the commands below.

flutter clean

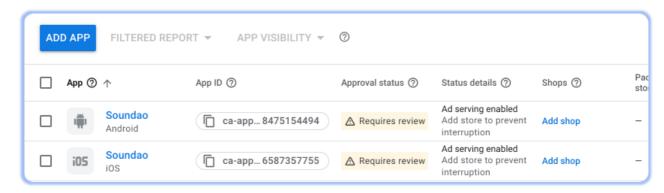
flutter pub get

dart run flutter_native_splash:create

Note: The splash screen may not appear when you launch the app from Visual Studio Code. However, it should appear when you launch by clicking on the launch icon in Android.

Admob

Login to your AdMob account and create apps for your platforms.



Replace App ID in ios/Runner/Info.plist for iOS.

```
EXPLORER

□ Info.plist ×
                      日の日日
∨ SRC
                                     ios > Runner > 🗋 Info.plist

√ P→ ios

                                     183
                                                        </dict>
                                     184
                                                         <dict>
   > 🖹 .symlinks
                                     185
                                                            <kev>SKAdNetworkIdentifier</kev>
   > 🗎 Flutter
                                     186
                                                            <string>zq492l623r.skadnetwork</string>
   > 🗎 Pods
                                     187
                                                         </dict>
   ∨ 🗁 Runner
                                     188
                                                         <dict>
                                     189
                                                            <key>SKAdNetworkIdentifier</key>
     > 🖹 Assets.xcassets
                                     190
                                                            <string>3qcr597p9d.skadnetwork</string>
      > 🛅 Base.lproj
                                     191
                                                        </dict>
        AppDelegate.swift
                                     192
                                                    </array>
        GeneratedPluginRegistra...
                                                    <key>GADApplicationIdentifier</key>
                                     193
        GeneratedPluginRegistra.
                                     194
                                                    <string>ca-app-pub-0620355927641886~6587357755
                                     195
                                                    <key>UIStatusBarHidden</key>
           Info.plist
                                     196
                                                    <false/>
        Runner-Bridging-Header.h
                                     197
                                                </dict>
   > 🖹 Runner.xcodeproj
                                            </plist>
                                     198
```

And in android/app/src/main/AndroidManifest.xml for Android.

```
EXPLORER
                                     [] Info.plist

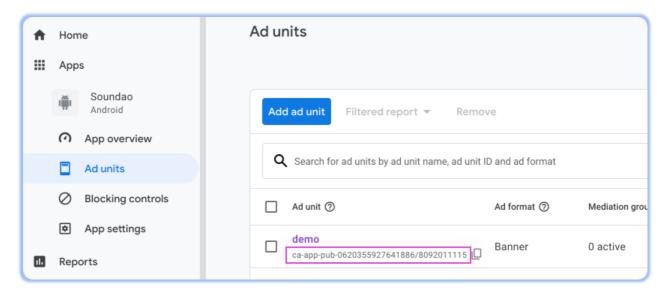
□ AndroidManifest.xml ×
∨ SRC
                      日日日日
                                     android > app > src > main > 1 AndroidManifest.xml
 > 🖹 .dart_tool
                                       23 ~
                                                         <intent-filter>
                                       24
                                                             <action android:name="android.intent.action.MAIN"/>

∨ 

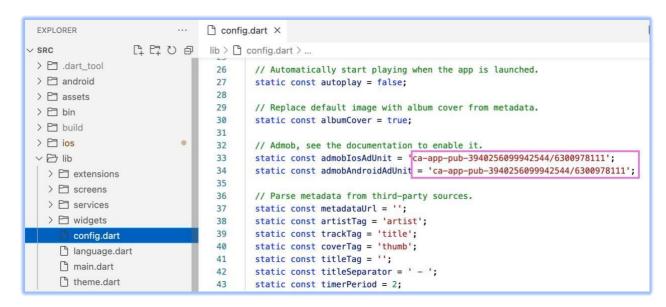
    android

                                       25
                                                             <category android:name="android.intent.category.LAUNCHE"</pre>
   > 🗎 .gradle
                                       26
                                                         </intent-filter>
   ∨ 🗁 app
                                       27
                                                     </activity>
      ∨ 🗁 src
                                       28 ~
                                                     <!-- Don't delete the meta-data below.
        > 🗀 debug
                                       29
                                                         This is used by the Flutter tool to generate GeneratedPlug
                                       30
        android:name="flutterEmbedding"
                                       31
          > 🗎 java
                                       32
                                                         android:value="2" />
           > 🗎 kotlin
                                       33 ~
                                                     <meta-data
          > 🖹 res
                                                         android:name="com.google.android.gms.ads.APPLICATION_ID"
                                       34
                                       35
                                                         android: value="ca-app-pub-0620355927641886~8475154494"/>
              AndroidManifest.xml
                                       36
                                                 </application>
        > 🖹 profile
                                       37
                                             </manifest>
        h build.gradle
                                       38
```

Now you have to create banner Ad units.



Copy these Ad unit IDs to the lib/config.dart file.



Open a terminal (Ctrl+`) and run the commands below to activate Admob.

dart run single_radio:admob_enable

flutter clean

flutter pub get

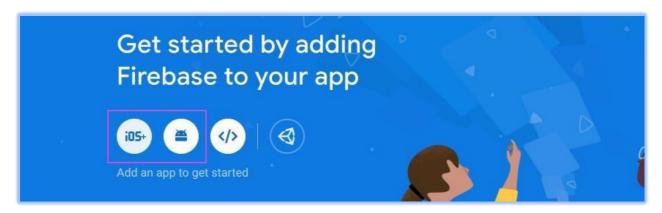
To disable it, replace admob enable with admob disable.

Firebase Cloud Messaging

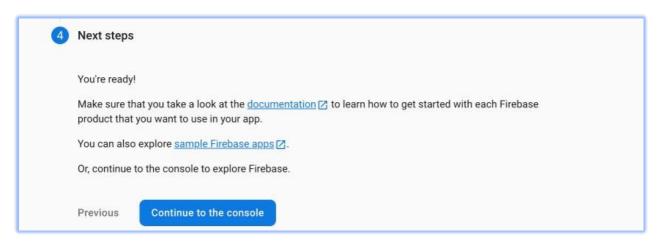
Login to your Firebase Console and create a new project.



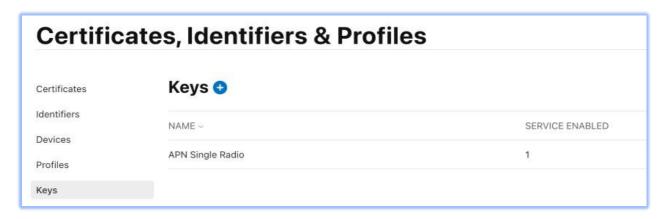
Register app for your platforms.



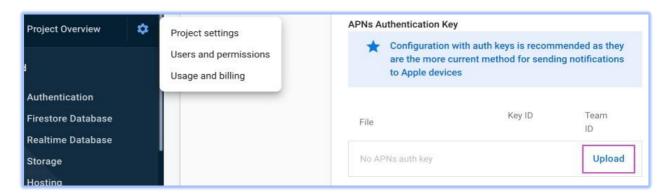
You don't need to make any changes to the source code, these steps are already done. Just enter the correct <u>package name</u>, download and replace the google-services.json file in the src/android/app/ directory and the GoogleService-Info.plist file in the src/ios/Runner directory.



For iOS, you will also need to login to your <u>Apple Developer Account</u> and create a Key file with Apple Push Notifications service (APNs) permission.



Upload this AuthKey file to your firebase project settings under Cloud Messaging.



Open a terminal (Ctrl+') and run the commands below to activate push notifications.

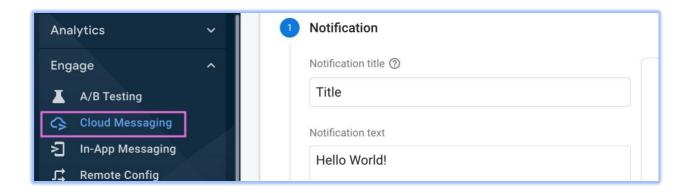
dart run single_radio:fcm_enable

flutter clean

flutter pub get

To disable it, replace fcm_enable with fcm_disable.

Well done, now you can send your first push notification.



Note: Simulator does not support remote notifications. Please test on a real device.

Config

In the config file, you can set up your radio station, social links, and more.

```
EXPLORER

☐ config.dart ×
            中にはむり
                            lib > 🗋 config.dart > ધ Config
∨ SRC
 > 🔁 .dart_tool
                              7
                                   class Config {
 > 🛅 android
                                    static const title = 'Single Radio';
                             8
                             9 static const description = 'Playing the Music You Love';
 > 🗎 assets
                            static const streamUrl = 'http://stream-uk1.radioparadise.com/aac-320';
 > 🗎 build
                           // Social links
static const instagramLink = '';
static const twitterLink = 'https://twitter.com/FlutterDev';

static const twitterLink = 'https://www.facebook.com/FlutterDev';
 > 🖹 ios
 ∨ 🗁 lib
   > 🖹 extensions
                            static const facebookLink = 'https://www.facebook.com/FlutterCommunity/';
   > 🗎 screens
                            16
   > 🖹 services
                                    // Admob
static const admobEnabled = false;
                             17
   > 🗎 widgets
                            18
      config.dart
                          19  static const admobIosAdUnit = 'ca-app-pub-3940256099942544/6300978111';
                            20 static const admobAndroidAdUnit = 'ca-app-pub-3940256099942544/6300978111';
     main.dart
                            21
22
     theme.dart
                                    // Share
static const shareSubject = 'Single Radio App';
static const shareText = "I'm Listening to Single Radio.";
    flutter-plugins.
                            23
    flutter-plugins-dep... 24
    .gitignore
                            25
                            26
                                     // Rate Us
    .metadata
                             27
                                     static const appStoreId = '0123456789';
    ______.packages
                             28
    A analysis antions yaml
```

Setting "Rate Us" for Android is not required.

If you don't want to set up social links, leave these fields blank.

Color Theme

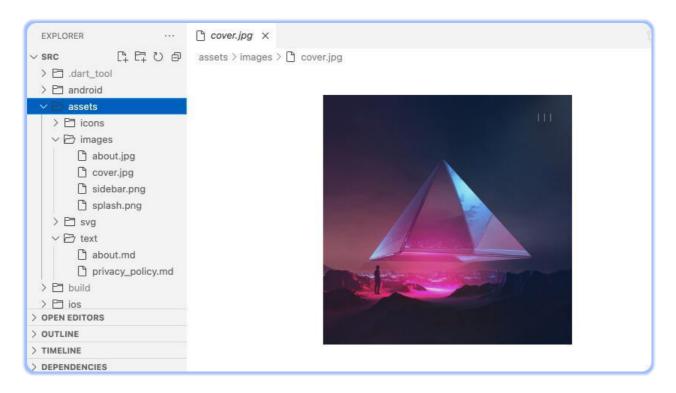
You have the option to customize the color theme. To do this, edit the lib/theme.dart file.

```
config.dart
                                          theme.dart ×
           다 다 강 @ lib > C theme.dart > ...
∨ SRC
 > 🗎 .dart_tool
                           10 class AppTheme {
                                // Primary colors in ARGB format.
static const headerColor = Color(0xFF141C27);
                           11
 > 🗎 android
                        12
 > 🗎 assets
                        13
                                 static const foregroundColor = Color(0xFFFFFFFF);
 > 🗎 build
                      ■ 14 static const backgroundColor = Color(0xFF172230);
 > 🗎 ios
                                 static const accentColor = Color(0xFFDF47D7);
                       15
 ∨ 🔁 lib
                          17
                                  // Constants for detailed customization.
   > 🗎 extensions
                          18
                                 static const appBarColor = headerColor;
   > 🖹 screens
                          19    static const appBarTextColor = foregroundColor;
   > 🗎 services
                          20
   > 🗎 widgets
                           21
                                 static const artistTextColor = foregroundColor;
                                  static final trackTextColor = foregroundColor.withOpacity(0.25);
                          22
     config.dart
                          23
     main.dart
                           24     static const controlButtonColor = accentColor;
      theme.dart
                               static const controlButtonSplashColor = Color(0xFFE91E63);
                        25
   flutter-plugins
                           26
                                  static const controlButtonIconColor = foregroundColor;
   flutter-plugins-dep...
                          27
                          28
                                 static const volumeSliderActiveColor = accentColor;
   gitignore .gitignore
                                  static final volumeSliderOverlayColor = accentColor.withOpacity(0.12);
   .metadata
                          30
                                  static final volumeSliderInactiveColor = foregroundColor.withOpacity(0.05);
   _____.packages
   A analysis antions vaml
                                   static const descendandanCalan - basdanCalani
```

In most cases, just change the four primary colors. If you want a more detailed customization, find and edit the constant you need.

Assets

The images are located in the assets/images directory. There, you can change the background image assets/images/background.jpg , the default cover image assets/images/cover.jpg , the top icon for the sidebar assets/images/sidebar.png , and the "About Us" page image assets/images/about.jpg .



The assets also contain text files in <u>Markdown</u> format such as Privacy Policy assets/text/privacy_policy.md and About Us assets/text/about.md.

Build the Release

To publish your app on the Google Play, you need to give your app a digital signature. Use the following instructions to sign your app.

On Mac/Linux, run the following command:

keytool -genkey -v -keystore ~/upload-keystore.jks -keyalg RSA -keysize 2048 -validity 10000 - alias upload

On Windows, run the following command:

keytool -genkey -v -keystore %userprofile%\upload-keystore.jks -storetype JKS -keyalg RSA keysize 2048 -validity 10000 -alias upload

This command stores the upload-keystore.jks file in your home directory. If you want to store it elsewhere, change the argument you pass to the -keystore parameter. However, keep the keystore file private.

```
cheebeez@Ilyas-MacBook-Pro src % keytool -genkey -v -keystore ~/upload-keystore.jks -keyalg RSA -keysize 2048 -validity 10000 -alias upload
Enter keystore password:
Re-enter new password:
What is your first and last name?
[Unknown]: Ilya Chirkunov
```

Create a file named src/android/key.properties that contains a reference to your keystore:

```
https://www.properties x
android > https://www.properties
storePassword=<password from previous step>
keyPassword=<password from previous step>
keyAlias=upload
storeFile=<location of the key store file, such as /Users/<user name>/upload-keystore.jks>
```

After that you can build the release app:

flutter clean

flutter build appbundle (or flutter build apk --split-per-abi)

flutter install (Install an APK on a device)

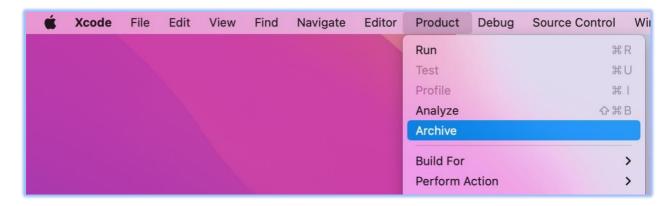
The resulting app bundle or apk files are located in build/app/outputs within your app's folder.

Xcode is required to release your iOS app.

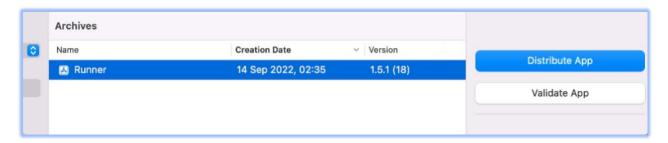
Open the src/ios/Runner.xcworkspace file and select "Any iOS Device" at the top.



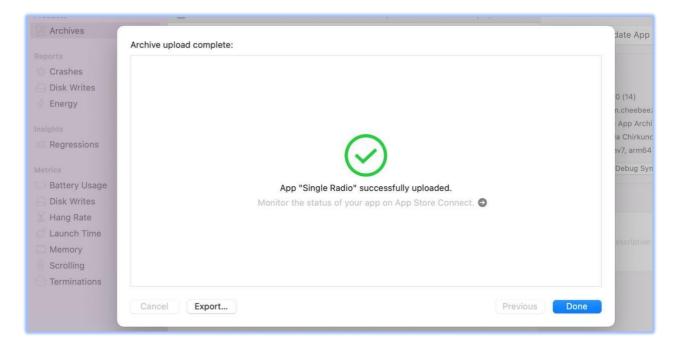
Then in the "Product" tab, select "Archive" and wait for the compilation to finish.



In the window that appears, click "Distribute App". This process can take a long time.



In the end, if you configure the app correctly, it will be successfully uploaded to App Store.



Known Issues

When building the app on macOS, the following error occurs: "Operation not permitted" $\,$

Cause: macOS does not trust files downloaded from the internet.

Solution: Execute the command to mark the files as trusted: sudo xattr -c -r <project_folder>

Can't move the slider in the iOS simulator.

Cause: Simulator does not process all events, unlike a real device.

Solution: To debug the slider use a real iOS device.

Support

Once again, I appreciate your decision to purchase this app. If you have any general questions about the apps on CodeCanyon, please feel free to contact me either through the profile contact form or directly at support@cheebeez.com