

MAD & PWA Lab Journal

Experiment No.	06
Experiment Title.	To Connect Flutter UI with fireBase database
Roll No.	20
Name	Madhura Jangale
Class	D15A
Subject	MAD & PWA Lab
Lab Outcome	LO3: Analyze and Build production ready Flutter App by incorporating backend services and deploying on Android / iOS
Grade:	

Creating a New Firebase Project

First, log in with your Google account to manage your Firebase projects. From within the Firebase dashboard, select the Create new project button and give it a name

× Create a project

Let's start with a name for your project[®]

Project name

Nykaa

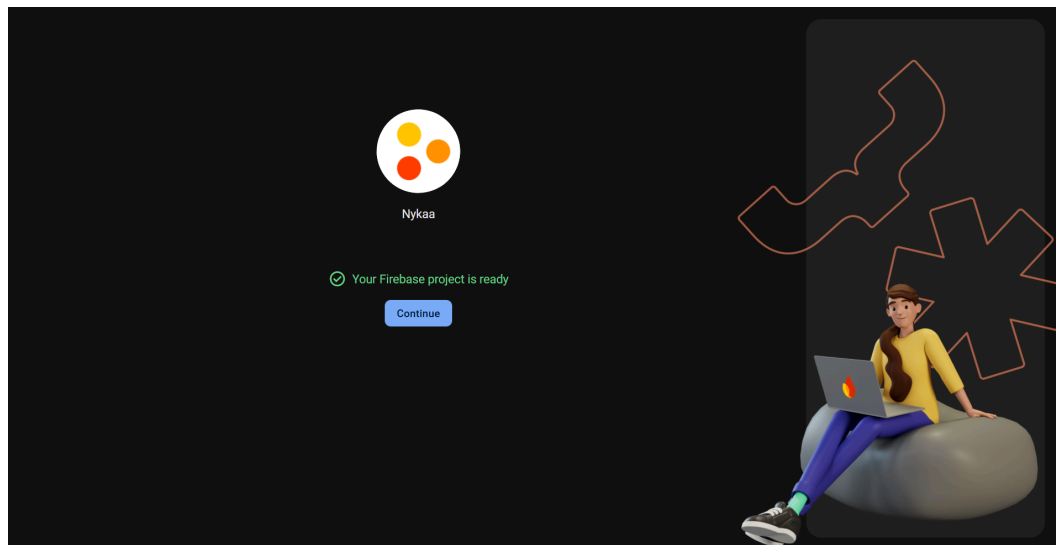
nykaa-52e72 ves.ac.in

☒ I accept the [Firebase terms](#).

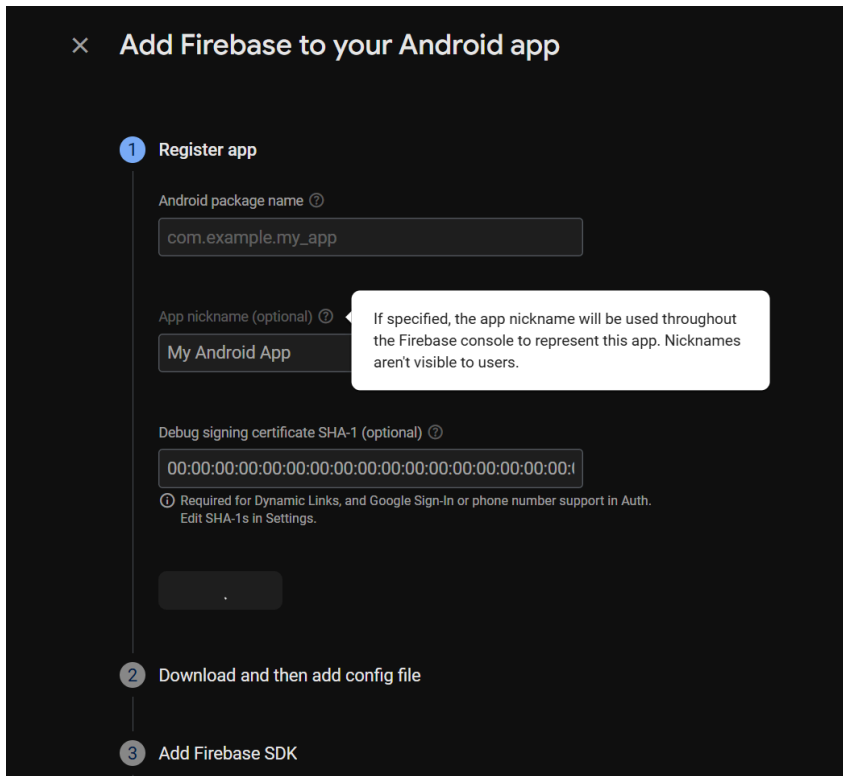
☒ I confirm that I will use Firebase exclusively for purposes relating to my trade, business, craft, or profession.

Already have a Google Cloud project?
[Add Firebase to Google Cloud project](#)

Continue



In order to add Android support to our Flutter application, select the Android logo from the dashboard. This brings us to the following screen:



The most important thing here is to match up the Android package name that you choose here with the one inside of our application.

Downloading the Config File

The next step is to add the Firebase configuration file into our Flutter project. This is important as it contains the API keys and other critical information for Firebase to use.

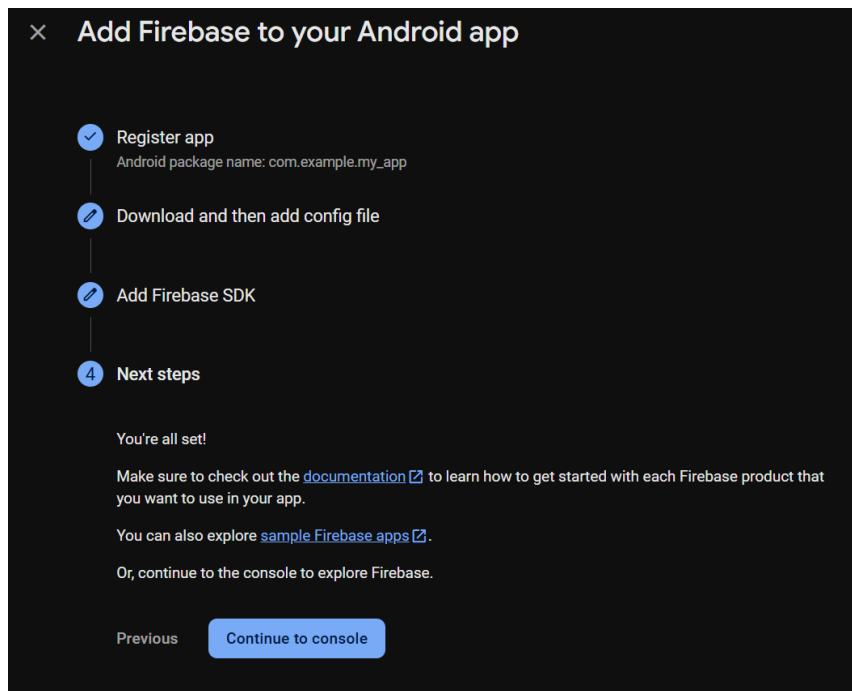
Select Download `google-services.json` from this page

In android/build.gradle add-

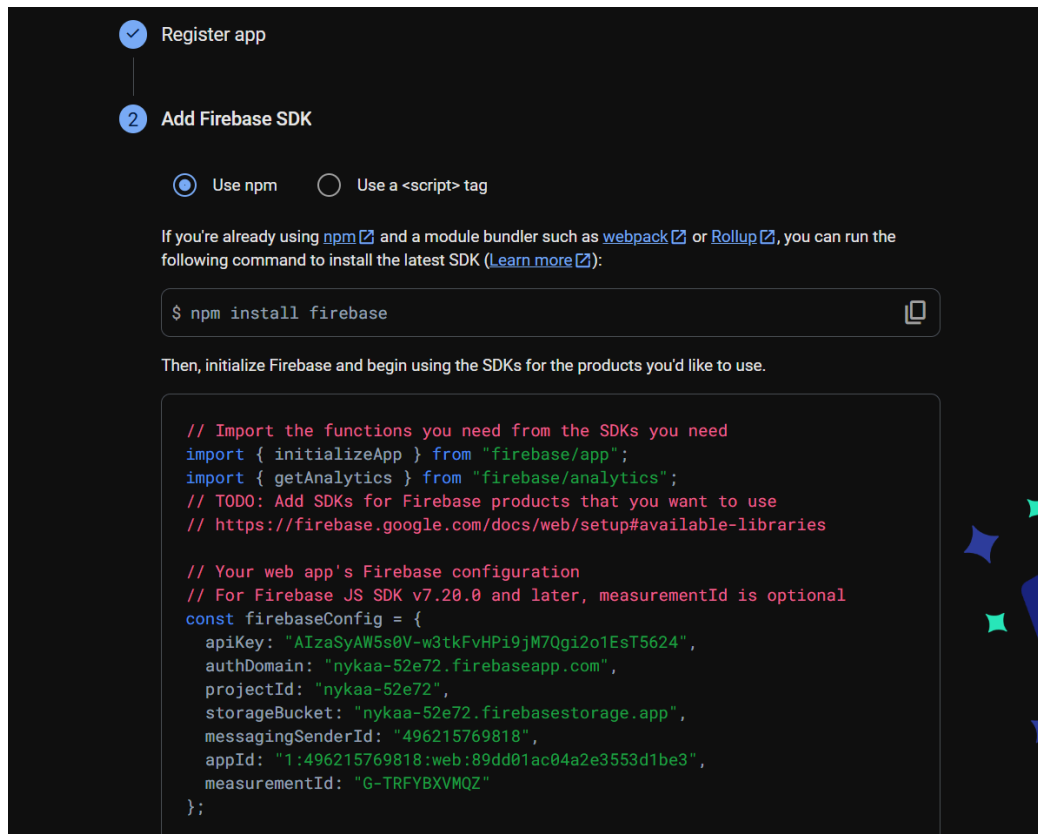
```
dependencies {
    classpath 'com.google.gms.google-services:4.4.2'
}
```

In app/build.gradle add-

```
dependencies{
    implementation platform('com.google.firebase:firebase-bom:33.9.0')
}
```



Lets setup web app-



In pubspec.yaml:

dependencies:

flutter:

sdk: flutter

```
# The following adds the Cupertino Icons font to your application.
# Use with the CupertinoIcons class for iOS style icons.
cupertino_icons: ^1.0.8
firebase_core: ^3.11.0
firebase_auth: ^5.4.2
cloud_firestore: ^5.6.3
firebase_storage: ^12.4.2
firebase_messaging: ^15.2.2
```

Firestore connection in code:

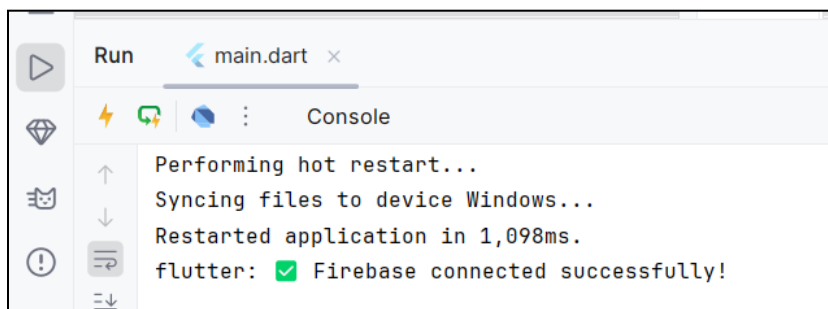
```
import 'package:flutter/material.dart';
import 'package:firebase_core/firebase_core.dart';
import 'home.dart';

void main() async {
  WidgetsFlutterBinding.ensureInitialized();

  try {
    await Firebase.initializeApp(
      options: const FirebaseOptions(
        apiKey: "AIzaSyAW5s0V-w3tkFvHPi9jM7Qgi2o1EsT5624",
        authDomain: "nykaa-52e72.firebaseio.com",
        projectId: "nykaa-52e72",
        storageBucket: "nykaa-52e72.firebaseio.com",
        messagingSenderId: "496215769818",
        appId: "1:496215769818:web:89dd01ac04a2e3553d1be3",
        measurementId: "G-TRFYBXVMQZ"));
    print("✅ Firestore connected successfully!");
  } catch (e) {
    print("❌ Firestore initialization failed: $e");
  }

  runApp(MyApp());
}
```

Output:




Generate SHA key for authentication-


```
C:\Users\MADHURA>keytool -list -v -keystore %USERPROFILE%\android\debug.keystore -alias androiddebugkey -storepass android
Alias name: androiddebugkey
Creation date: 26-Jan-2025
Entry type: PrivateKeyEntry
Certificate chain length: 1
Certificate[1]:
Owner: C=US, O=Android, CN=Android Debug
Issuer: C=US, O=Android, CN=Android Debug
Serial number: 1
Valid from: Sun Jan 26 23:42:14 IST 2025 until: Tue Jan 19 23:42:14 IST 2055
Certificate fingerprints:
  SHA1: 6E:D6:8D:4E:6F:3A:AC:14:8F:E2:C3:9A:7B:2C:34:0C:D2:17:C2:73
  SHA256: 48:DE:D4:03:A5:07:34:F1:72:9B:0B:ED:91:72:FB:A9:4F:B7:AD:E4:6F:AE:86:B2:71:6F:5D:9D:B5:7B:C2:3F
Signature algorithm name: SHA256withRSA
Subject Public Key Algorithm: 2048-bit RSA key
Version: 1

C:\Users\MADHURA>
```


Nykaa ▾ **Project settings**

 **com.example.my_app**

Apple apps

 **com.example.myApp**

Web apps

 **nykaa-web**
Web App

SDK setup and configuration

Need to reconfigure the Firebase SDKs for your app? Revisit the SDK setup instructions or just download the configuration file containing keys and identifiers for your app.

[See SDK instructions](#) [google-services.json](#)

App ID ⓘ
1:496215769818:android:4f2b479a885099d33d1be3

App nickname
Add a nickname ✎


Package name
com.example.my_app

SHA certificate fingerprints ⓘ	Type ⓘ
6e:d6:8d:4e:6f:3a:ac:14:8f:e2:c3:9a:7b:2c:34:0c:d2:17:c2:73	SHA-1
48:de:d4:03:a5:07:34:f1:72:9b:0b:ed:91:72:fb:a9:4f:b7:ad:e4:6f:ae:86:b2:71:6f:5d:9d:b5:7b:c2:3f	SHA-256

[Add fingerprint](#)

[Remove this app](#)

Enable the firestore API-



Cloud Firestore API

Accesses the NoSQL document database built for automatic scaling, high performance, and ease of application development.

By Google Enterprise API ⓘ

Service name firestore.googleapis.com	Type Public API	Status Enabled	Documentation LEARN MORE	Explore TRY IN API EXPLORER
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Authentication

[Users](#)[Sign-in method](#)[Templates](#)[Usage](#)[Settings](#)[Extensions](#)

The following Authentication features will stop working when Firebase Dynamic Links shuts down on August 25, 2025: email link authentication for mobile apps, as well as Cordova OAuth support for web apps.

[Add user](#)

Identifier

Providers

Created ▾

Signed In

User UID

madhurajangle2004@g...



Feb 17, 2025

Feb 17, 2025

6J3mIV7P0PedYSvlc5gcUlygl...

Rows per page:

50 ▾

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