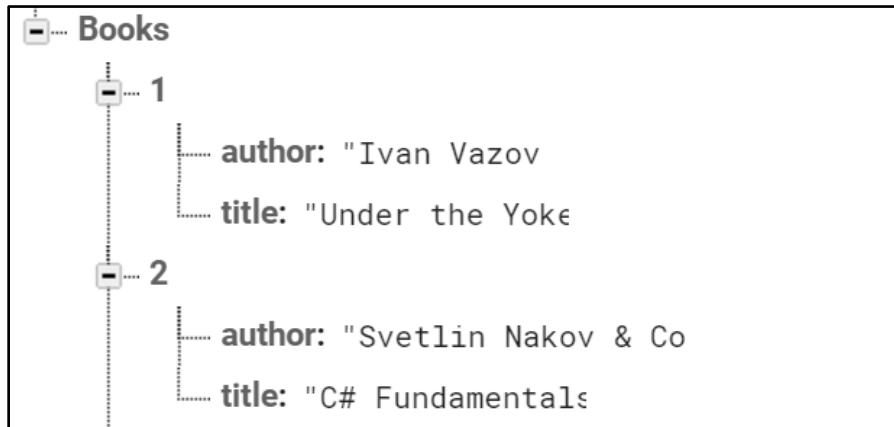


# Lab: Remote Databases

## 1. Firebase: All Books

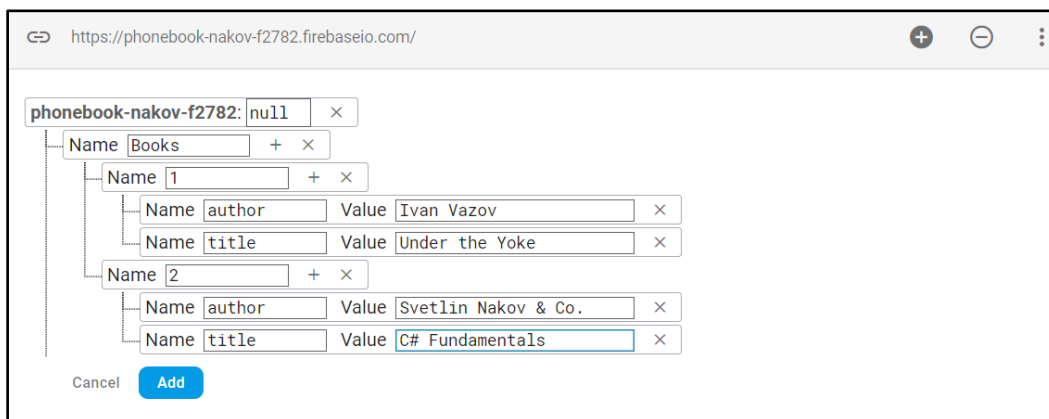
Firebase is a **mobile** and **web application** development **platform**.

Create a "TestApp" and then create the **following** structure:

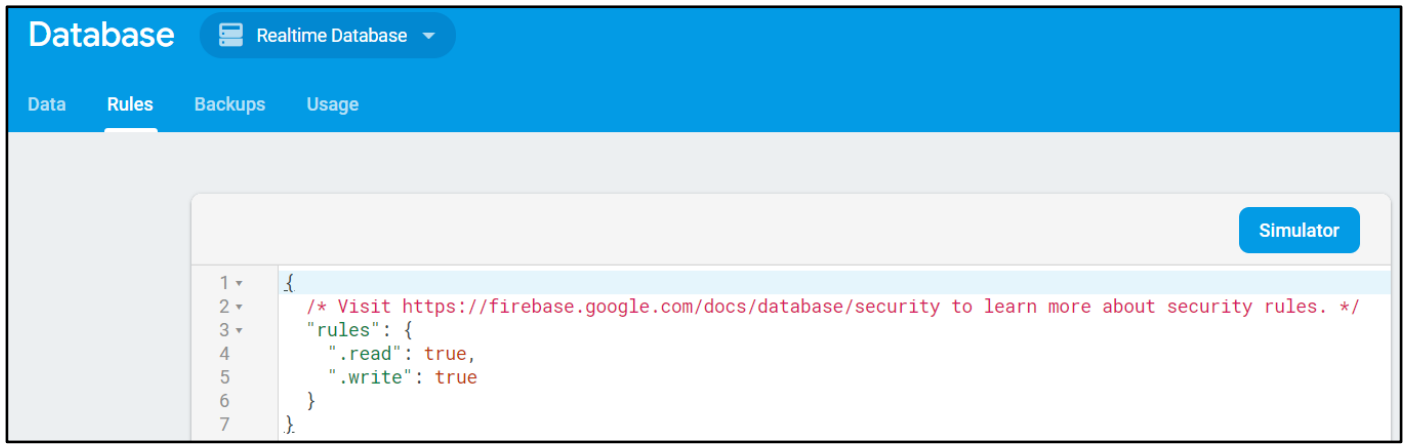


First task is to "GET" all books. To consume the request with **POSTMAN** your **url** should be the **following**: <https://{databaseId}.firebaseio.com/.json>.

**DatabaseId** is unique for every application. You can **find** yours from here:



We **should** also do one more configuration. Go to Database/Rules and set **.read** & **.write** actions to "**true**". This will allow us to **send** request with **POSTMAN**. Beware that now everyone can **manipulate** our database and even **delete** it. (this is for **testing** purposes only).



## 2. Firebase: Get Book

"GET" the Book with **id**: 1. Don't forget the **.json** extension at the end (otherwise you will receive the whole **html**).

## 3. Firebase: Create Book

To **create** a book, we will have to send a "**POST**" request and the JSON body should be in the **following** format:

```
{
  "title": "New Title",
  "author": "New Author"
}
```

## 4. Firebase: Patch Book

The HTTP command "**PATCH**" **modifies** an existing HTTP **resource** (it can also create the resource if it does **not** exist). The JSON body should be in the **following** format:

```
{
  "year": 1981,
  "author": "Author Changed"
}
```

## 5. Firebase: Change Book Author

The next task is to execute a "**PUT**" command (the difference is that with "**PUT**" we can update a resource **partially**). In our case we have to **change** the author's name to "**New author was assigned**".

**REQUEST:** <https://{databaseId}.firebaseio.com/Books/7/author/.json>

The JSON body should be in the **following** format:

"New author was assigned".

## 6. Kinvey: Handshake

Kinvey is a **Mobile Back-End** as a Service (mBaaS).

To fulfill a **handshake**, we have to enter the following "GET" request in **POSTMAN**:

<https://baas.kinvey.com/appdata/{appId}>. Enter your own **appId (App Key)**. Go to **Authorization** and select "**Basic Auth**". Enter **username**: "guest" and **password**: "guest".

The screenshot shows the Postman interface with the 'Authorization' tab selected. The 'TYPE' dropdown is set to 'Basic Auth'. Below it, a note states: 'The authorization header will be automatically generated when you send the request. [Learn more about authorization](#)'. The 'Username' field contains 'guest' and the 'Password' field contains '\*\*\*\*\*'. There is a 'Show Password' checkbox which is unchecked. A 'Preview Request' button is visible at the bottom left.

## 7. Kinvey: All Posts

Create a **new data collection** called "**posts**" that has **two** columns: "**title**" and "**body**" and add **3 rows** of information.

The screenshot shows the Kinvey database interface. At the top, there's a search bar 'Filter collections...', a dropdown 'ADV. v', and a status '1-3 of 3 posts'. There are buttons for 'ADD COLUMN' and 'ADD ROW'. Below this is a table with columns: \_id, \_acl, \_kmd, title, and body. There are three rows of data representing posts.

<input type="checkbox"/>	_id	_acl	_kmd	title	body
<input type="checkbox"/>	5c6c3b42c892215f50364ef8	{"creator": "kid_HJa2FEEdHV"}	{"lmt": "2019-02-19T17:22:10.5z"	"Third Post Title"	"Third Post Body"
<input type="checkbox"/>	5c6c3b341be4947c2a6e7543	{"creator": "kid_HJa2FEEdHV"}	{"lmt": "2019-02-19T17:21:56.6z"	"Second Post Title"	"Second Post Body"
<input type="checkbox"/>	5c6c3b24c341455f55d027a1	{"creator": "kid_HJa2FEEdHV"}	{"lmt": "2019-02-19T17:21:40.7z"	"First Post Title"	"First Post Body"

After that **listing** all posts should be easy **with** the following request:

<https://baas.kinvey.com/appdata/{appId}/posts>

## 8. Kinvey: Create New Post

We already know the request method for **creating** a new resource. Now we should create a **new** post with a **title**: "New Title" and a **body**: "New Post Body".

Key	Value	Description
<input checked="" type="checkbox"/> title	New Title	
<input checked="" type="checkbox"/> body	New Post Body	
New key	Value	Description

Body Cookies Headers (13) Tests Status: 201 Created Time: 1774 ms

## 9. Kinvey: Delete a Post

Now let us **delete** the **newly** created post.

**REQUEST "DELETE"**: <https://baas.kinvey.com/appdata/{appId}/posts/{postId}>. The **postId** can be found from the JSON response of the **previous** task. The **"DELETE"** request should **generate** a response that tells us how **many** posts we have **deleted**.

## 10. Kinvey: Edit a Post

Edit a Post with a **"PUT"** request. **Change** the following columns: **title**: "edited title", **body**: "edited author" and add an additional column: **hidden**: true.

## 11. Kinvey: Register

**Logging** in is done with a **"POST"** request with the **following** url: <https://baas.kinvey.com/user/{appId}>

- Change the **Authorization** to **"Basic Auth"**
- Enter the **AppKey** as **username**
- Enter the **AppSecret** as **password**

Params	Authorization	Headers	Body	Pre-request Script	Tests
TYPE Basic Auth The authorization header will be automatically generated when you send the request. <a href="#">Learn more about authorization</a> Preview Request	Username kid_H1qLbO2BE Password ..... <input type="checkbox"/> Show Password				

After a **successful** register you should **receive** the following response:

```

{
  "username": "guest",
  "password": "guest",
  "_kmd": {
    "lmt": "2019-11-11T12:14:12.370Z",
    "ect": "2019-11-11T12:14:12.370Z",
    "authToken": "8ef9ddd9-4616-4750-ac4a-ef95efad8bf4.pd+9id24o+8CaB5PtvBHZ1AFV17nViXyhaAzKfcT9Mw="
  },
  "_id": "5dc9509425a7153947a312d4",
  "_acl": {
    "creator": "5dc9509425a7153947a312d4"
  }
}

```

## 12. Kinvey: Login

Logging in is done with a "POST" request with the following url:

<https://baas.kinvey.com/user/{appId}/login>.

- Change the **Authorization** to "Basic Auth"
- Enter the **AppKey** as **username**
- Enter the **AppSecret** as **password**

After a **successful** login you should **receive** the following response:

```
1 {
2   "_id": "5977b913194052ef493311f6",
3   "username": "guest",
4   "_kmd": {
5     "lmt": "2017-07-25T21:33:07.503Z",
6     "ect": "2017-07-25T21:33:07.503Z",
7     "authToken": "46c7c31a-a277-432d-ab90-8113e4d872ff.BoYT3uj3D1nOhkVLPmue4tpBIsSOyGV0mwqwzuR6dWU="
8   },
9   "_acl": {
10     "creator": "5977b913194052ef493311f6"
11   }
12 }
```

Save the **authToken**, because you will **need** it for the **final** task.

## 13. Bonus Kinvey: Logout

Lastly we have to **logout** from the application. To do so we have to send a "POST" request with the following url: <https://baas.kinvey.com/user/{appId}/logout>.

Remember that long **authorization** token ? Now we have to copy it and paste it in the **POSTMAN** "Headers" section:

Authorization	Headers (2)	Body	Pre-request Script	Tests	Code
Key	Value	Description	...	Bulk Edit	Presets ▼
<input checked="" type="checkbox"/> Content-Type	application/json				
<input checked="" type="checkbox"/> Authorization	Kinvey 46c7c31a-a277-432d-ab90-8113e4d872ff.BoYT3uj3D1nOhkVLPmue4tpBIsSOyGV0mwqwzuR6dWU=				X
New key		Description			

After you click "**Send**" the response body **should** be **empty**. Doing it **again** should trigger an **error**.