



---

ICT Department

# Firestore: របៀបធ្វើ Login ជាមួយនឹង Google និង Facebook

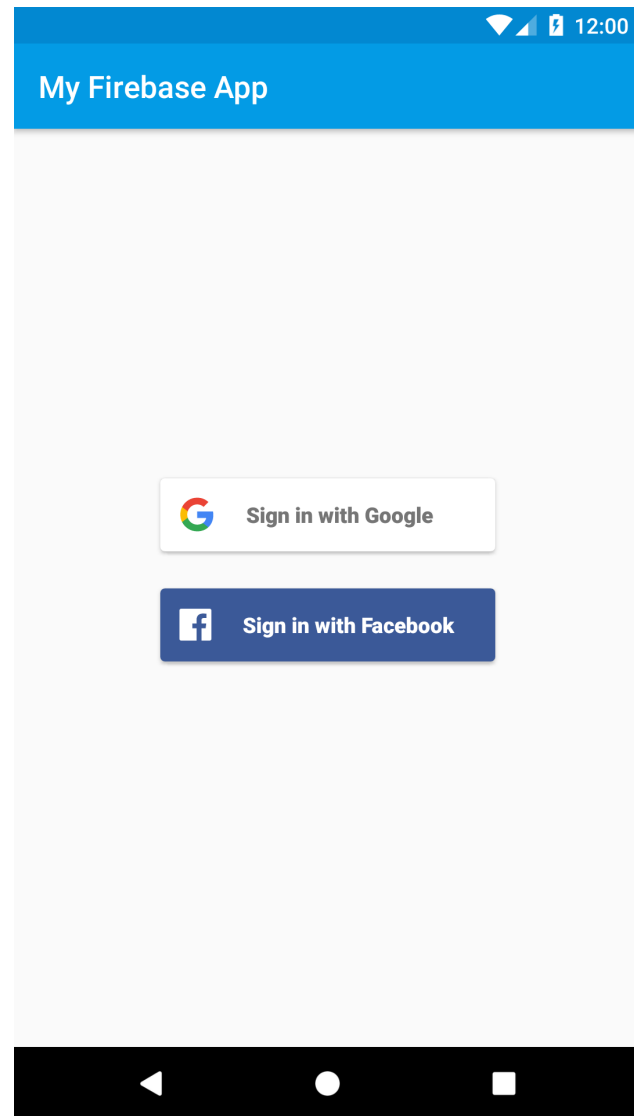
**Instructor:** Oum Saokosal, Master of Engineering in Information Systems, South Korea '2010

**Email:** [oumsaokosal@gmail.com](mailto:oumsaokosal@gmail.com)

**Phone:** 012 252 752 (Telegram)

# Sign In ជាមួយនឹង Google & Firebook

- នាពេលបច្ចុប្បន្ននេះ វេបសាយភាគច្រើនគឺទទួលការវាយឡុកអោយ Hacker។ ដូច្នេះហើយ App ភាគច្រើនគឺតែងតែងអោយយើង Sign In តាមរយៈ Google និង Facebook ផងដែរ។
- ម៉្យាងទៀត ពេលដែលយើងធ្វើបែបនេះ គឺសំរួលដល់ user មិនបាច់ត្រូវចុះឈ្មោះច្រើនដង ព្រោះអីនាពេលបច្ចុប្បន្ននេះ អ្នកណាក៏មាន Gmail និង Facebook ផង។



# របៀប Sign In ដោយប្រើ Google

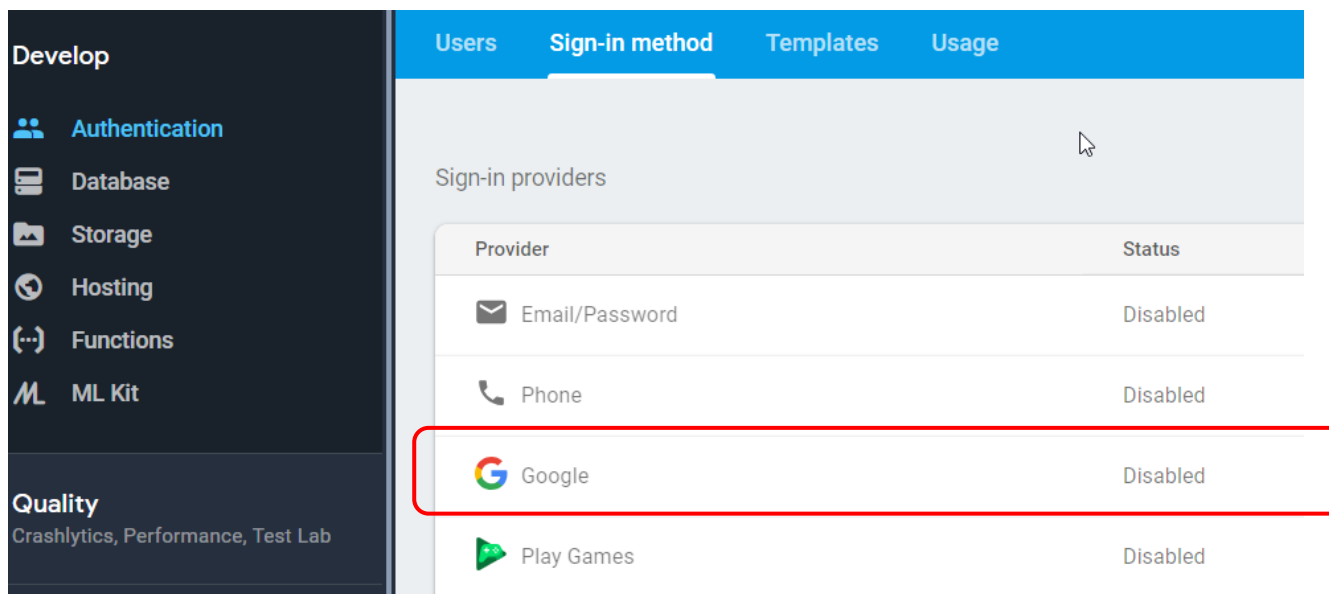
1. ដាក់ dependency google\_sign\_in៖

dependencies:

**google\_sign\_in: ^4.5.1**

សូមមើល version ក្នុង៖ [https://pub.dev/packages/google\\_sign\\_in](https://pub.dev/packages/google_sign_in)

2. បើក option Google ក្នុង Firebase Authentication៖



### 3. សំរាប់ Android គឺយើងត្រូវចុះឈ្មោះ App ក្នុង Consent Screen សិន៖

<https://console.developers.google.com/>

បញ្ជាក់៖ បើយើងចុះឈ្មោះទេ ពេលដែល release App វានឹងចេញ APIException Error

☰

Google APIs


Google Play Android Developer ▼

🗄️

❓

🔔

⋮

<div>API APIs &amp; Services</div> <div> <div>⚙️ Dashboard</div> <div>📖 Library</div> <div>🔑 Credentials</div> <div>🔗 OAuth consent screen</div> <div>✅ Domain verification</div> <div>⚙️ Page usage agreements</div> </div>	<div>OAuth consent screen</div> <div> <div>🖱️</div> <p>Before your users authenticate, this consent screen will allow them to choose whether they want to grant access to their private data, as well as give them a link to your terms of service and privacy policy. This page configures the consent screen for all applications in this project.</p> <p><b>Verification status</b> Not published</p> <p><b>Application name</b> <span>?</span> The name of the app asking for consent</p> <div> <input type="text" value="Application name"/> </div> <p><b>Application logo</b> <span>?</span> An image on the consent screen that will help users recognize your app</p> <div> <input type="text" value="Local file for upload"/> <input type="button" value="Browse"/> </div> <div>  </div> <p><b>Support email</b> <span>?</span> Shown on the consent screen for user support</p> <div> <input type="text" value="oumsaokosal@gmail.com"/> </div> </div>
--	---

4. សំរាប់ iOS គឺយើងត្រូវដាក់ GoogleService-Info.plist ក្នុង

[my\_project]/ios/Runner

5. ក្នុង [my\_project]/ios/Runner/Info.plist គឺត្រូវថែម៖

```
<!-- Put me in the [my_project]/ios/Runner/Info.plist file -->
<!-- Google Sign-in Section -->
<key>CFBundleURLTypes</key>
<array>
  <dict>
    <key>CFBundleTypeRole</key>
    <string>Editor</string>
    <key>CFBundleURLSchemes</key>
    <array>
      <!-- TODO Replace this value: -->
      <!-- Copied from GoogleService-Info.plist key REVERSED_CLIENT_ID -->
      <string>com.googleusercontent.apps.861823949799-vc35cprkp249096uujjn0vvnmcvjppkn</string>
    </array>
  </dict>
</array>
<!-- End of the Google Sign-in Section -->
```

## 6. បន្ទាប់យើងហៅកូដខាងក្រោម ដើម្បីប្រើសំរាប់ Sign In បាន៖

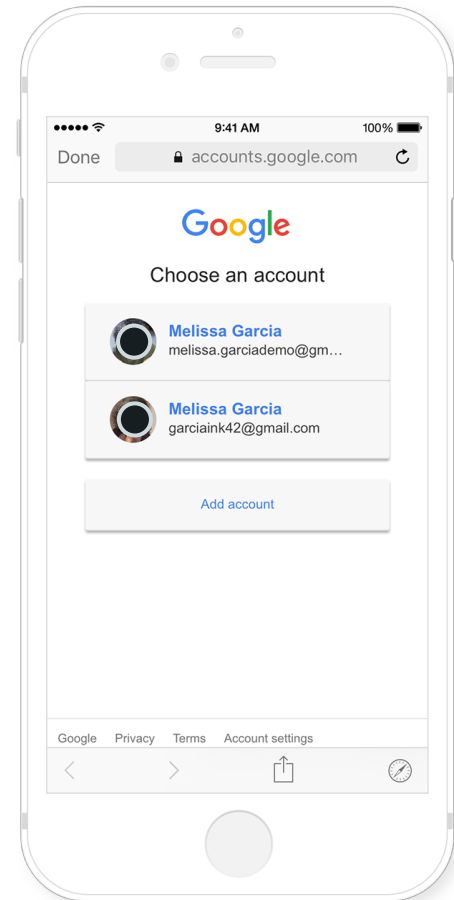
```
import 'package:firebase_auth/firebase_auth.dart' as auth;
import 'package:google_sign_in/google_sign_in.dart';
```

```
GoogleSignIn _googleSignIn = GoogleSignIn();

_handleGoogleSignIn() async {
  final googleUser = await _googleSignIn.signIn();
  final googleAuth = await googleUser.authentication;
  final credential = auth.GoogleAuthProvider.credential(
    idToken: googleAuth.idToken,
    accessToken: googleAuth.accessToken);

  auth.UserCredential userCredential =
    await auth.FirebaseAuth.instance.
      signInWithCredential(credential);

  if (userCredential != null) {
    auth.User user = userCredential.user;
    Navigator.of(context).pushReplacement(MaterialPageRoute(
      builder: (context) => MainPage(user: user)));
  } else {
    print("Google Login Failed"),
  }
}
```



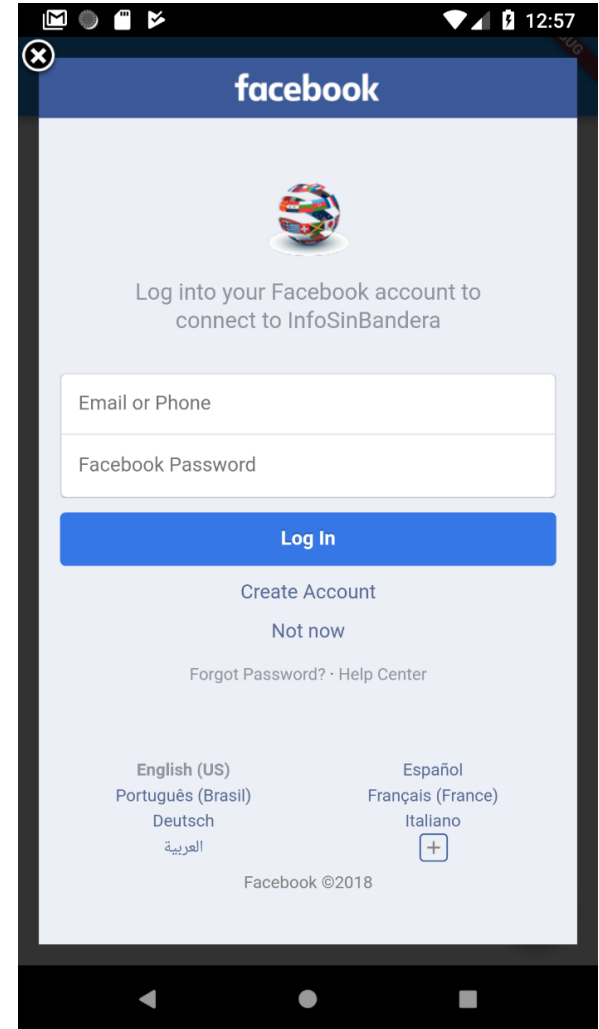
Firebase ក៏អនុញ្ញាតិអោយយើងប្រើ Facebook Login ផងដែរ។ ប៉ុន្តែវាទាមទារអោយយើងត្រូវបង្កើត App មួយ ក្នុង Facebook Developer សំរាប់តំណាងអោយ Smartphone App យើង។

1. ដាក់ dependency google\_sign\_in៖

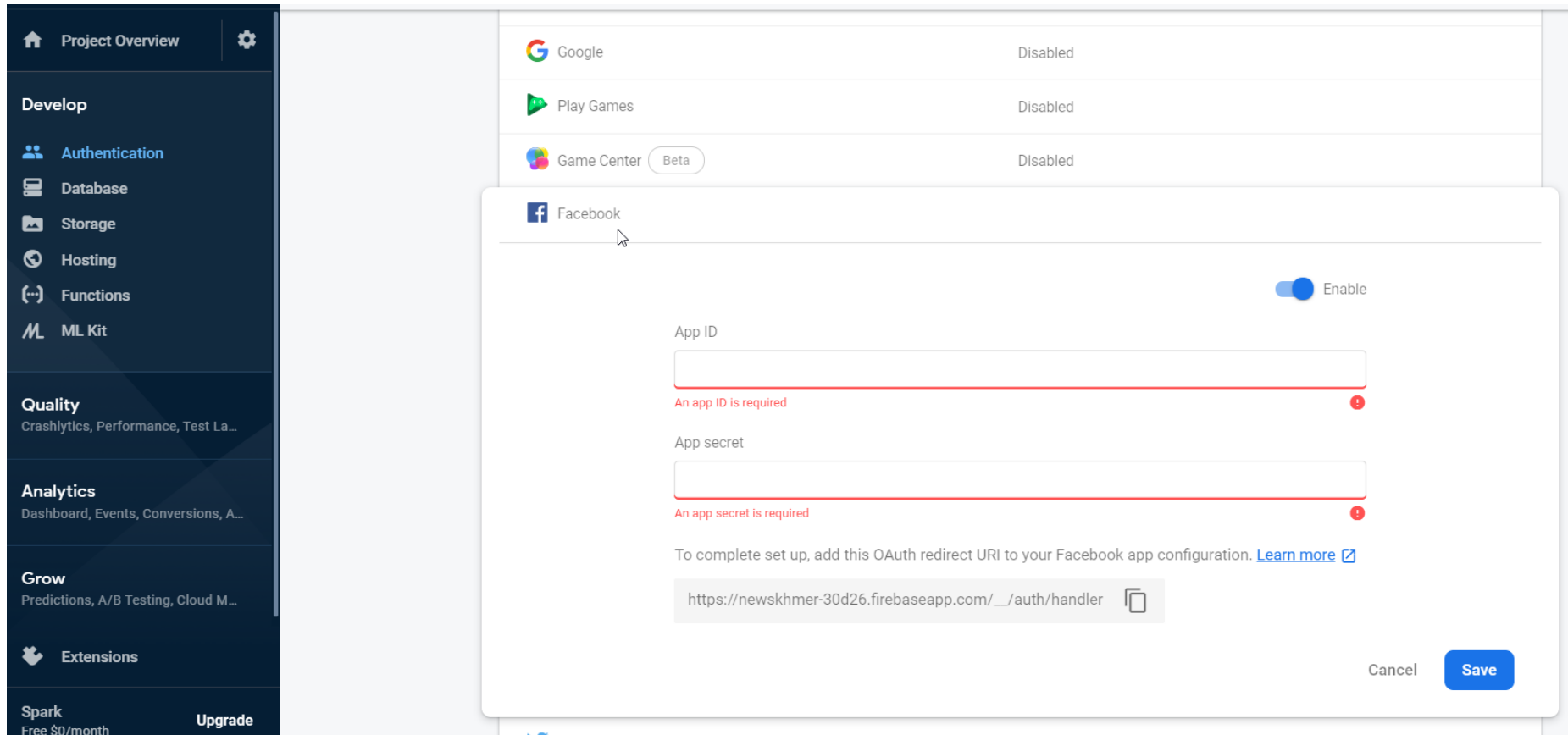
```
dependencies:
  flutter_facebook_auth: "^0.3.3"
```

សូមមើល version ក្នុង៖

[https://pub.dev/packages/flutter\\_login\\_facebook](https://pub.dev/packages/flutter_login_facebook)



2. បើក option Google ក្នុង Firebase Authentication។ នៅក្នុងនេះ វាទាមទារអោយដាក់ App ដែលត្រូវបង្កើតក្នុង Facebook Developer (សូមមើល slide បន្ទាប់)៖



The screenshot shows the Firebase Authentication console. On the left is a sidebar with navigation options: Project Overview, Develop (Authentication, Database, Storage, Hosting, Functions, ML Kit), Quality (Crashlytics, Performance, Test Lab), Analytics (Dashboard, Events, Conversions, A/B Testing), Grow (Predictions, A/B Testing, Cloud Machine Learning), and Extensions. The main area displays a list of providers: Google, Play Games, Game Center (Beta), and Facebook. The Facebook provider is selected, opening a configuration modal. The modal has an 'Enable' toggle switch. Below it are input fields for 'App ID' and 'App secret', both of which have red error messages: 'An app ID is required' and 'An app secret is required'. At the bottom, there is a text instruction: 'To complete set up, add this OAuth redirect URI to your Facebook app configuration. [Learn more](#)'. Below this is a text box containing the URL 'https://newskhmer-30d26.firebaseio.com/\_/auth/handler' with a copy icon. At the bottom right of the modal are 'Cancel' and 'Save' buttons.

Provider	Status
Google	Disabled
Play Games	Disabled
Game Center	Disabled (Beta)
Facebook	Configuring

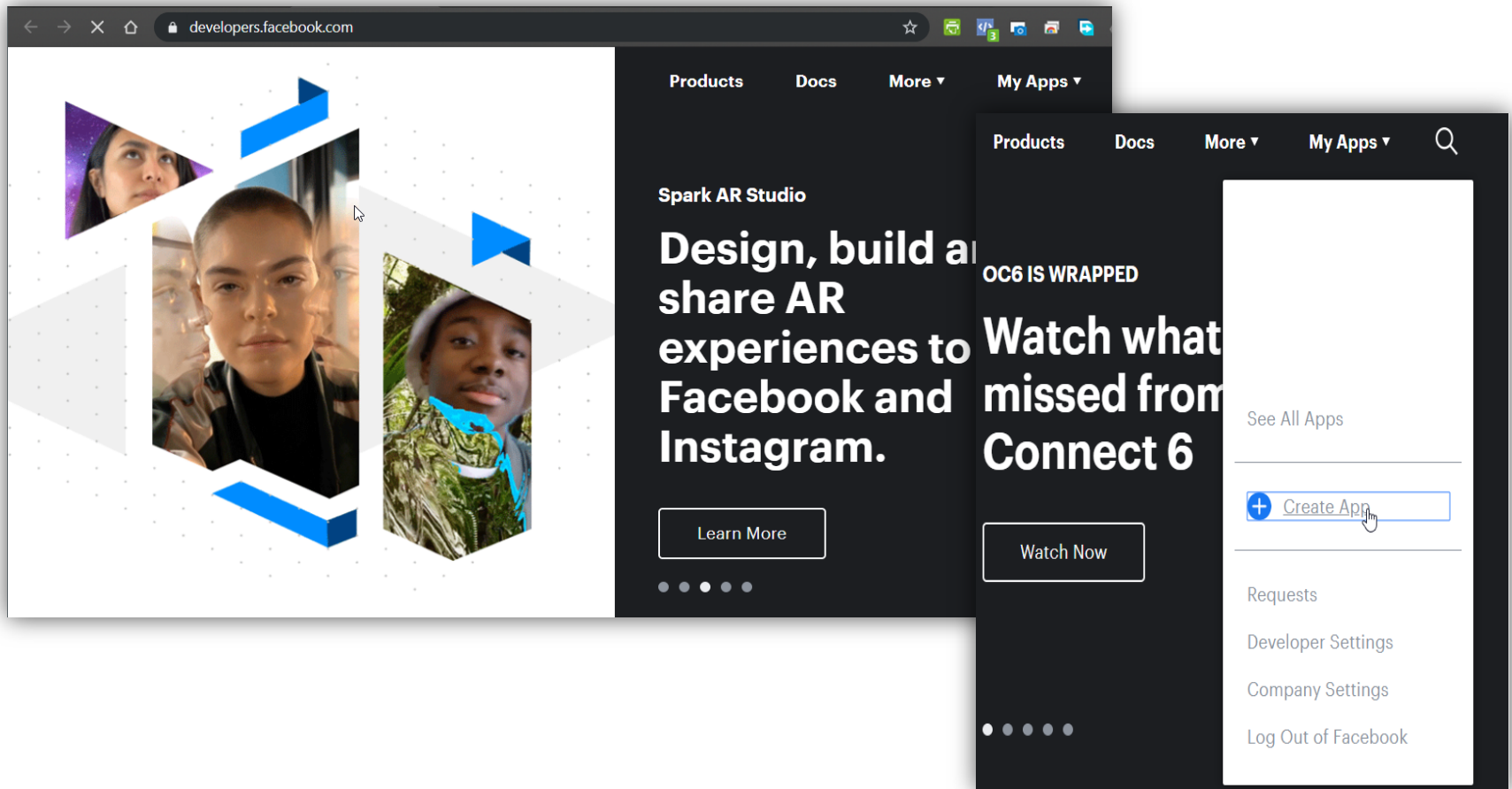
**Facebook Configuration Modal:**

- Enable:** ☒
- App ID:**  (Error: An app ID is required)
- App secret:**  (Error: An app secret is required)
- OAuth redirect URI:** `https://newskhmer-30d26.firebaseio.com/_/auth/handler`



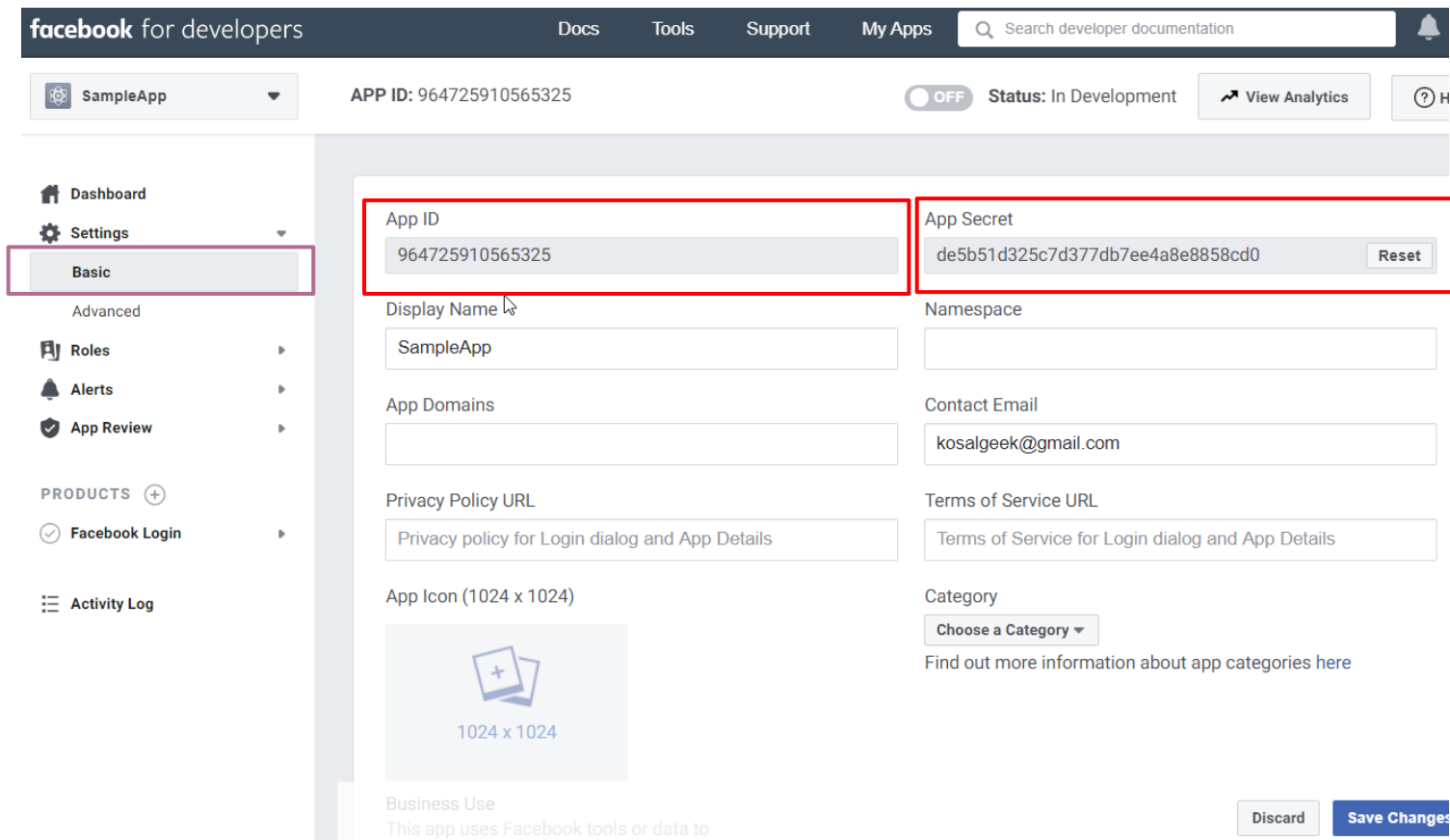
3. ចូល <https://developers.facebook.com/>

4. រួចហើយបង្កើត App មួយ ព្រមទាំងអនុវត្តតាមការណែនាំរបស់វា



5. បន្ទាប់ពីបង្កើតរួចហើយ សូមចុច menu Settings -> Basic

6. ចុចត្រង់ App Secret ដើម្បីបើកមើល App Secret។ ហើយ copy App ID និង App Secret៖



facebook for developers Docs Tools Support My Apps Search developer documentation

SampleApp APP ID: 964725910565325 OFF Status: In Development View Analytics ? H

Dashboard Settings Basic Advanced Roles Alerts App Review PRODUCTS + Facebook Login Activity Log

App ID: 964725910565325 App Secret: de5b51d325c7d377db7ee4a8e8858cd0 Reset

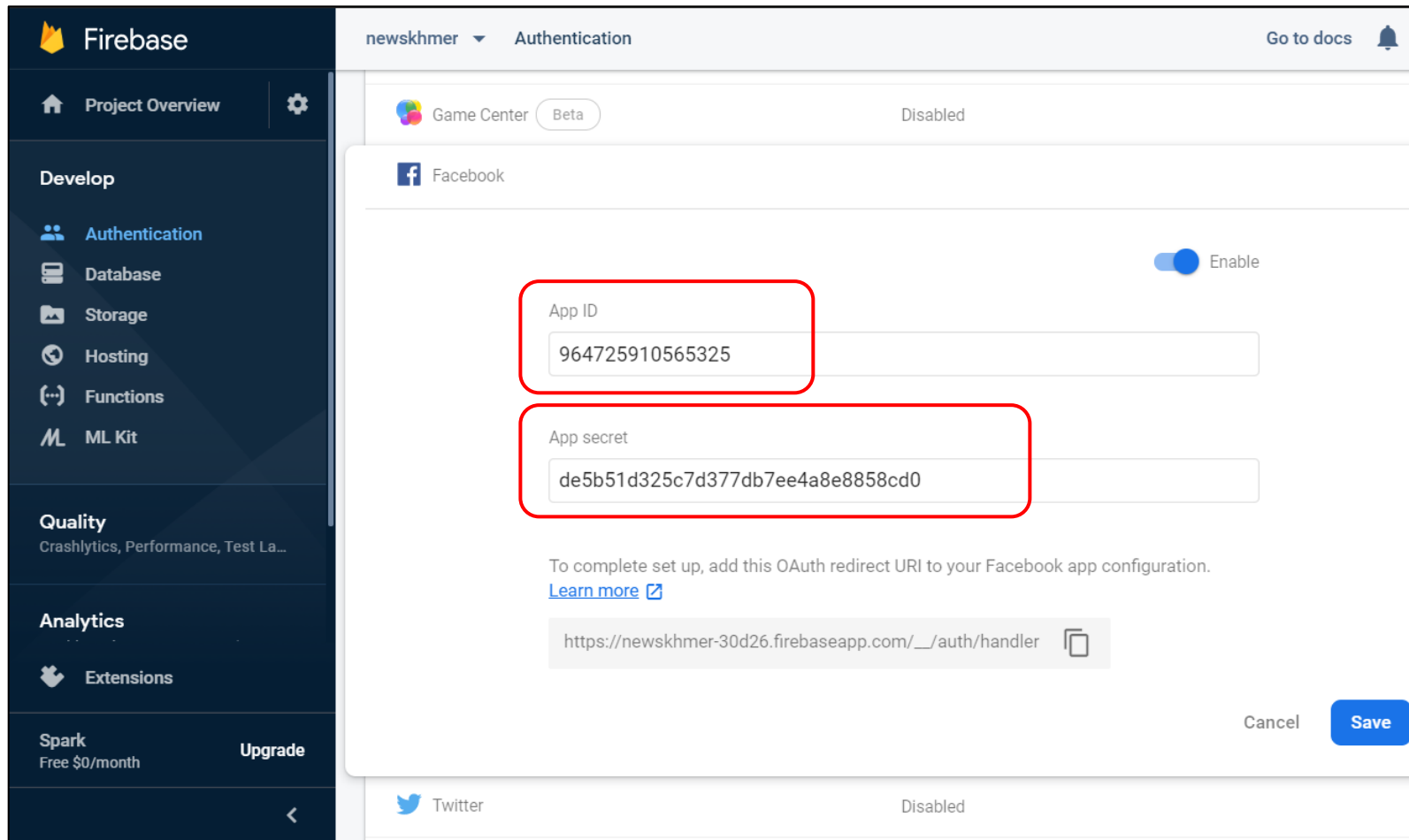
Display Name: SampleApp Namespace: Contact Email: kosalgeek@gmail.com

App Domains: Privacy Policy URL: Privacy policy for Login dialog and App Details Terms of Service URL: Terms of Service for Login dialog and App Details

App Icon (1024 x 1024): 1024 x 1024 Category: Choose a Category Find out more information about app categories here

Business Use This app uses Facebook tools or data to Discard Save Changes

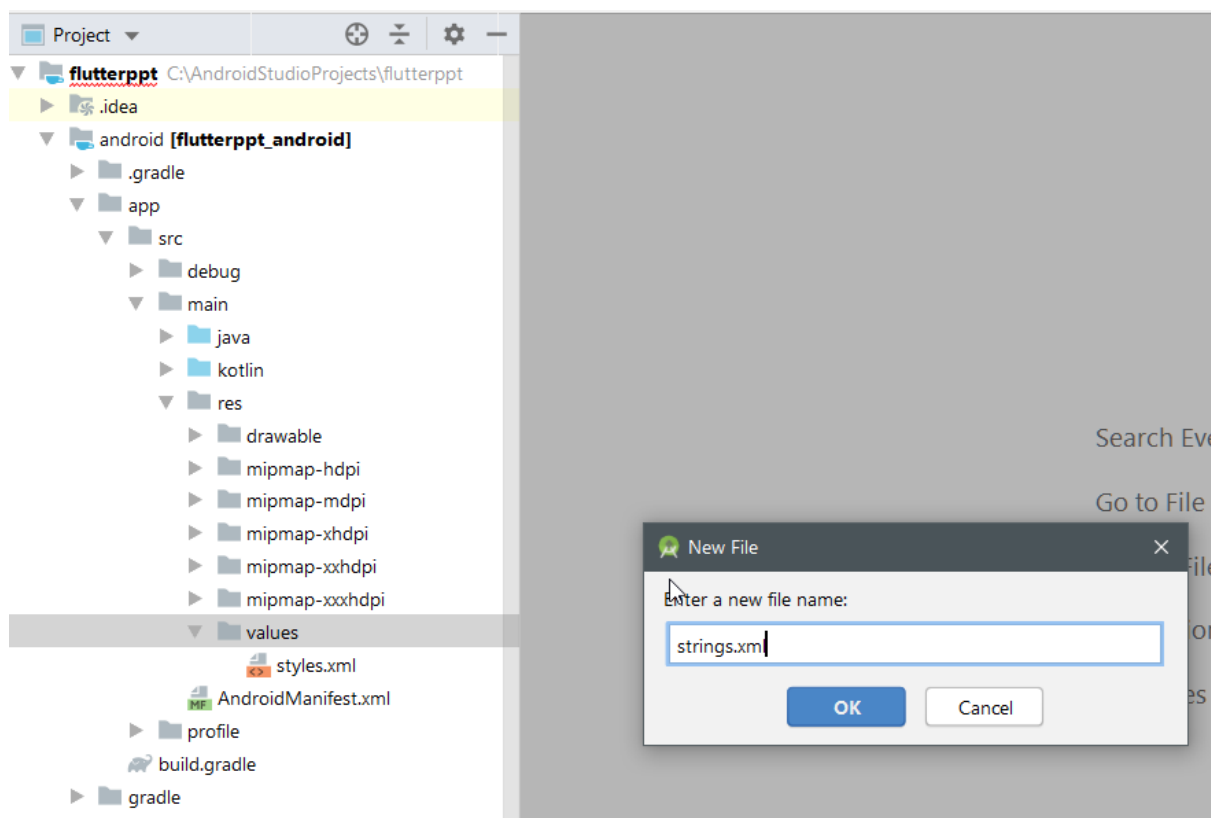
## 7. បន្ទាប់មកយក App ID និង App Secret មកដាក់ចូលក្នុង Firebase៖



The screenshot shows the Firebase Authentication console for the project 'newskhmer'. The 'Facebook' provider is selected and enabled. The 'App ID' is 964725910565325 and the 'App secret' is de5b51d325c7d377db7ee4a8e8858cd0. A note indicates that the OAuth redirect URI must be added to the Facebook app configuration, with the provided URI being https://newskhmer-30d26.firebaseio.com/\_/auth/handler. The 'Save' button is visible at the bottom right.

Provider	Status	App ID	App Secret
Game Center	Beta / Disabled		
Facebook	Enabled	964725910565325	de5b51d325c7d377db7ee4a8e8858cd0
Twitter	Disabled		

8. នៅក្នុង Android project folder, សូមចុចចូល android -> app -> src -> main -> res -> values -> ហើយបង្កើត file មួយដាក់ឈ្មោះថា strings.xml



9. បន្ទាប់មក ត្រូវដាក់ code ខាងក្រោមចូល។ បញ្ជាក់ ត្រង់ facebook\_app\_id គឺយើង ត្រូវដាក់ app id ដែលបានពីផ្ទាំង Facebook Developer។ ហើយត្រង់ចំនុច fb\_login\_protocol\_scheme គឺជាកំលេង app id ដូចគ្នា គ្រាន់តែផ្ដើមដោយ fb។ ត្រង់លេខ 964725910565325 គឺត្រូវដាក់លេខ app id ពិតរបស់អ្នក៖

```
<?xml version="1.0" encoding="utf-8"?>
<resources>
    <string name="app_name">flutter_login</string>
    <string name="facebook_app_id">964725910565325</string>
    <string name="fb_login_protocol_scheme">fb964725910565325</string>
</resources>
```

10. សូម paste កូដខាងក្រោមចូលក្នុង AndroidManifest.xml។ គឺជាកំរិតត្រង់ចន្លោះ Application tag (សូមមើលរូបនៅ slide បន្ទាប់)៖

```
<activity android:name="com.facebook.FacebookActivity"
    android:configChanges=
        "keyboard|keyboardHidden|screenLayout|screenSize|orientation"
    android:label="@string/app_name" />

<activity
    android:name="com.facebook.CustomTabActivity"
    android:exported="true">
    <intent-filter>
        <action android:name="android.intent.action.VIEW" />
        <category android:name="android.intent.category.DEFAULT" />
        <category android:name="android.intent.category.BROWSABLE" />
        <data android:scheme="@string/fb_login_protocol_scheme" />
    </intent-filter>
</activity>
```

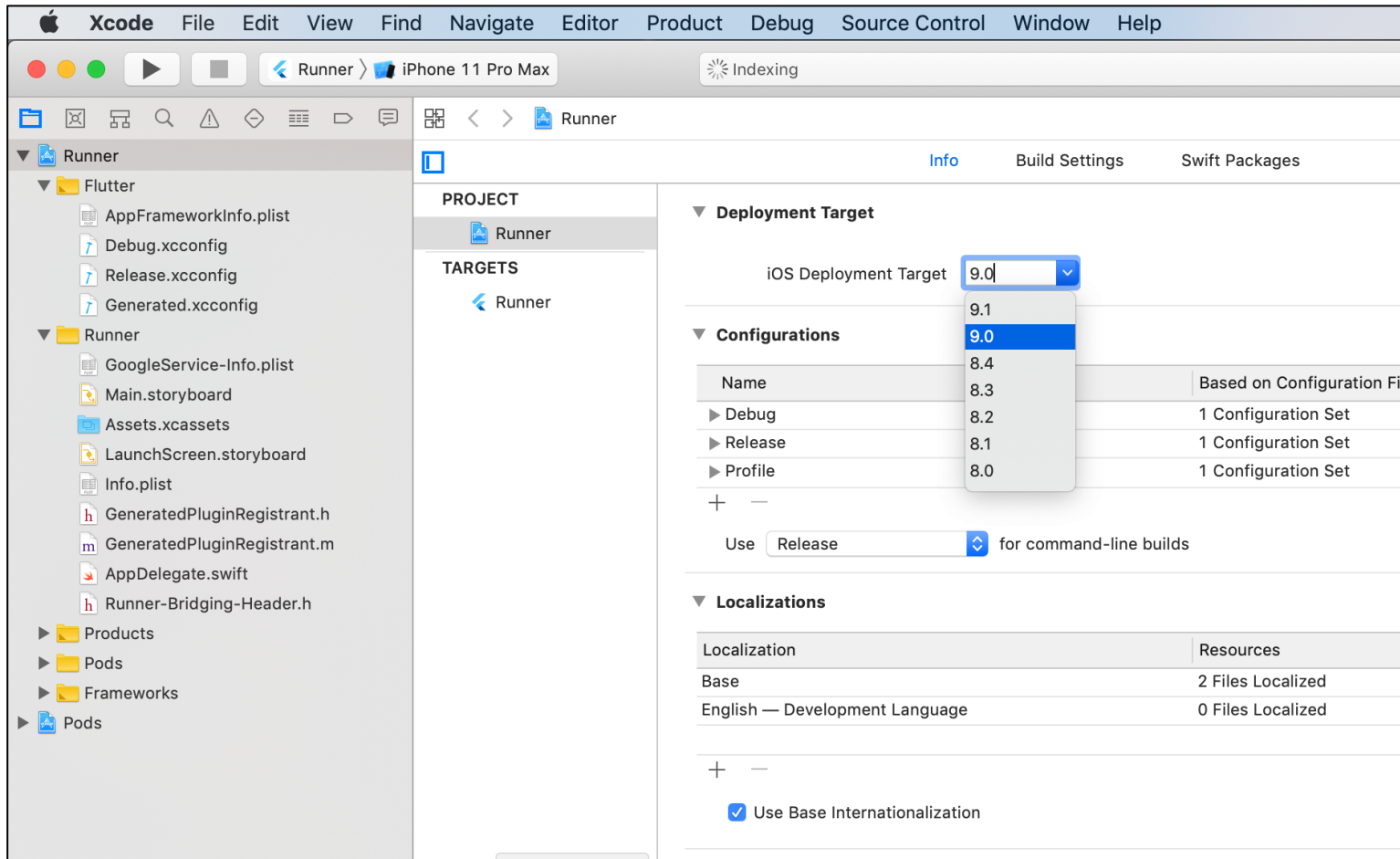
```

AndroidManifest.xml
Flutter commands
Open for Editing in

9  <application
10  android:name="io.flutter.app.FlutterApplication"
11  android:label="@string/app_name"
12  android:icon="@mipmap/ic_launcher">
13  <activity
14  android:name=".MainActivity"
15  android:launchMode="singleTop"
16  android:theme="@style/LaunchTheme"
17  android:configChanges="orientation|keyboardHidden|keyboard|screenSize|locale|layoutDirection|fontScale|screenLayout|density|uiMode"
18  android:hardwareAccelerated="true"
19  android:windowSoftInputMode="adjustResize">
20  <meta-data
21  android:name="io.flutter.app.android.SplashScreenUntilFirstFrame"
22  android:value="true" />
23  <intent-filter>
24  <action android:name="android.intent.action.MAIN"/>
25  <category android:name="android.intent.category.LAUNCHER"/>
26  </intent-filter>
27  </activity>
28  <meta-data android:name="com.facebook.sdk.ApplicationId"
29  android:value="@string/facebook_app_id"/>
30
31  <activity android:name="com.facebook.FacebookActivity"
32  android:configChanges=
33  "keyboard|keyboardHidden|screenLayout|screenSize|orientation"
34  android:label="@string/app_name" />
35
36  <activity
37  android:name="com.facebook.CustomTabActivity"
38  android:exported="true">
39  <intent-filter>
40  <action android:name="android.intent.action.VIEW" />
41  <category android:name="android.intent.category.DEFAULT" />
42  <category android:name="android.intent.category.BROWSABLE" />
43  <data android:scheme="@string/fb_login_protocol_scheme" />
44  </intent-filter>
45  </activity>
46  </application>
47  </manifest>

manifest > application > activity
  
```

## ■ យក version 9





## 11. សំរាប់ iOS គឺដាក់កូដខាងក្រោមចូល <your project root>/ios/Runner/Info.plist៖

```
<key>CFBundleURLTypes</key>
<array>
  <!--
  <dict>
    ... Some other CFBundleURLTypes definition.
  </dict>
-->
  <dict>
    <key>CFBundleURLSchemes</key>
    <array>
      <!--
      Replace "964725910565325" with your Facebook App ID here.
      **NOTE**: The scheme needs to start with `fb` and then your ID.
      -->
      <string>fb964725910565325</string>
    </array>
  </dict>
</array>
<key>FacebookAppID</key>
  <!-- Replace "964725910565325" with your Facebook App ID here. -->
  <string>964725910565325</string>
<key>FacebookDisplayName</key>
  <!-- Replace "SampleApp" with your Facebook App name. -->
  <string>SampleApp</string>
<key>LSApplicationQueriesSchemes</key>
<array>
  <string>fbapi</string>
  <string>fb-messenger-share-api</string>
  <string>fbauth2</string>
  <string>fbshareextension</string>
</array>
```

```
import 'package:firebase_auth/firebase_auth.dart' as auth;
import 'package:flutter_facebook_auth/flutter_facebook_auth.dart';

_handleFacebookLogin() async {
  // Trigger the sign-in flow
  final LoginResult result = await FacebookAuth.instance.login();

  // Create a credential from the access token
  final auth.FacebookAuthCredential fbAuthCredential =
    auth.FacebookAuthProvider.credential(result.accessToken.token);

  // Once signed in, return the UserCredential
  auth.UserCredential userCredential = await auth.FirebaseAuth.instance
    .signInWithCredential(fbAuthCredential);

  if (userCredential != null) {
    auth.User user = userCredential.user;
    Navigator.of(context).pushReplacement(MaterialPageRoute(
      builder: (context) => MainPage(
        user: user,
      )),
    );
  } else {
    print("Facebook Login Failed");
  }
}
```