

# 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 = FirebaseDatabase(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.