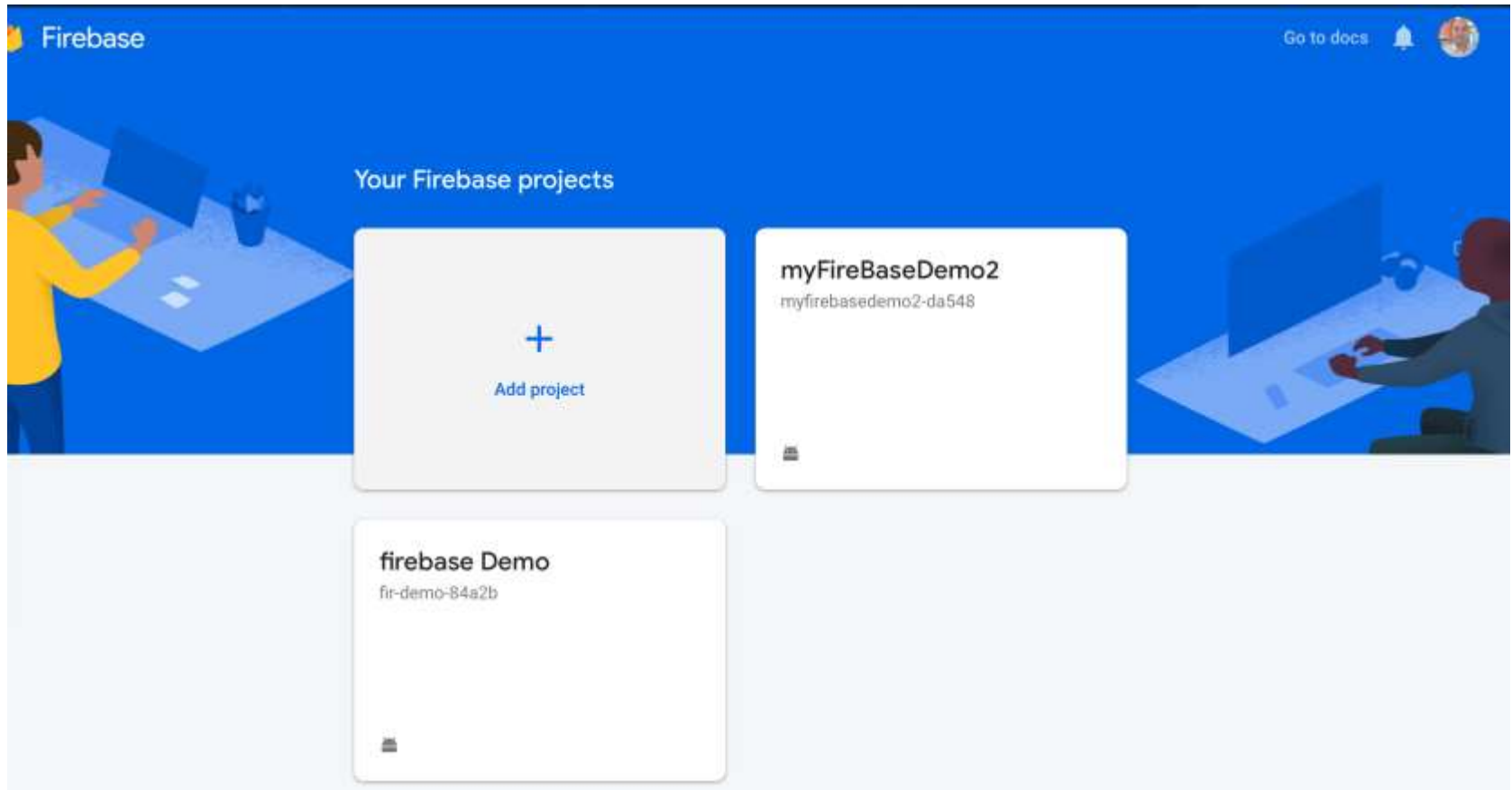# Mobil Programlama

Hafta 12

Firebase

- Proje Ekle

- Account Seç

-

Creating your project...
CoronaFirebase

CoronaFirebase

Your new project is ready

Continue
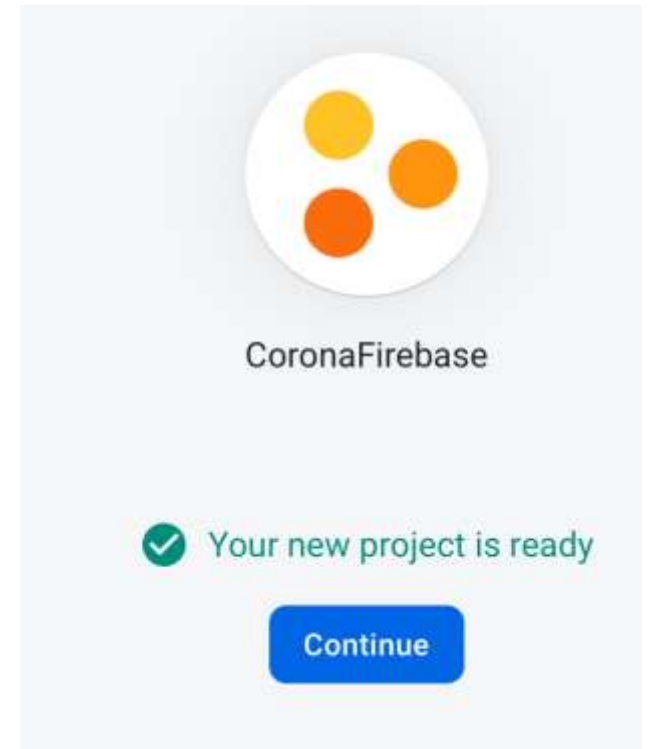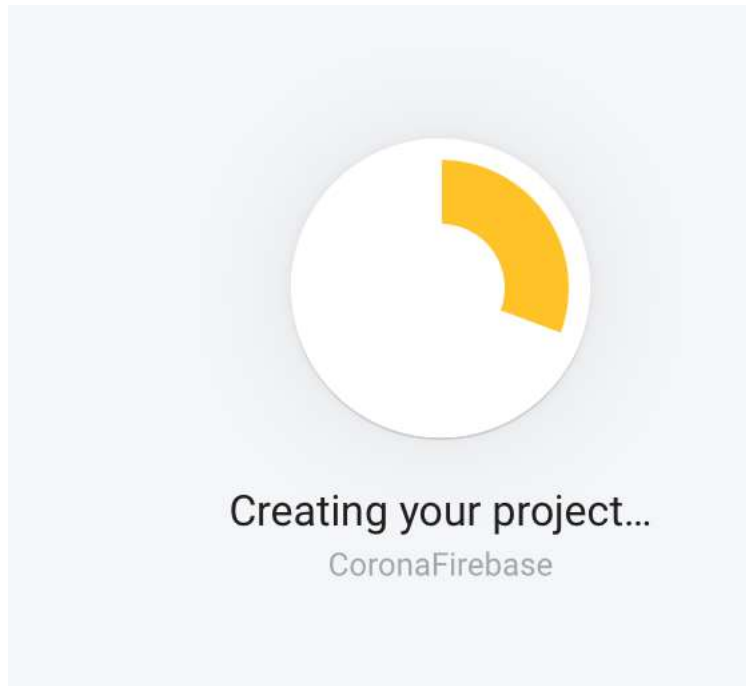
• Android için ekleme yapılır.

Add Firebase to your Android app

① Register app

Android package name ⓘ

com.company.appname

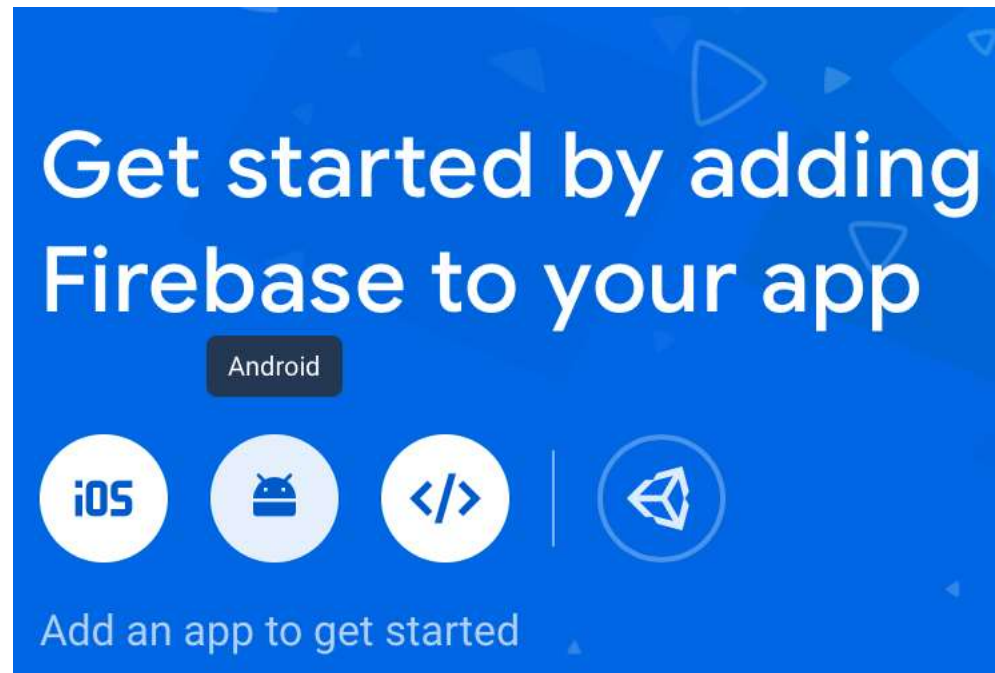App nickname (optional) ⓘ

My Android App

Debug signing certificate SHA-1 (optional) ⓘ

00:00:00:00:00:00:00:00:00:00:00:00:00:00:00:00:00:00:00:00

Required for Dynamic Links, Invites, and Google Sign-In or phone number support in Auth. Edit SHA-1s in Settings.

Register app

② Download config file

② Download config file

Instructions for Android Studio below | Unity C++

⬇ Download google-services.json

Switch to the **Project** view in Android Studio to see your project root directory.
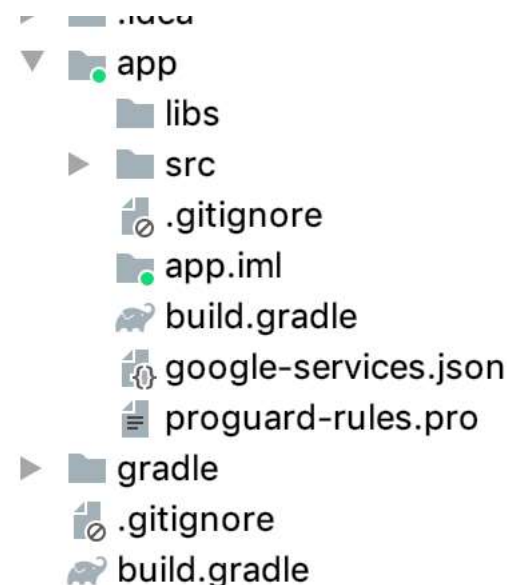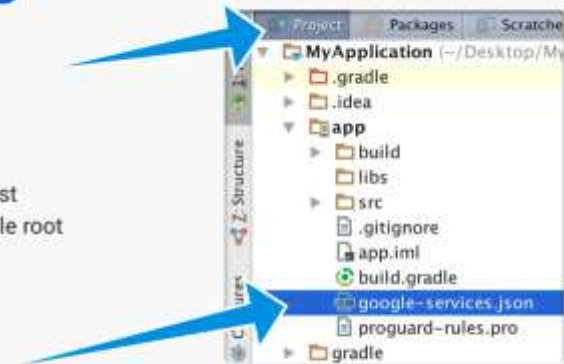
Move the google-services.json file you just downloaded into your Android app module root directory.

google-services.json

Previous   **Next**

app
  libs
  ▶ src
  .gitignore
  app.iml
  build.gradle
  google-services.json
  proguard-rules.pro
▶ gradle
  .gitignore
  build.gradle

Add Firebase SDK

The Google services plugin for Gradle ↗ loads the `google-services.json` file you just downloaded. Modify your build.gradle files to use the plugin.

Project-level build.gradle (`<project>/build.gradle`):

```gradle
buildscript {
  repositories {
    // Check that you have the following line (if not, add it):
    google()  // Google's Maven repository
  }
  dependencies {

    ...

    // Add this line
    classpath 'com.google.gms:google-services:4.3.3'

  }
}


allprojects {

  ...

  repositories {
    // Check that you have the following line (if not, add it):
    google()  // Google's Maven repository

    ...

  }
}
```

App-level build.gradle (`<project>/<app-module>/build.gradle`):

```
apply plugin: 'com.android.application'
// Add this line
apply plugin: 'com.google.gms.google-services'

dependencies {
  // add the Firebase SDK for Google Analytics
  implementation 'com.google.firebase:firebase-analytics:17.2.2'
  // add SDKs for any other desired Firebase products
  // https://firebase.google.com/docs/android/setup#available-librarie
}
```

Finally, press "Sync now" in the bar that appears in the IDE:

Gradle files have changed si **Sync now**

```
<uses-permission android:name="android.permission.INTERNET"></uses-permis
    <application
```

implementation **'com.google.firebase:firebase-database:19.2.0'**

```java
@Override
protected void onCreate(Bundle savedInstanceState) {
    super.onCreate(savedInstanceState);
    setContentView(R.layout.activity_main);

    DatabaseReference dbRef= FirebaseDatabase.getInstance().getReference();
    Map<String,String> values = new HashMap<>();
    values.put("name","Trabzonspor");
    dbRef.push().setValue(values, new DatabaseReference.CompletionListener() {
        @Override
        public void onComplete(@Nullable DatabaseError databaseError,
                               @NonNull DatabaseReference databaseReference) {

            if (databaseError==null){
            Log.i( tag: "INFO", msg: "KAYIT BAŞARILI");
            }else
                Log.i( tag: "INFO", msg: "BAŞARISIZ");


        }
    });
}
```

```
ebasesdemo V/FA: Processing queued up
ebasesdemo W/RepoOperation: setValue a
ebasesdemo I/INFO: BAŞARISIZ
ebasesdemo D/FA: Application going to
```
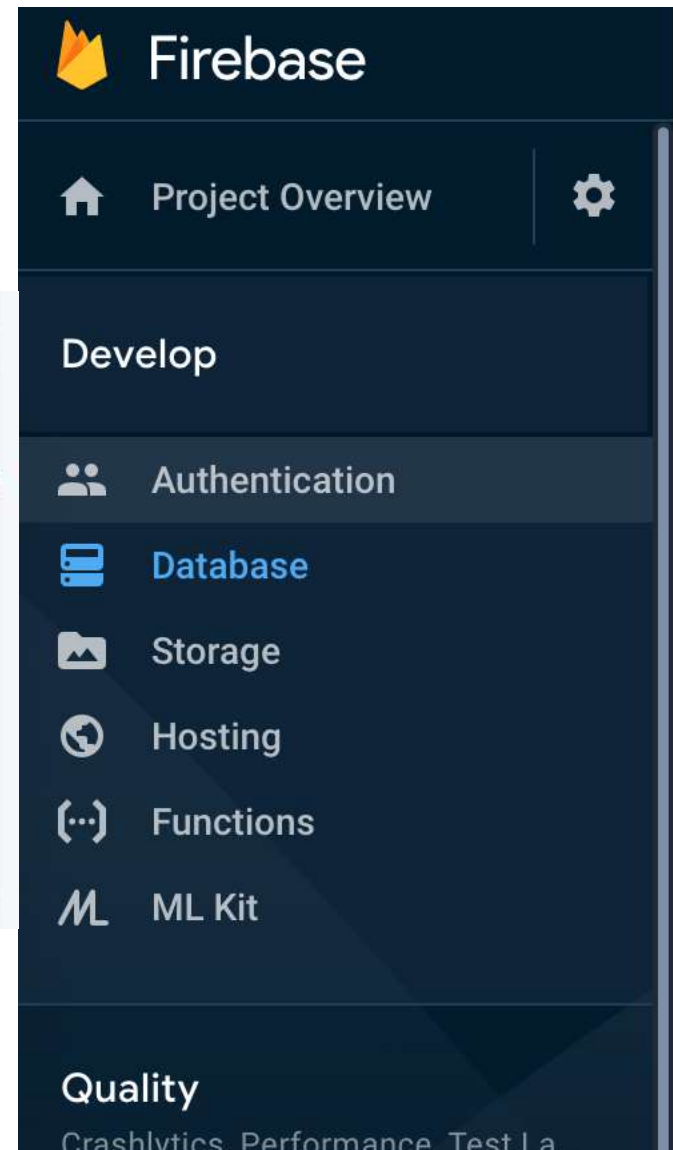
- https://firebase.google.com/docs/android/setup

- Yeni firebase veritabanı açılır

- Rule

```
1   rules_version = '2';
2   service cloud.firestore {
3     match /databases/{database}/documents {
4
5       // This rule allows anyone on the internet to view, edit, and delete
6       // all data in your Firestore database. It is useful for getting
7       // started, but it is configured to expire after 30 days because it
8       // leaves your app open to attackers. At that time, all client
9       // requests to your Firestore database will be denied.
10      //
11      // Make sure to write security rules for your app before that time,
12      // your app will lose access to your Firestore database
13      match /{document=**} {
14        allow read, write: if request.time < timestamp.date(2020, 6, 5);
15      }
16    }
17  }
```

Database ▤ Realtime Database ▾

Data   **Rules**   Backups   Usage

⭐ Default security rules are locked from access

```
1 ▾   {
2 ▾     /* Visit https://firebase.google.com/docs/databas
3 ▾     "rules": {
4         ".read": false,
5         ".write": false
6       }
7     }
```

-

```
sdemo D/FA: Connected to remote service
sdemo V/FA: Processing queued up service tasks: 5
sdemo I/INFO: KAYIT BAŞARILI
sdemo D/FA: Application going to the background
sdemo V/FA: Inactivity, disconnecting from the service
```

Get a DatabaseReference

To read or write data from the database, you need an instance of `DatabaseReference` :

Java	Kotlin+KTX
Android	Android

```java
private DatabaseReference mDatabase;
// ...
mDatabase = FirebaseDatabase.getInstance().getReference();
```

https://firebase.google.com/docs/database/android/read-and-write?authuser=0

Read and write data

Basic write operations

For basic write operations, you can use `setValue()` to save data to a specified reference, replacing any existing data at that path. You can use this method to:

- Pass types that correspond to the available JSON types as follows:

    - `String`

    - `Long`

    - `Double`

    - `Boolean`

    - `Map<String, Object>`

    - `List<Object>`

AdMob

- https://firebase.google.com/docs/admob/android/quick-start

Admob

-