

FIREBASE INSTALLATION GUIDE



Firebase

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1. Installation

First, we install Firebase with the following command:

```
sudo npm i -g firebase-tools
```

```
eduardo@ubuntu:~$ sudo npm i -g firebase-tools
/usr/bin/firebase -> /usr/lib/node_modules/firebase-tools/lib/bin/firebase.js
npm WARN optional SKIPPING OPTIONAL DEPENDENCY: fsevents@2.1.1 (node_modules/firebase-tools/node_modules/fsevents):
npm WARN notsup SKIPPING OPTIONAL DEPENDENCY: Unsupported platform for fsevents@2.1.1: wanted {"os":"darwin","arch":"any"} (current: {"os":"linux","arch":"x64"})
+ firebase-tools@7.6.2
updated 1 package in 14.2s
eduardo@ubuntu:~$
```

Fig. 1 - Firebase installation

2. Project creation

- Open this URL in a web browser for open the Firebase start page, and click on the **Comenzar** button:

<https://firebase.google.com/>

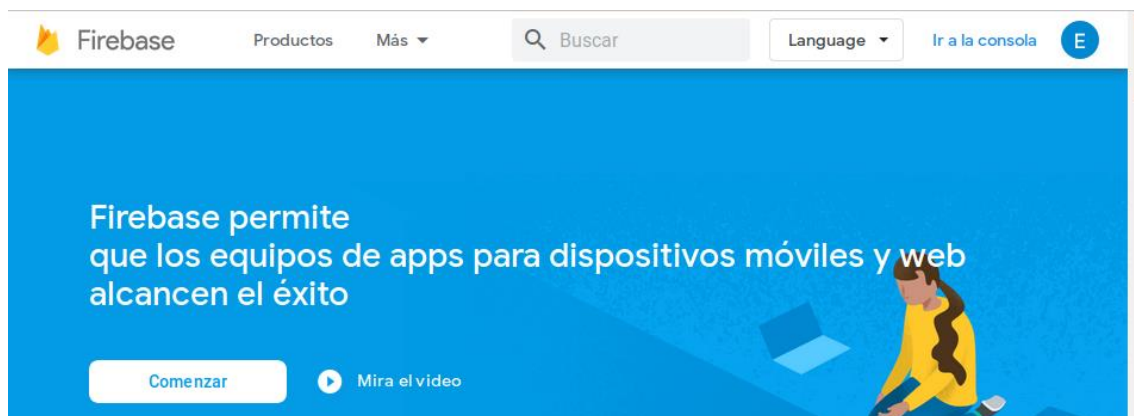


Fig. 2 - Firebase start page

- Then, click on **Crear Proyecto** for start to create a project.

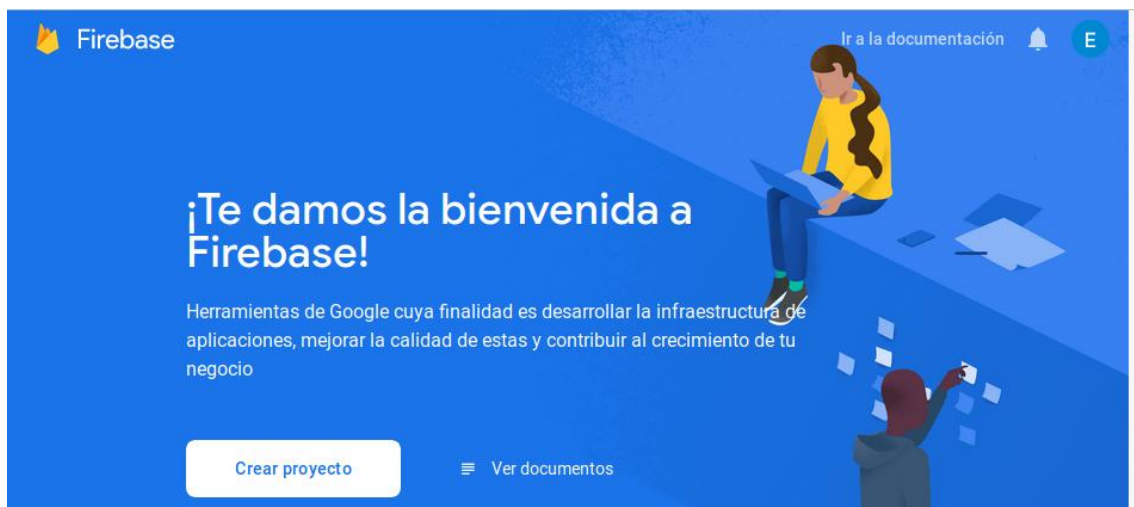
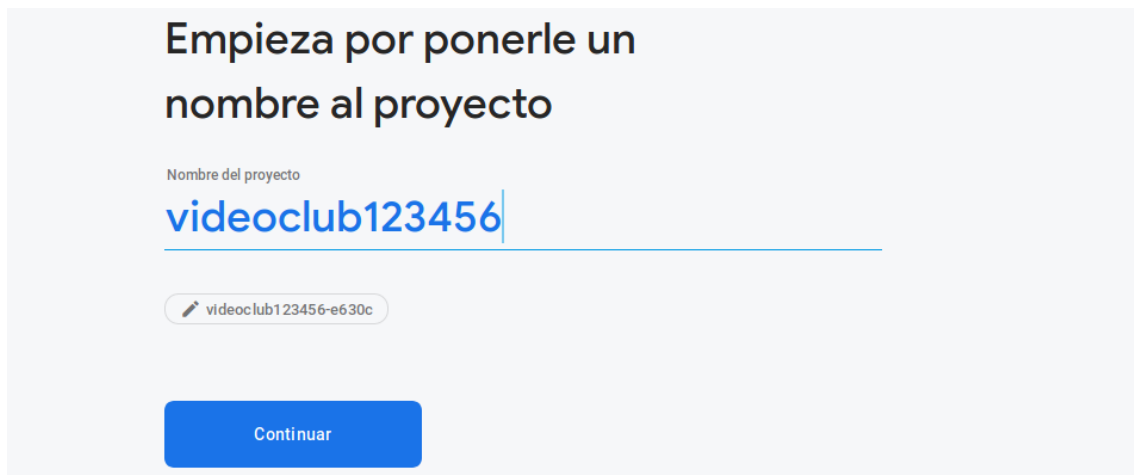


Fig. 3 - Firebase project creation

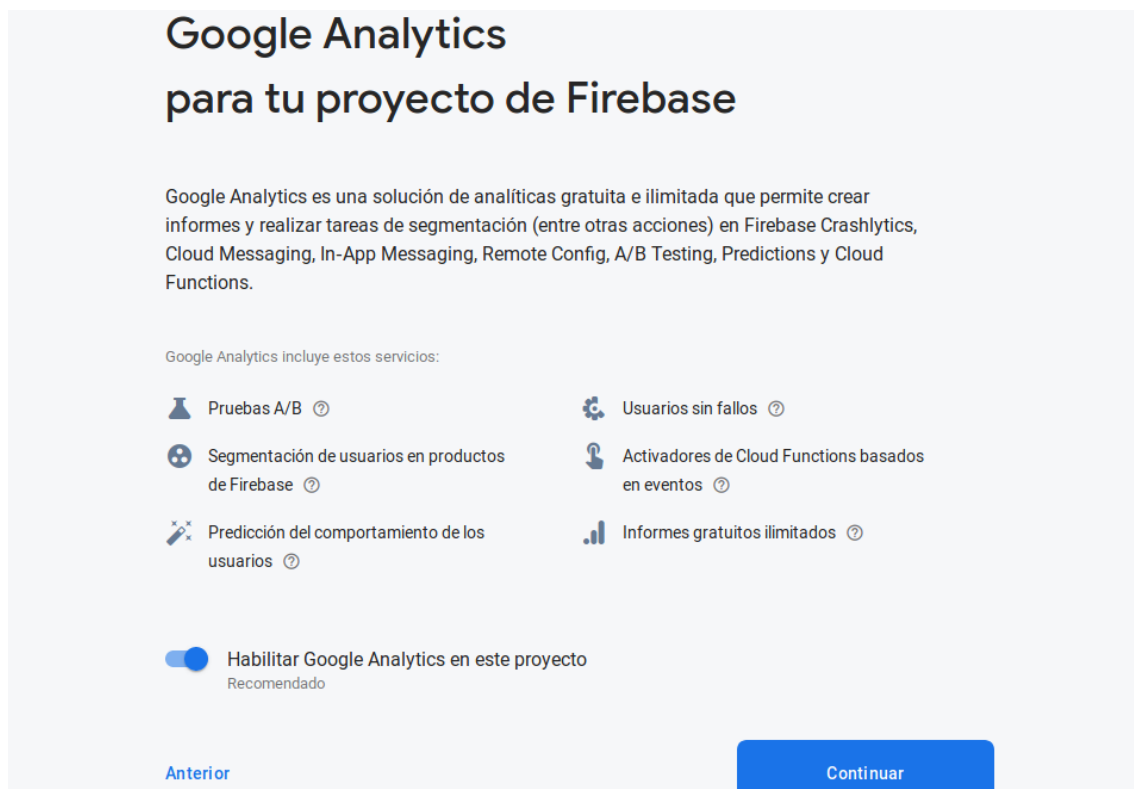
- Next, we give a name for the project and click on **Continuar** button.



The screenshot shows the 'Empieza por ponerle un nombre al proyecto' (Start by giving your project a name) screen in the Firebase console. It features a text input field with the placeholder 'Nombre del proyecto' and the text 'videoclub123456' entered. Below the input field is a small button with a pencil icon and the text 'videoclub123456-e630c'. At the bottom, there is a large blue button labeled 'Continuar'.

Fig. 4 - Project name input

- Click again on **Continuar** for allow Google Analytics on the project.



The screenshot shows the 'Google Analytics para tu proyecto de Firebase' (Google Analytics for your Firebase project) screen. It includes a description of Google Analytics as a free and unlimited analytics solution. Below this, there is a section titled 'Google Analytics incluye estos servicios:' (Google Analytics includes these services) with a grid of icons and labels for various services: 'Pruebas A/B', 'Segmentación de usuarios en productos de Firebase', 'Predicción del comportamiento de los usuarios', 'Usuarios sin fallos', 'Activadores de Cloud Functions basados en eventos', and 'Informes gratuitos ilimitados'. At the bottom, there is a toggle switch labeled 'Habilitar Google Analytics en este proyecto' (Enable Google Analytics on this project) with the text 'Recomendado' (Recommended) below it. The screen also has 'Anterior' (Previous) and 'Continuar' (Continue) buttons.

Fig. 5 - Allowing Google Analytics

- Select the default account for Firebase and click on **Crear Proyecto** button.

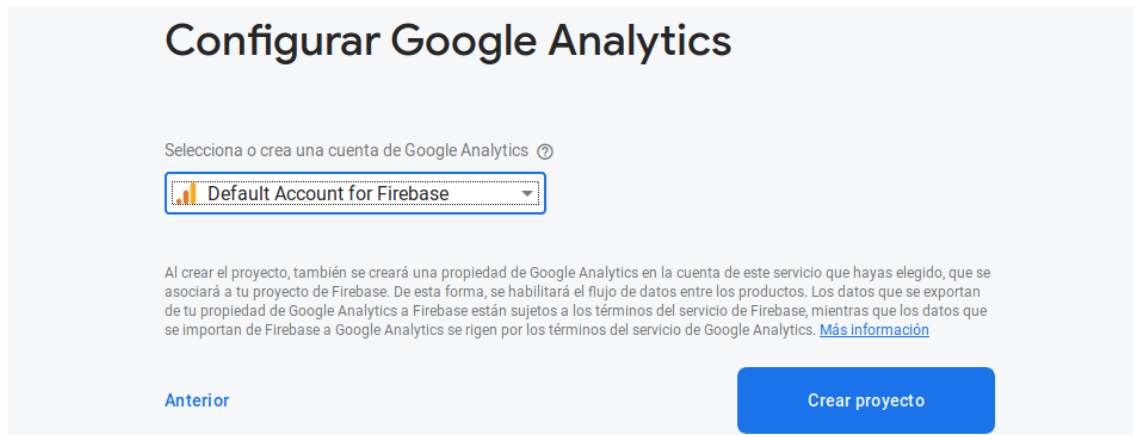


Fig. 6 - Configuring Google Analytics

- The project is already created. Click on **Continuar**.

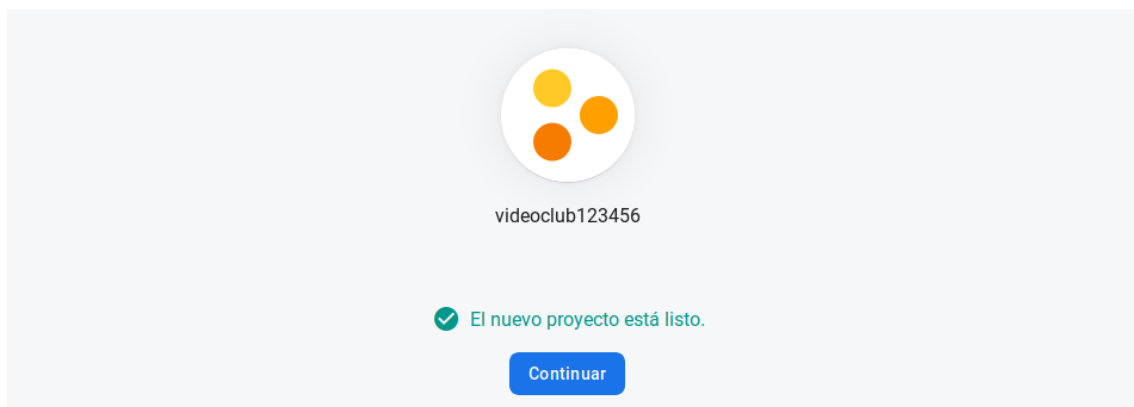


Fig. 7 - Finishing project creation

3. Configuration

- To get started, we login in Firebase with a Google account with this command:
firebase login

```
eduardo@ubuntu:~$ firebase login
i  Firebase optionally collects CLI usage and error reporting information to help improve our products.
   Data is collected in accordance with Google's privacy policy (https://policies.google.com/privacy) and it
   is not used to identify you.

? Allow Firebase to collect CLI usage and error reporting information? Yes
i  To change your data collection preference at any time, run 'firebase logout' and log in again.

Visit this URL on this device to log in:
https://accounts.google.com/o/oauth2/auth?client_id=563584335869-fgrhgm47bqnekij5i8b5pr03ho849e6.apps.g
oogleusercontent.com&scope=email%20openid%20https%3A%2F%2Fwww.googleapis.com%2Fauth%2Fcloudplatformproje
cts.readonly%20https%3A%2F%2Fwww.googleapis.com%2Fauth%2Ffirebase%20https%3A%2F%2Fwww.googleapis.com%2Fa
uth%2Fcloud-platform&response_type=code&state=310898263&redirect_uri=http%3A%2F%2Flocalhost%3A9005

Waiting for authentication...

✓ Success! Logged in as egallegoc98@gmail.com
eduardo@ubuntu:~$
```

- Once you are logged, execute this command and select **Database** and **Hosting** for start to configure Firebase:

firebase init

```
eduardo@ubuntu-server:~$ firebase init

#####
##
#####
##
#####
##
#####
##

You're about to initialize a Firebase project in this directory:

  /home/eduardo

Before we get started, keep in mind:

  * You are initializing your home directory as a Firebase project

? Which Firebase CLI features do you want to set up for this folder? Press Space to select features, then Enter to confirm your choices.
  ☒ Database: Deploy Firebase Realtime Database Rules
  ☐ Firestore: Deploy rules and create indexes for Firestore
  ☐ Functions: Configure and deploy Cloud Functions
  ☒ Hosting: Configure and deploy Firebase Hosting sites
  ☐ Storage: Deploy Cloud Storage security rules
```

Fig. 8 - Firebase initialization

- The third step consists in answer all questions to realize the configuration.

```
=== Project Setup

First, let's associate this project directory with a Firebase project.
You can create multiple project aliases by running firebase use --add,
but for now we'll just set up a default project.

? Please select an option: Use an existing project
? Select a default Firebase project for this directory: videoclub123456-e630c (videoclub123456)
i Using project videoclub123456-e630c (videoclub123456)

=== Database Setup

Firebase Realtime Database Rules allow you to define how your data should be
structured and when your data can be read from and written to.

? What file should be used for Database Rules? database.rules.json
✓ Database Rules for videoclub123456-e630c have been downloaded to database.rules.json.
Future modifications to database.rules.json will update Database Rules when you run
firebase deploy.

=== Hosting Setup

Your public directory is the folder (relative to your project directory) that
will contain Hosting assets to be uploaded with firebase deploy. If you
have a build process for your assets, use your build's output directory.

? What do you want to use as your public directory? public
```

Fig. 9 - Questions I

```
? Configure as a single-page app (rewrite all urls to /index.html)? No
✓ Wrote public/404.html
✓ Wrote public/index.html

i Writing configuration info to firebase.json...
i Writing project information to .firebaserc...
i Writing gitignore file to .gitignore...

✓ Firebase initialization complete!
eduardo@ubuntu-server:~$
```

Fig. 10 - Questions II

4. Add project to a web application

- We click the marked button for add the created project to a web application.

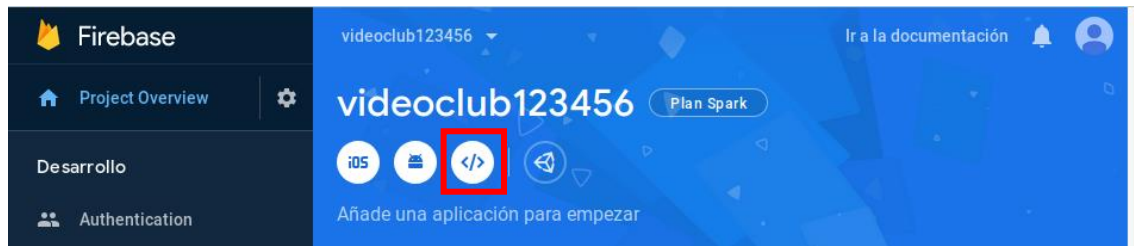


Fig. 11 - Project overview

- In this point, we give a nick to the application and click on **Registrar aplicación** button. The nick is private only for you.

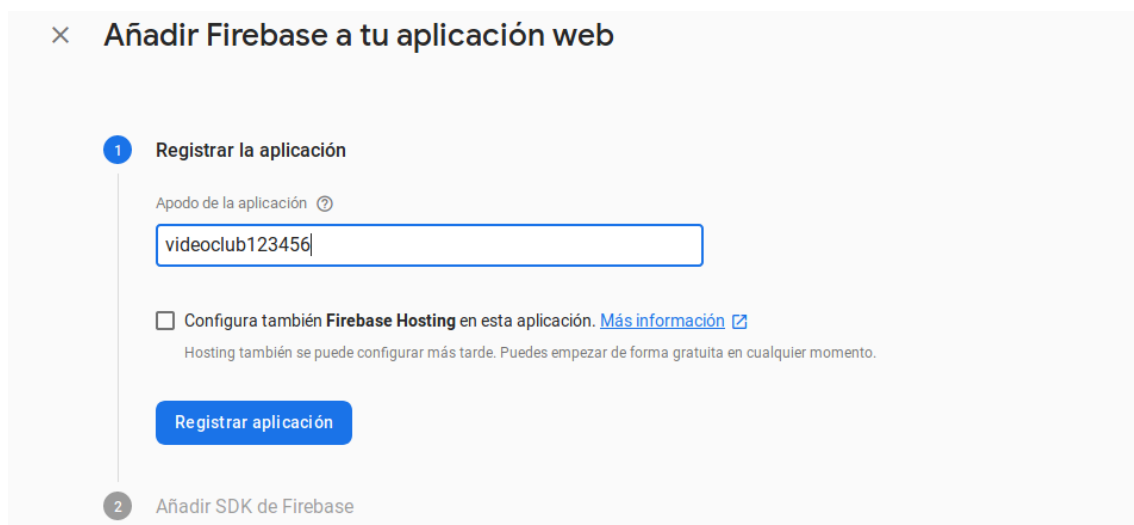


Fig. 12 - Adding project to a web application

- Next, we create a simple html file named **holaMundo.html** on the **public** directory of the Firebase server, that contains this code and click on **Ir a la consola**.

2 Añadir SDK de Firebase

Antes de utilizar cualquier servicio de Firebase, copia y pega estas secuencias de comandos en la parte inferior de la etiqueta <body>:

```
<!-- The core Firebase JS SDK is always required and must be listed first -->
<script src="https://www.gstatic.com/firebasejs/7.2.3/firebase-app.js"></script>

<!-- TODO: Add SDKs for Firebase products that you want to use
      https://firebase.google.com/docs/web/setup#available-libraries -->
<script src="https://www.gstatic.com/firebasejs/7.2.3/firebase-analytics.js"></script>

<script>
  // Your web app's Firebase configuration
  var firebaseConfig = {
    apiKey: "AIzaSyDU02xXgdy-dlgdBgxFSfZ9pH0y0LLAqxM",
    authDomain: "videoclub123456-e630c.firebaseio.com",
    databaseURL: "https://videoclub123456-e630c.firebaseio.com",
    projectId: "videoclub123456-e630c",
    storageBucket: "videoclub123456-e630c.appspot.com",
    messagingSenderId: "1057009418565",
    appId: "1:1057009418565:web:f2b90f2b10731ac620be2c",
    measurementId: "G-NDDZ2PCMBZ"
  };
  // Initialize Firebase
  firebase.initializeApp(firebaseConfig);
  firebase.analytics();
</script>
```

Más información sobre Firebase para aplicaciones web: [Primeros pasos](#), [Referencia de APIs del SDK web](#) y [Muestras](#)

[Ir a la consola](#)

Fig. 13 - Firebase Project SDK

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <title>Prueba firebase</title>

  <!-- The core Firebase JS SDK is always required and must be listed first -->
  <script src="https://www.gstatic.com/firebasejs/7.2.3/firebase-app.js"></script>

  <!-- TODO: Add SDKs for Firebase products that you want to use
        https://firebase.google.com/docs/web/setup#available-libraries -->
  <script src="https://www.gstatic.com/firebasejs/7.2.3/firebase-analytics.js"></script>

  <script>
    // Your web app's Firebase configuration
    var firebaseConfig = {
      apiKey: "AIzaSyDU02xXgdy-dlgdBgxFSfZ9pH0y0LLAqxM",
      authDomain: "videoclub123456-e630c.firebaseio.com",
      databaseURL: "https://videoclub123456-e630c.firebaseio.com",
      projectId: "videoclub123456-e630c",
      storageBucket: "videoclub123456-e630c.appspot.com",
      messagingSenderId: "1057009418565",
      appId: "1:1057009418565:web:f2b90f2b10731ac620be2c",
      measurementId: "G-NDDZ2PCMBZ"
    };
    // Initialize Firebase
    firebase.initializeApp(firebaseConfig);
    firebase.analytics();
  </script>
</head>
<body>
  <h1>Hola mundo!</h1>
</body>
</html>
```

Fig. 14 - holaMundo.html

5. Database creation

- For create a database on the project, we click on the **Crear base de datos** button.



Fig. 15 - Database creation

- Here, we select the second option and click **Siguiente**.

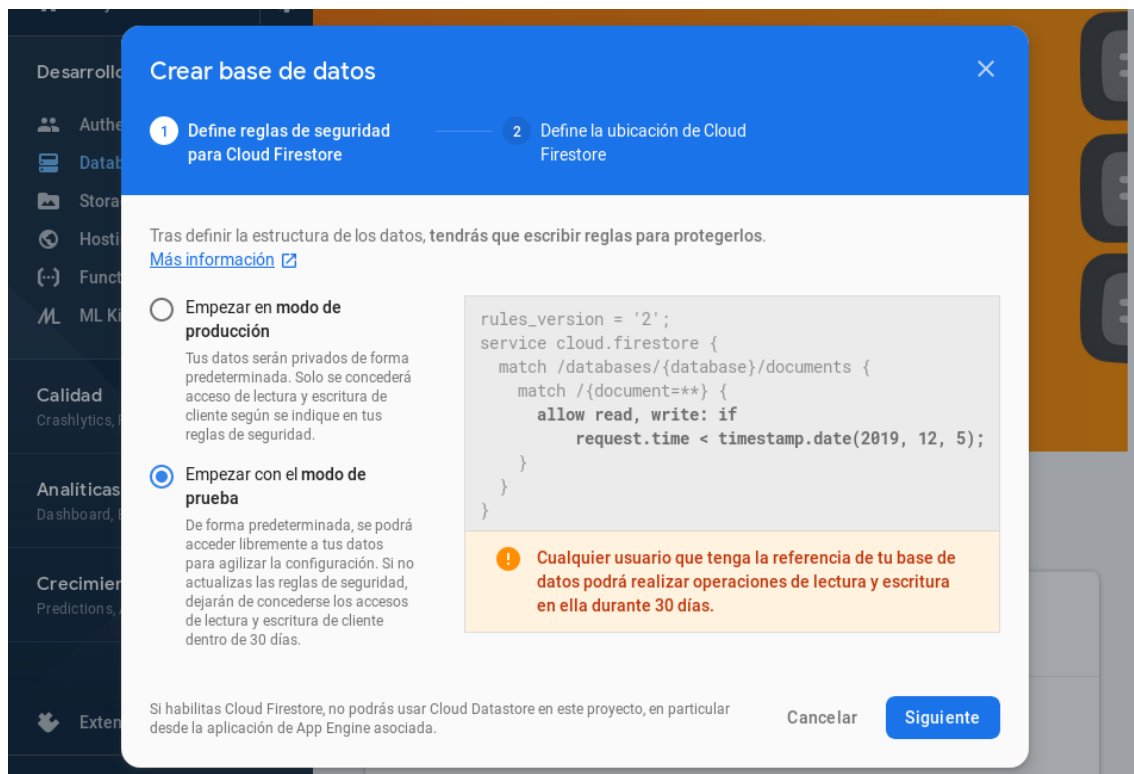


Fig. 16 - Database mode selectio

- Select **eur3 (europe-west)** option and click on the **Listo** button.

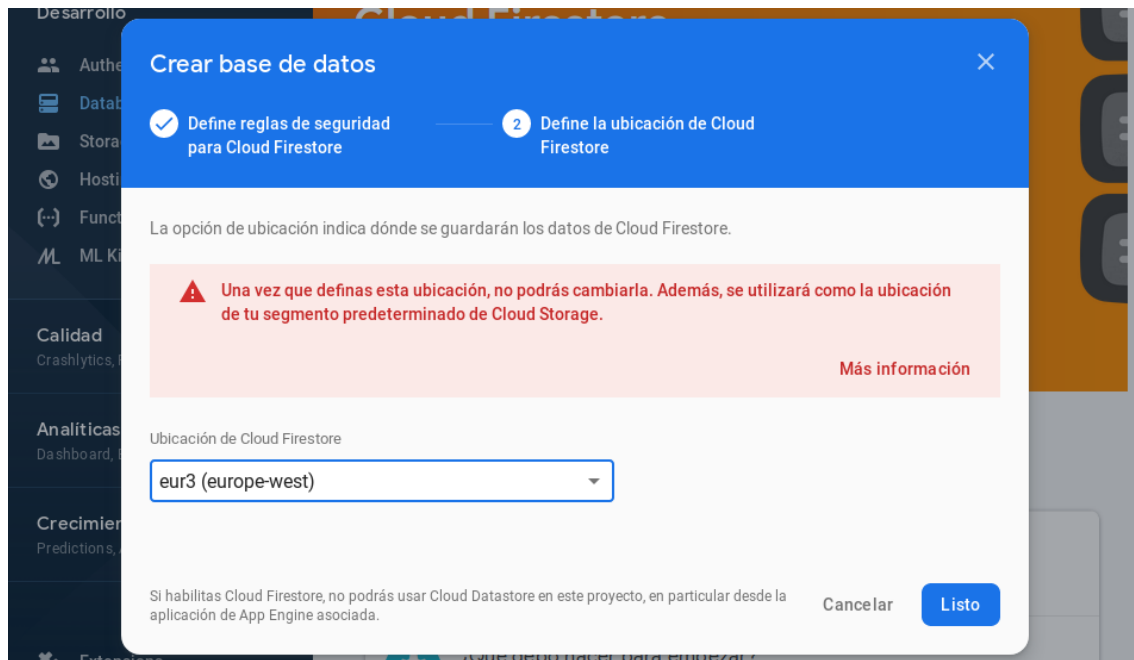


Fig. 17 - Database location selection

- Next, we select **Realtime database** and create a new child with name **appName** and value **trabajador**, and click on **Añadir**.



Fig. 18 - Creating a database chil

- Change rules on **Reglas** tab modifying **.read** and **.write** properties changing their value to true, and click on the **Publicar** button.

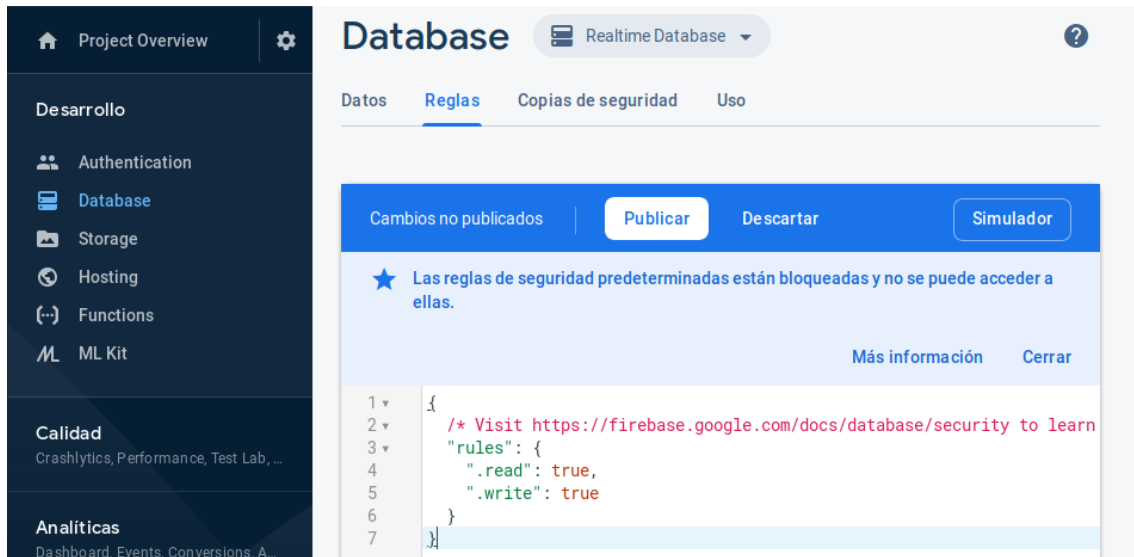


Fig. 19 - Allowing read and write on the database

- Add these lines on the html file recently created:

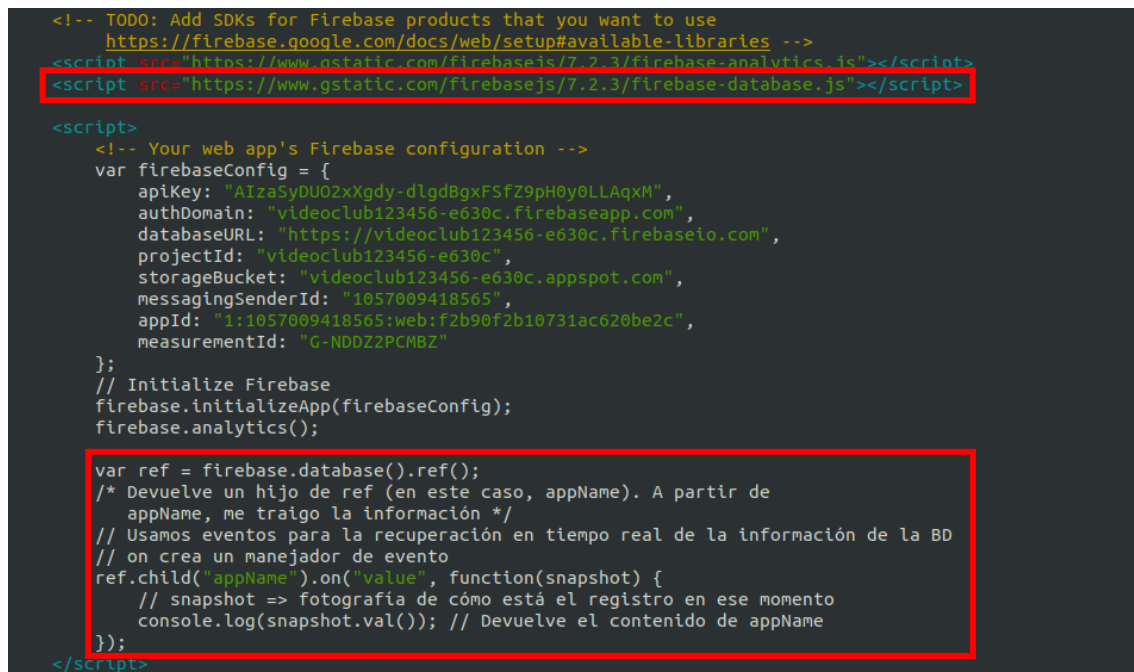


Fig. 20 - Lines for allow access to the database

6. Test performance

Open the html file on a web browser for try if Firebase works.

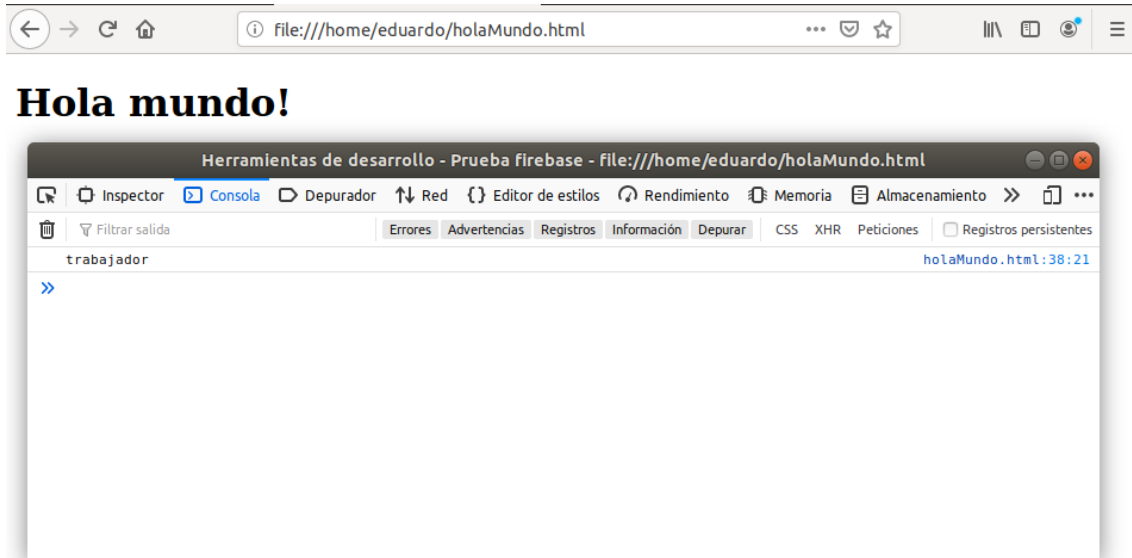


Fig. 21 - Testing if Firebase works

7. Start the server

Finally, start the Firebase server with the following command:

firebase serve

```
eduardo@ubuntu-server:~$ firebase serve
=== Serving from '/home/eduardo'...
i hosting: Serving hosting files from: public
✓ hosting: Local server: http://localhost:5000
```

Fig. 22 - Firebase start