

AngularJS Firebase REST API

Learning Objectives

- Students can create a public Firebase account, and connect to it in the console and in JavaScript.
- Students can demonstrate how to Create, Read, Update and Delete data with the REST API.
- Students will CRUD lists, objects, and simple values in Firebase.

Resources

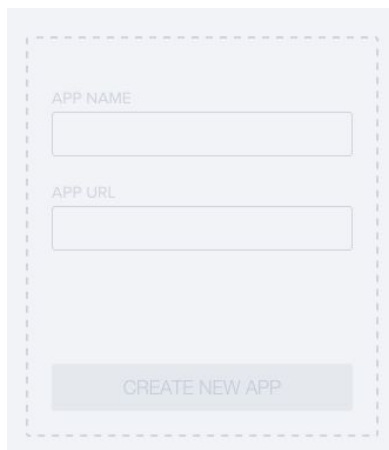
<https://www.firebase.com/docs/rest/api/>

Firebase REST API

- Typically, three-way binding with AngularFire is sufficient.
- Firebase REST API more closely resembles typical services you'll interact with via REST/HTTP.
 - Also what you'll use if you make your app multiplatform--developing on Android/iOS, etc. won't have three-way binding and will instead use the REST API (unless using something like Ionic, where three-way binding is available).
- Supports typical HTTP verbs: GET, PUT, POST, PATCH, DELETE.
- May want to use REST API over AngularFire for some one-off requests.

Add some data and subsequently retrieve it

- Create a new Firebase. Following examples use a firebase named "matcrest".

A screenshot of the 'Create New App' form in the Firebase console. The form is enclosed in a dashed border and contains two input fields: 'APP NAME' and 'APP URL'. Below these fields is a button labeled 'CREATE NEW APP'.

- POST from terminal:
 - `curl -X POST -d '{"testKey": "testVal"}' https://matcrest.firebaseio.com/test.json`

```
$ curl -X POST -d '{"testKey": "testVal"}' https://matcrest.firebaseio.com/test.json
```

○ {"name": "-K7j10dJ52ZnzuYrRTS9"}

- Data appears in Firebase:



- GET from terminal using the key returned by the POST:

```
$ curl 'https://matcrest.firebaseio.com/test/-K7j10dJ52ZnzuYrRTS9.json'
```

○ {"testKey": "testVal"}

- Complete AngularJS example with POST and GET:

<https://github.com/MountainlandWEB/firebase/blob/master/firebase.html>

- This example lets the students input their own text and POST it to their Firebase. As they do this, the keys returned from the Firebase will be associated with buttons appearing at the bottom of the page. Clicking one of these buttons will make a GET on that key and retrieve the data from the Firebase.

Exercise

- Have students add their own buttons to the ng-repeat for DELETE and PUT operations.

Example execution:

Type something to POST to your Firebase here:

You just POSTed to key: -K7jOUJbczyJg56rzB5B

Retrieve data you POSTed earlier with GET:

Perform REST operations on data with Firebase key: -K7jOTcgAlHrG8YI7L19

The value is: asdf

Perform REST operations on data with Firebase key: -K7jOTxJMKiY6ZDRildY

The value is: Type something here!

Perform REST operations on data with Firebase key: -K7jOUJbczyJg56rzB5B

The value is: qwer

The Firebase REST API also supports a handful of query parameters as well as streaming data. These advanced topics are left as an exercise to the student. More information available at <https://www.firebase.com/docs/rest/api/>