

Taller Firebase

Por: Alfonso Ayala

2022

Crear proyecto firebase

Curso: CLOUD COMPUTING

Mail - Alfonso Ayala Paloma

UCompensar - Editor reunión


Curso: MACHINE LEARNING

Firestore

← → × 🏠

🔒 https://firebase.google.com/?gclid=Cj0KCQjw-fmZBhDtARIsAH6H8qhA3mhmShYOI2DWV9Nk7ynG7lkp...

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 **Firebase**

Products ▾ Use Cases Pricing Docs ▾ More ▾

🔍 Search

🌐 English ▾

[Go to console](#)



[Join us in person and online for **Firestore Summit** on October 18, 2022. Learn how Firebase can help you accelerate app development, release your app with confidence, and scale with ease. \[Register now\]\(#\)](#)


Make your app the best it can be

Firebase is an app development platform that helps you build and grow apps and games users love. Backed by Google and trusted by millions of businesses around the world.

Get started

Try demo


Watch video



https://console.firebase.google.com

^ 🔊 📶 🔌 ESP

1:21 p. m.
6/10/2022

 2

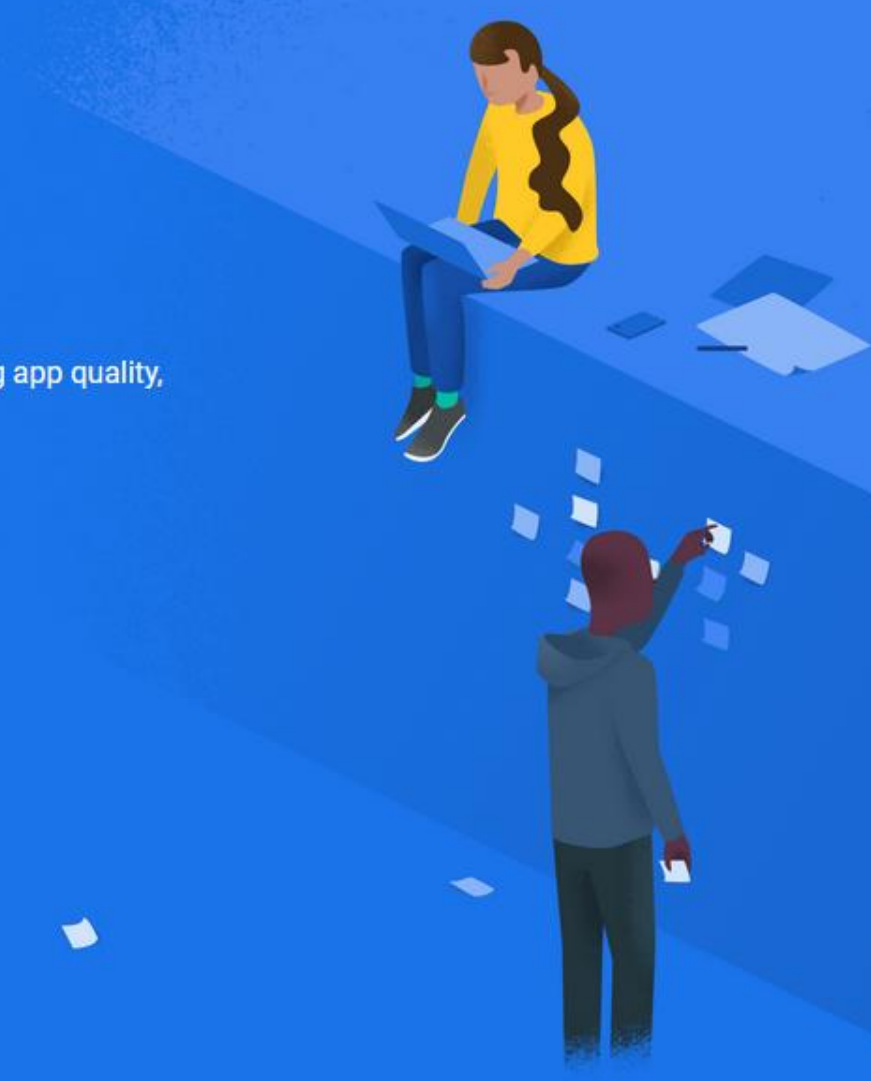


Welcome to Firebase!

Tools from Google for building app infrastructure, improving app quality, and growing your business

Create a project

☰ View docs



× Create a project (Step 1 of 3)

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

Project name

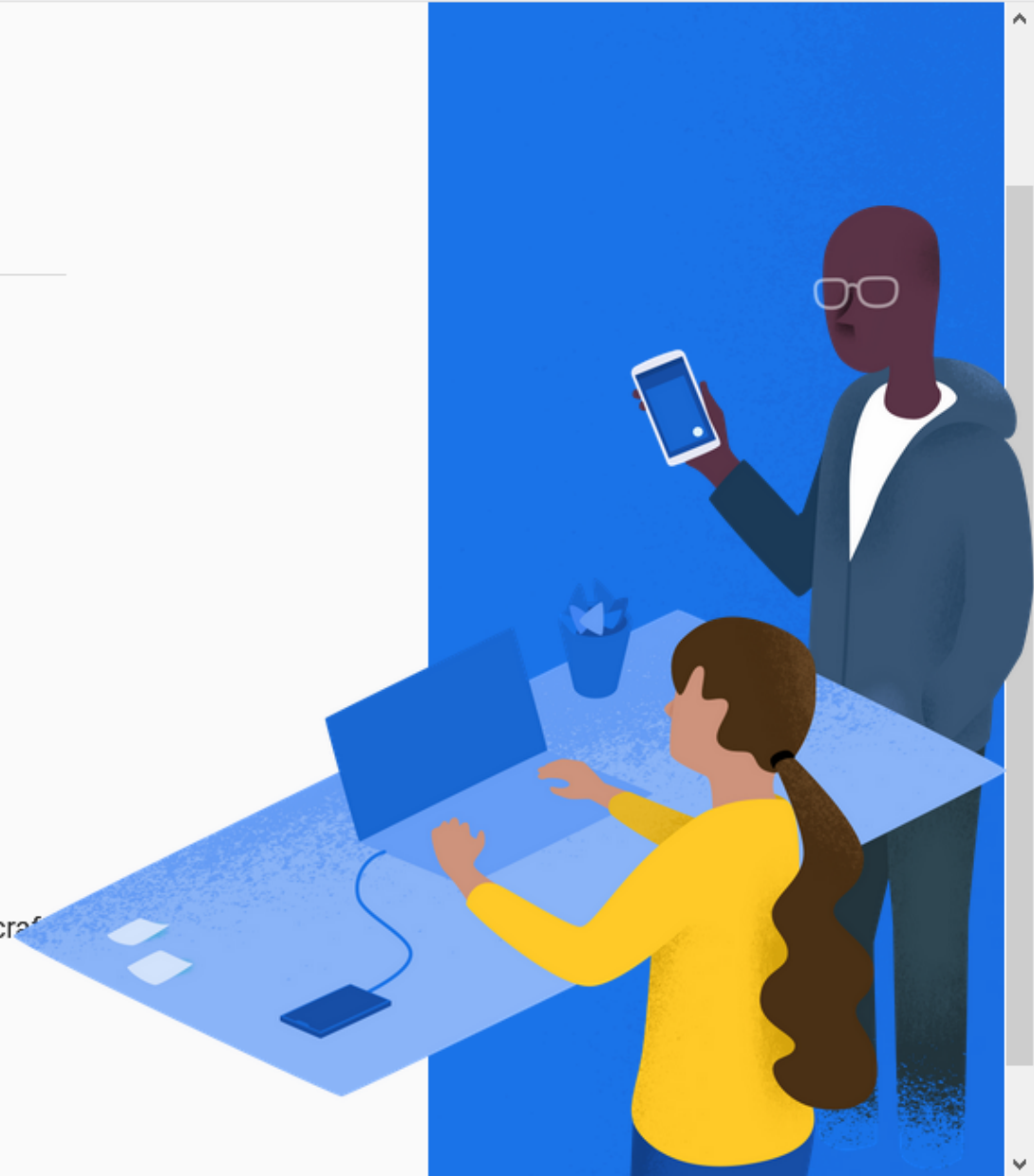
peopledb

peopledb-dc124

☒ I accept the [Firebase terms](#)

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

Continue



X Create a project (Step 2 of 3)

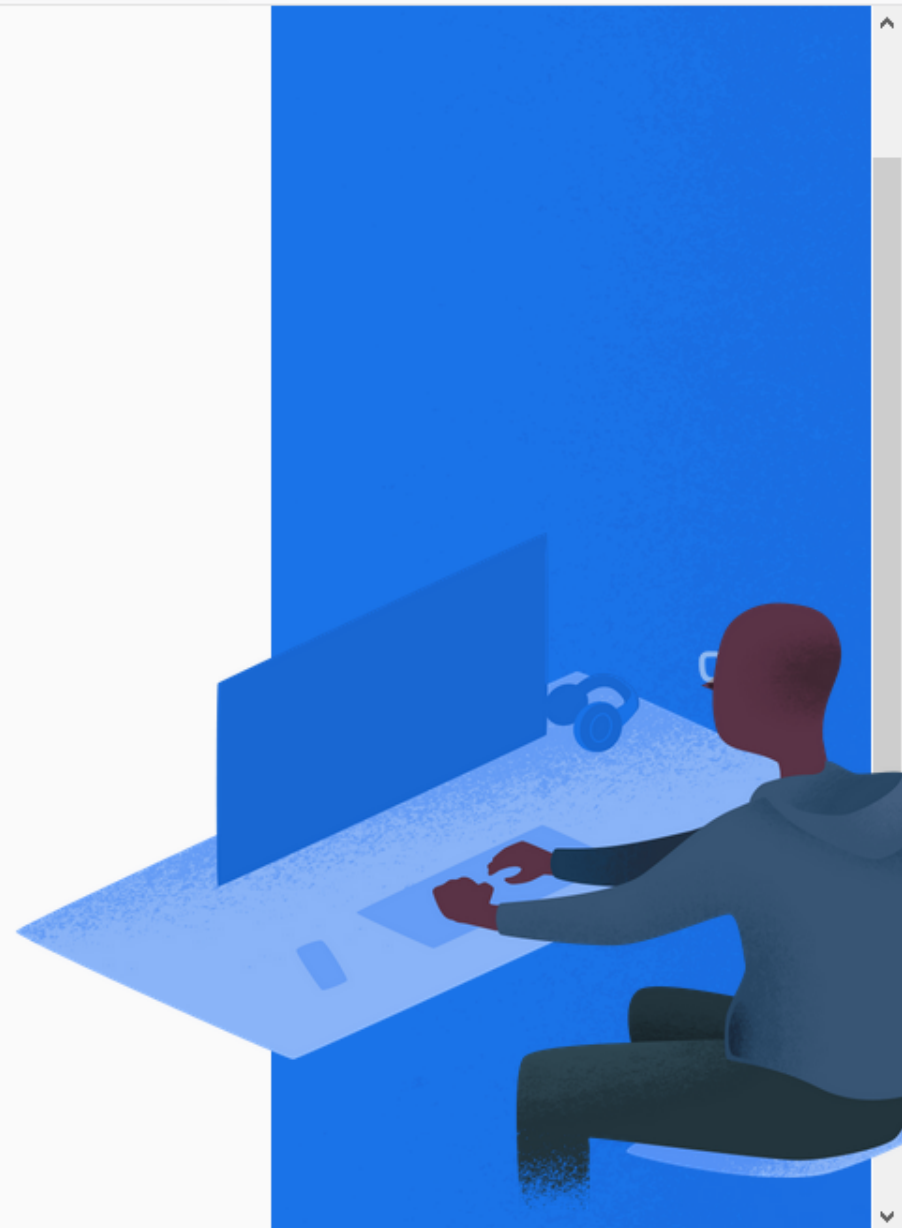
Google Analytics for your Firebase project

Google Analytics is a free and unlimited analytics solution that enables targeting, reporting, and more in Firebase Crashlytics, Cloud Messaging, In-App Messaging, Remote Config, A/B Testing, and Cloud Functions.

Google Analytics enables:

- A/B testing ?
- Crash-free users ?
- User segmentation & targeting across Firebase products ?
- Event-based Cloud Functions triggers ?
- Free unlimited reporting ?

☒ Enable Google Analytics for this project
Recommended



× Create a project (Step 3 of 3)

Data sharing settings and Google Analytics terms

☒ Use the default settings for sharing Google Analytics data. [Learn more](#)

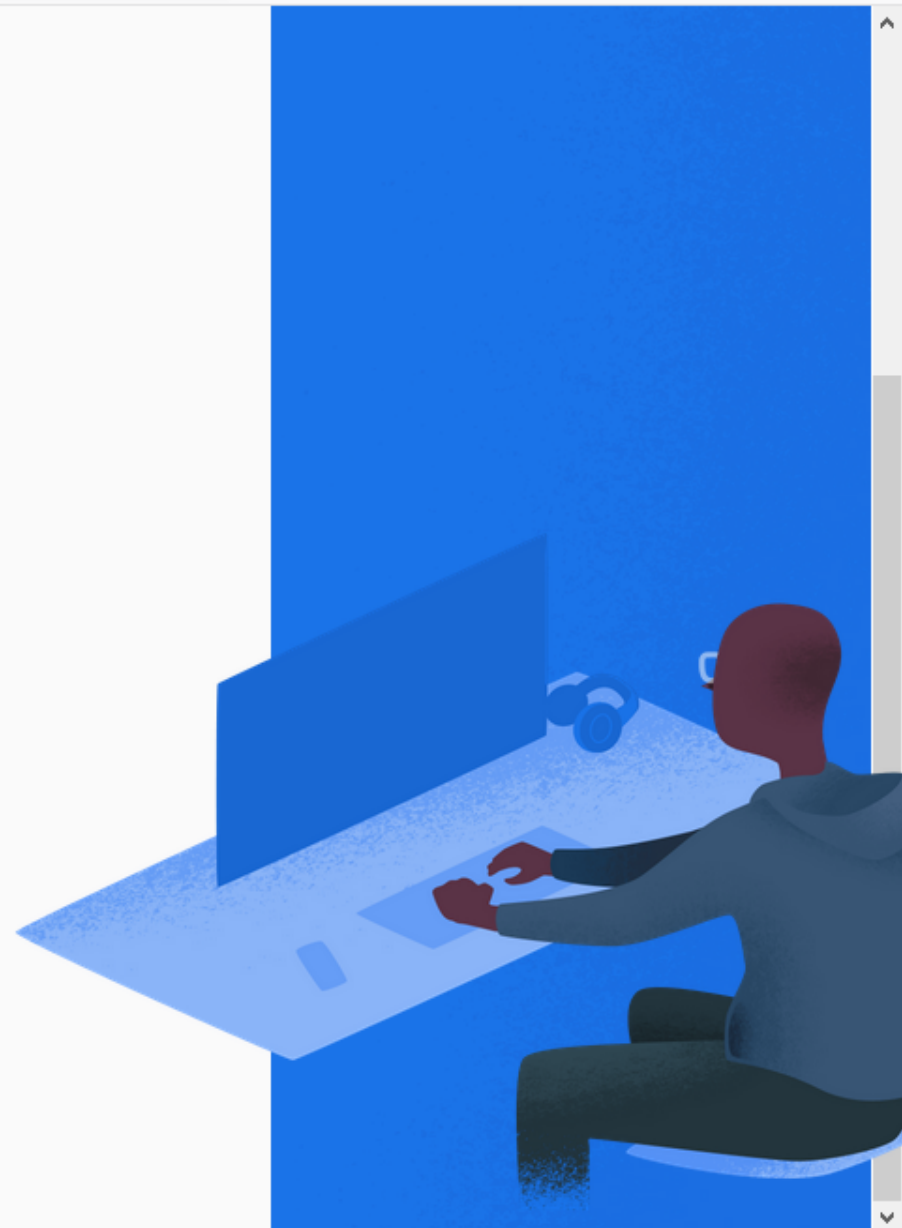
- ☐ Share your Analytics data with Google to improve Google Products and Services
- ☒ Share your Analytics data with Google to enable Benchmarking
- ☒ Share your Analytics data with Google to enable Technical Support
- ☒ Share your Analytics data with Google Account Specialists

☒ I accept the [Google Analytics terms](#)

Upon project creation, a new Google Analytics property will be created and linked to your Firebase project. This link will enable data flow between the products. Data exported from your Google Analytics property into Firebase is subject to the Firebase terms of service, while Firebase data imported into Google Analytics is subject to the Google Analytics terms of service. [Learn more](#)

[Previous](#)

Create project





Provisioning resources...
peopleldb








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✓ Your new project is ready


Continue




 **Firebase**


 **Project Overview** 


What's new


 **Extensions** NEW


Product categories

Build 

Release & Monitor 

Analytics 

Engage 


 **All products**



Customize your nav!



You can now focus your

Spark **Upgrade**

No-cost \$0/month


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Go to docs  


 Receive email updates about new Firebase features, research, and events Sign up 


peopledb Spark plan


Get started by adding Firebase to your app
















Add an app to get started




Store and sync app data in milliseconds 

Crear base firestore


 **Firestore**

 Project Overview 


Project shortcuts


 **Firestore Database**


What's new


 Extensions NEW


Product categories

Build 


Release & Monitor 



Analytics 

Engage 

 All products

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Go to docs  

Cloud Firestore


Realtime updates, powerful queries, and automatic scaling

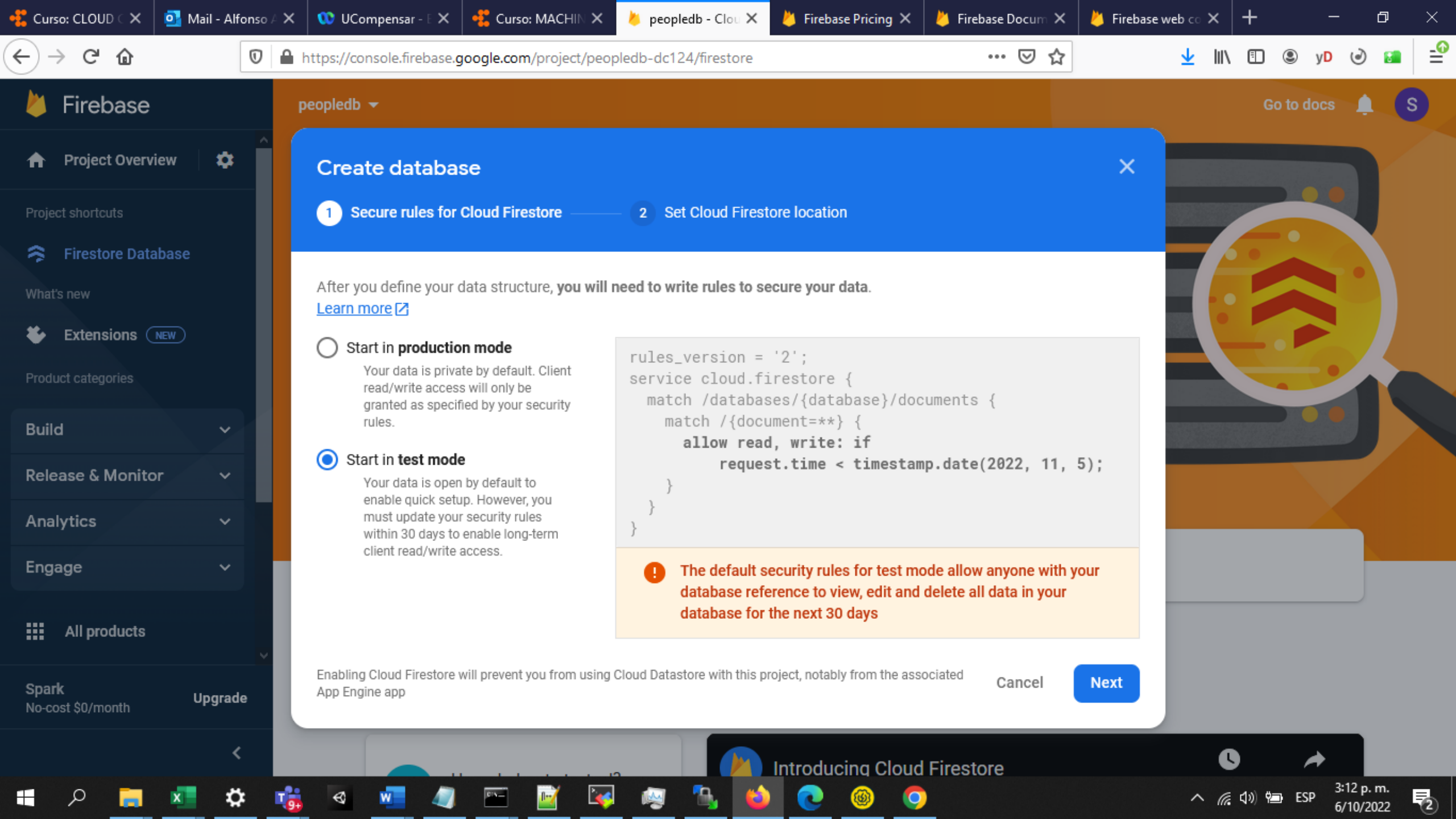
Create database



 Is Cloud Firestore right for you? [Compare Databases](#)

Learn more





Create database

- 1 Secure rules for Cloud Firestore
- 2 Set Cloud Firestore location

After you define your data structure, you will need to write rules to secure your data.

[Learn more](#)

☐ Start in production mode

Your data is private by default. Client read/write access will only be granted as specified by your security rules.

☒ Start in test mode

Your data is open by default to enable quick setup. However, you must update your security rules within 30 days to enable long-term client read/write access.

```
rules_version = '2';
service cloud.firestore {
  match /databases/{database}/documents {
    match /{document=**} {
      allow read, write: if
        request.time < timestamp.date(2022, 11, 5);
    }
  }
}
```

! The default security rules for test mode allow anyone with your database reference to view, edit and delete all data in your database for the next 30 days

Enabling Cloud Firestore will prevent you from using Cloud Datastore with this project, notably from the associated App Engine app

Cancel

Next

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Create database

Secure rules for Cloud Firestore 2 Set Cloud Firestore location

Your location setting is where your Cloud Firestore data will be stored.

After you set this location, you cannot change it later. Also, this location setting will be the location for your default Cloud Storage bucket.


Learn more



Cloud Firestore location

nam5 (us-central)


Enabling Cloud Firestore will prevent you from using Cloud Datastore with this project, notably from the associated App Engine app

Cancel Enable


 **Firebase**

 **Project Overview** 


Project shortcuts


 **Firestore Database**


What's new


 **Extensions** NEW


Product categories

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Cloud Firestore  NEW


[Data](#) [Rules](#) [Indexes](#) [Usage](#)


 Protect your Cloud Firestore resource

 Prototype and test end-to-end with the

 **NEW: More in Google Cloud**  [App Check](#) 
Explore more administrative and troubleshooting features in Google Cloud [Get started](#)  

 [More in Google Cloud](#) 

 peopledb-dc124

 [Start collection](#)

Crear colección y adicionar
documentos

Firestore Database

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Cloud Firestore

Data Rules Indexes Usage

Start a collection

1 Give the collection an ID 2 Add its first document

Parent path

/

Collection ID ?

practica

Cancel Next

Go to docs

More in Google Cloud

Firestore Database

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Go to docs

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Cloud

Data


Document parent path
/practica



Document ID ?
estudiante1

Field	Type	Value
nombre	string	Maria
apellido	string	Gomez
carrera	string	Sistemas
nacimiento	string	1990


+ Add field

Cancel Save


 **Firebase**

 Project Overview 


Project shortcuts


 **Firestore Database**


What's new


 Extensions **NEW**


Product categories

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 All products



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Cloud Firestore  **NEW**








[Data](#) [Rules](#) [Indexes](#) [Usage](#)

 Protect your Cloud Firestore resources from abuse, such as billing fraud or phishing [Configure App Check](#) 

 Prototype and test end-to-end with the Local Emulator Suite, now with Firebase Authentication [Get started](#) 





 peopledb-dc124	 practica 	 estudiante1 
+ Start collection	+ Add document	+ Start collection
practica 	estudiante1 	+ Add field apellido: "Gomez" carrera: "Sistemas" nacimiento: "1990" nombre: "Maria"

Generar una “llave” para
conectar nuestro código a la base

Firestore Database

Realtime Database

Extensions NEW

Build NEW

Release & Monitor

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Build

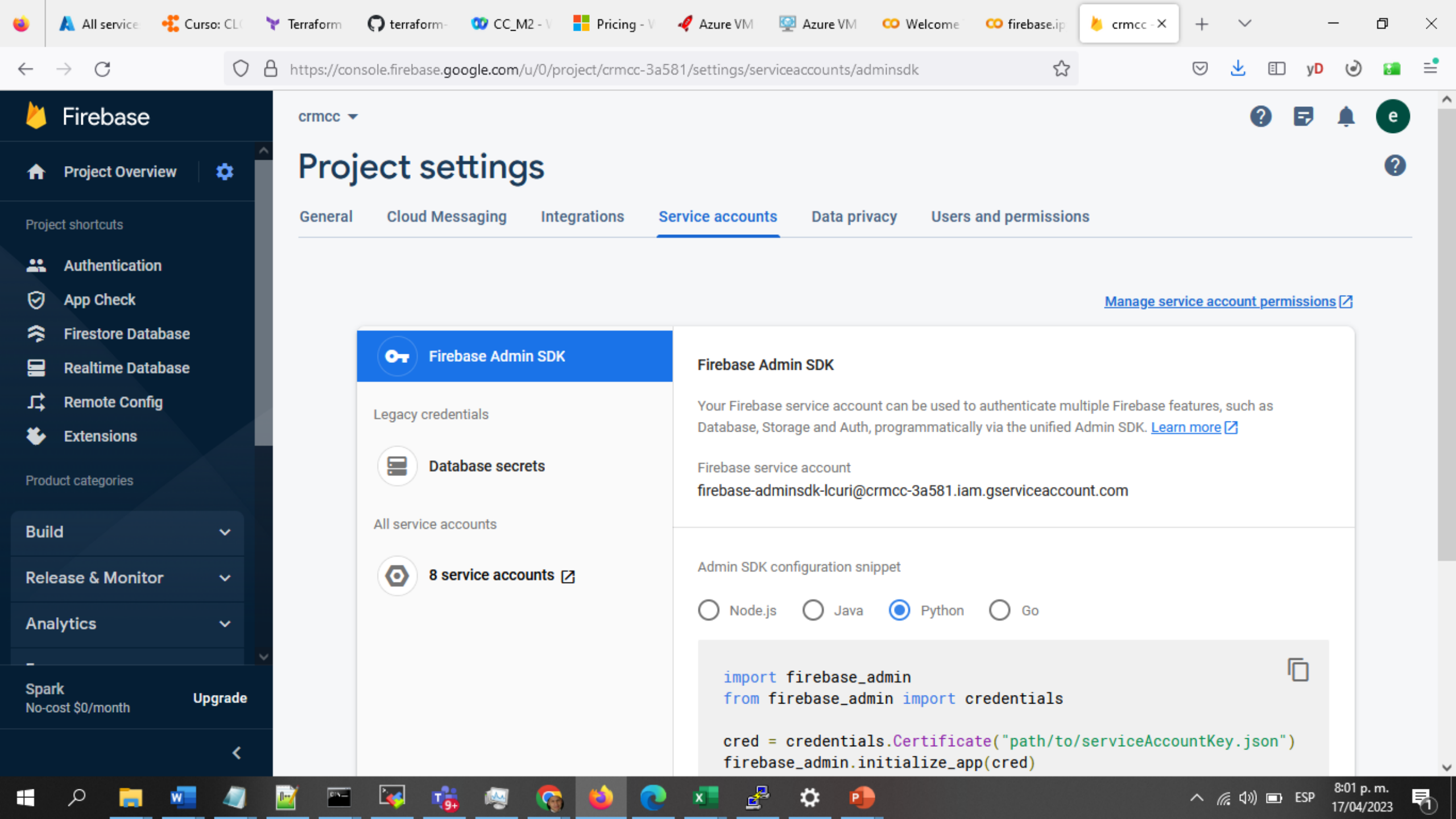
Firestore


Reads (current)
0



Writes (current)
0

Oct 2 Oct 3 Oct 4 Oct 5 Oct 6 Oct 7 Oct 8


— This week — — Last week




 **Firebase**


 **Project Overview** 

Project shortcuts


 **Firestore Database**


 **Realtime Database**


What's new


 **Extensions** NEW


Product categories

Build 




Release & Monitor 

Analytics 


Engage 

 **All products**



Spark
No-cost \$0/month **Upgrade**

peopledb  **Project settings** Go to docs  

Legacy credentials

 **Database secrets**

All service accounts

 **7 service accounts** 

Your Firebase service account can be used to authenticate multiple Firebase features, such as Database, Storage and Auth, programmatically via the unified Admin SDK. [Learn more](#)


Firebase service account
firebase-adminsdk-l4ocr@peopledb-dc124.iam.gserviceaccount.com

Admin SDK configuration snippet

☐ Node.js ☐ Java ☒ Python ☐ Go

```
import firebase_admin
from firebase_admin import credentials

cred = credentials.Certificate("path/to/serviceAccountKey.json")
firebase_admin.initialize_app(cred)
```



Generate new private key

Extensions **NEW**

Product categories

Build

Release & Monitor

Analytics

Engage

All products

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Upgrade

Firebase Admin SDK

Legacy credentials

Database secrets

All service accounts

7 service accounts

Generate new private key

Your Firebase service account can be used to authenticate multiple Firebase features, such as Database, Storage and Auth, programmatically via the unified Admin SDK. [Learn more](#)

Firebase service account
firebase-adminsdk-l4ocr@peopledb-dc124.iam.gserviceaccount.com


Generate new private key



⚠ Your private key gives access to your project's Firebase services. Keep it confidential and never store it in a public repository.

Store this file securely, because your new key can't be recovered if lost


Cancel **Generate key**

Generate new private key


 **Firebase**

 **Project Overview** 


Project shortcuts


 **Firestore Database**


What's new


 **Extensions** NEW


Product categories

Build 




Release & Monitor 

Analytics 

Engage 

 **All products**

Spark
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Legacy credentials

Database secrets

All service accounts

7 service accounts

Your Firebase service account can be used to authenticate multiple Firebase features, such as Database, Storage and Auth, programmatically via the unified Admin SDK. [Learn more](#)


Firebase service account
firebase-adminsdk-l4ocr-6e8c446362@peopledb-dc124.iam.gserviceaccount.com

Go

credentials

```
authenticate("path/to/serviceAccountKey.json")  
app(cred)
```

Opening peopledb-dc124-firebase-adminsdk-l4ocr-6e8c446362.json

You have chosen to open:
 **peopledb-dc124-firebase-adminsdk-l4ocr-6e8c446362.json**
which is: JSON file (2.3 KB)
from: data:

What should Firefox do with this file?

☐ **Open with** Applications\Notepad++ Portable.exe (default)

☒ **Save File**

☐ Do this automatically for files like this from now on.

OK

Cancel

Generate new private key

Windows taskbar with icons for File Explorer, Excel, Settings, Teams, Word, and others. System tray shows time 3:23 p.m. 6/10/2022.

Crear un notebook en
“[https://colab.research.google.co
m](https://colab.research.google.com)”

+ Code + Text

RAM Disk Editing

```
#contextualizacion
import firebase_admin
import google.cloud
from firebase_admin import credentials, firestore

cred=credentials.Certificate( '/content/peopledb-dc124-firebase-adminsdk-l4ocr-6e8c446362.json')
app=firebase_admin.initialize_app(cred)
db = firestore.client()

[ ] users_ref = db.collection(u'practica')
docs = users_ref.stream()
for doc in docs:
    print( u'{} =>{}'.format(doc.id, doc.to_dict()))

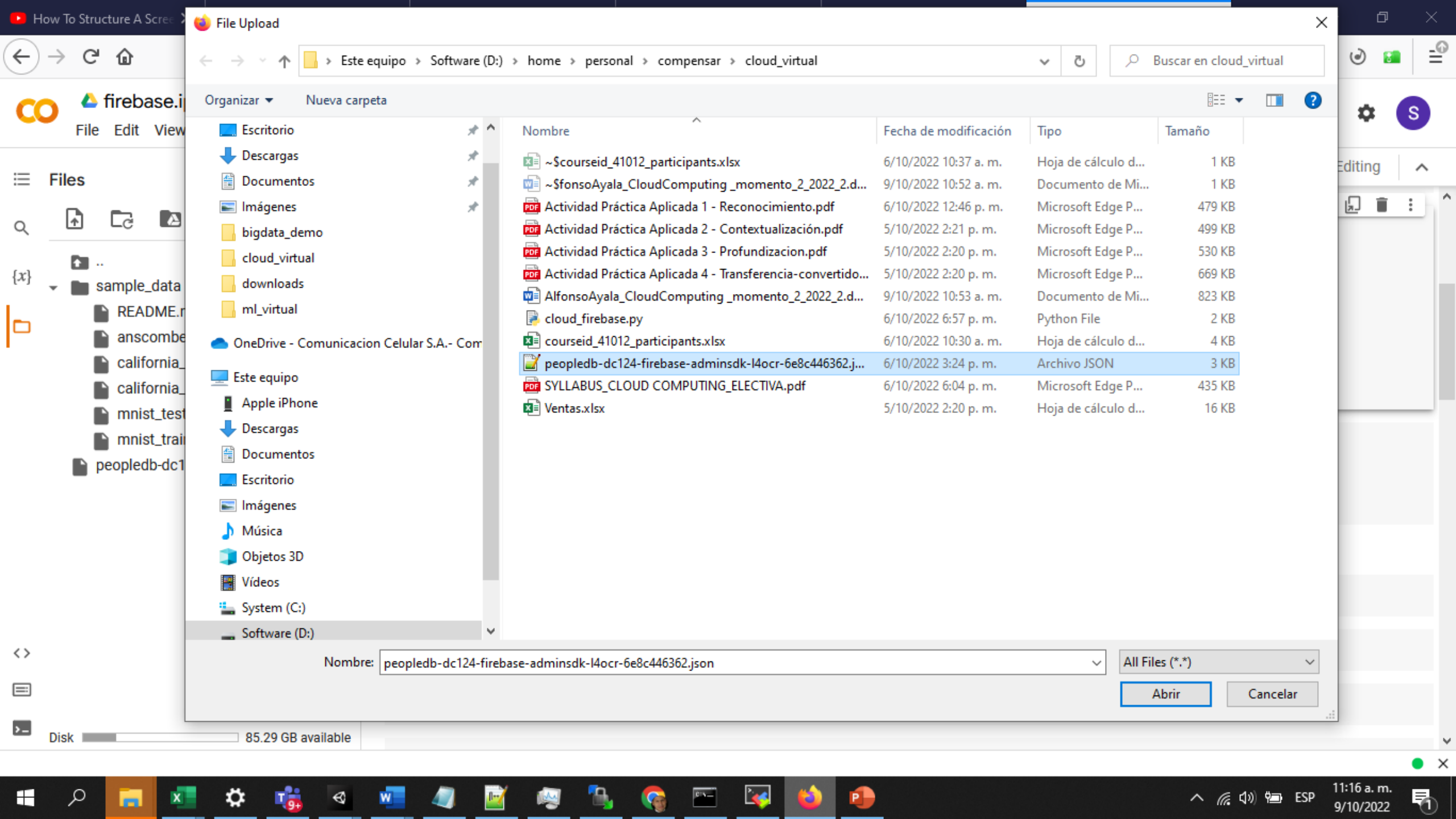
estudiantel =>{'nacimiento': '1990', 'nombre': 'Maria', 'carrera': 'Sistemas', 'apellido': 'Gomez'}
```

[]

[]

[]

Subir la “llave” a colab.



Darle PLAY!

Files

peopledb-dc124-firebase-adminsdk-l4ocr-6e8c446362.json

sample_data

- README.md
- anscombe.json
- california_housing_test.csv
- california_housing_train.csv
- mnist_test.csv
- mnist_train_small.csv
- peopledb-dc124-firebase-adminsdk...

Disk 85.29 GB available

+ Code + Text

```
#contextualizacion
import firebase_admin
import google.cloud
from firebase_admin import credentials, firestore

cred=credentials.Certificate( '/content/peopledb-dc124-firebase-adminsdk-l4ocr-6e8c446362.json' )
app=firebase_admin.initialize_app(cred)
db = firestore.client()

[ ] users_ref = db.collection(u'practica')
docs = users_ref.stream()
for doc in docs:
    print( u'{} =>{}'.format(doc.id, doc.to_dict()))

estudiante1 =>{'nacimient': '1990', 'nombre': 'Maria', 'carrera': 'Sistemas', 'apellido': 'Gomez'}
```

[]

[]

[]

RAM

Disk

Editing

Felicitaciones!!!

Lo hemos logrado!!!!