

# Firestore Realtime Database API Documentation

## Introduction:

This application programming interface (API) documentation describes how to incorporate the Firestore Realtime Database into a JavaScript-based web app. It includes settings for data storage, database reference, and initialization.

## Prerequisites:

In order to use this API, you must first have Firestore set up and the required Firestore modules installed.

```
import { initializeApp } from  
"https://www.gstatic.com/firebasejs/9.19.1/firebase-app.js";  
import { getDatabase, ref, set } from  
"https://www.gstatic.com/firebasejs/9.19.1/firebase-database.js";
```

## Initialize Firestore

### **initializeApp(config: object): App**

The Firestore configuration object must be supplied in order to initiate Firestore. This method returns a new instance of a Firestore application.

**config** (object): Configuration object containing your Firestore project credentials.

```
const app = initializeApp(firebaseConfig);
```

## Get a Reference to the Database:

### **getDatabase(app: App): Database**

Get a reference to the Firebase Realtime Database service associated with the initialized Firebase app.

**app** (App): The Firebase app instance.

```
const db = getDatabase(app);
```

## Store User Data:

### Event Listener:

To save user information when a submit button is pressed in an HTML form, add a click event listener to the button.

```
document.getElementById("submit").addEventListener('click', function(e) {  
    e.preventDefault();  
    // Code for storing user data goes here.  
});
```

## **set(ref: Reference, data: object): Promise<void>**

Save information about users in the Firebase Realtime Database using a given identifier.

- **ref** (Reference): A database reference where the data will be stored.
- **data** (object): The data to be stored in the database.

```
set(ref(db, 'user/' + document.getElementById("username").value), {  
    username: document.getElementById("username").value,  
    email: document.getElementById("email").value,
```

```
    PhoneNumber: document.getElementById("phone").value
  });
```

## Example Usage:

```
<!DOCTYPE html>
<html>
<head>
  <!-- Include Firebase scripts and initialize Firebase -->
</head>
<body>
  <form>
    <input type="text" id="username" placeholder="Username">
    <input type="text" id="email" placeholder="Email">
    <input type="text" id="phone" placeholder="Phone Number">
    <button id="submit">Submit</button>
  </form>

  <script type="module">
    // JavaScript code as provided in your question
  </script>
</body>
</html>
```

## Conclusion:

This application programming interface (API) paper describes how to use Firebase Realtime Database in a standard web project. It's flexible enough to be customized to fit your needs. Check out the Firebase docs for all the details and advanced options.

# Rapid API Documentation:

Access points to which your app is linked. A log including all the request data will also be available to you. If you simply want to see metrics for a certain API in the app, you can do that too.

- **API Calls:** how many requests are being made.
- **Error rates:** how many requests are error some.
- **Latency:** how long (on average) requests take to execute

## Headers sent as response:

**server:** The current version of the API proxy used by RapidAPI.

**x-ratelimit-requests-limit:** The number of requests the plan you are currently subscribed to allows you to make, before incurring overages.

**x-ratelimit-requests-remaining:** The number of requests remaining before you reach the limit of requests your application is allowed to make, before experiencing overage charges.

**X-RapidAPI-Proxy-Response:** This header is set to true when the RapidAPI proxy generates the response, (i.e. the response is not generated from the our servers).

```
import http.client
```

```
conn = http.client.HTTPSConnection("covid-193.p.rapidapi.com")
```

```
headers = {  
    'x-rapidapi-host': "covid-193.p.rapidapi.com",  
    'x-rapidapi-key': "XxXxXxXxXxXxXxXxXxXxXxXxXx"  
}
```

```
conn.request("GET", "/countries", headers=headers)
```

```
res = conn.getresponse()
```

```
data = res.read()
```

```
print(data.decode("utf-8"))
```

### **Sample responses:**

```
{  
  "get": "countries",  
  "parameters": [],  
  "errors": [],  
  "results": 193,  
  "response": [  
    "Afghanistan",  
    "Albania",  
    "Algeria",  
    "Andorra",  
    "Angola",  
    "Antigua-and-Barbuda",  
    "Argentina",  
    "Armenia",  
    "Aruba",  
    "Australia",  
    "Austria",  
    "Azerbaijan",  
    "Bahamas",  
    "Bahrain",  
    "Bangladesh"  
  ]  
}
```

## Statistics:

```
import http.client

conn = http.client.HTTPSConnection("covid-193.p.rapidapi.com")

headers = {
    'x-rapidapi-host': "covid-193.p.rapidapi.com",
    'x-rapidapi-key': "XxXxXxXxXxXxXxXxXxXxXxXxXx"
}

conn.request("GET", "/statistics", headers=headers)

res = conn.getresponse()
data = res.read()

print(data.decode("utf-8"))
```

### Samples responses:

```
{
  "get": "statistics",
  "parameters": {
    "country": "usa"
  },
  "errors": [],
  "results": 1,
  "response": [
    {
      "continent": "North-America",
      "country": "USA",
      "population": 330848770,
      "cases": {
        "new": "+15408",
        "active": 1145446,
        "critical": 16939,
        "recovered": 621439,
        "1M_pop": "5666",
        "total": 1874731
      },
      "deaths": {
        "new": "+921",
        "1M_pop": "326",

```

```
    "total": 107846
  },
  "tests": {
    "1M_pop": "55817",
    "total": 18466841
  },
  "day": "2020-06-02",
  "time": "2020-06-02T21:00:06+00:00"
}
]
```

## CONCLUSION:

The access points to which your app is linked. A log including all the request data will also be available to you. If you simply want to see metrics for a certain API in the app, you can do that too.