Cloud Firestore Security

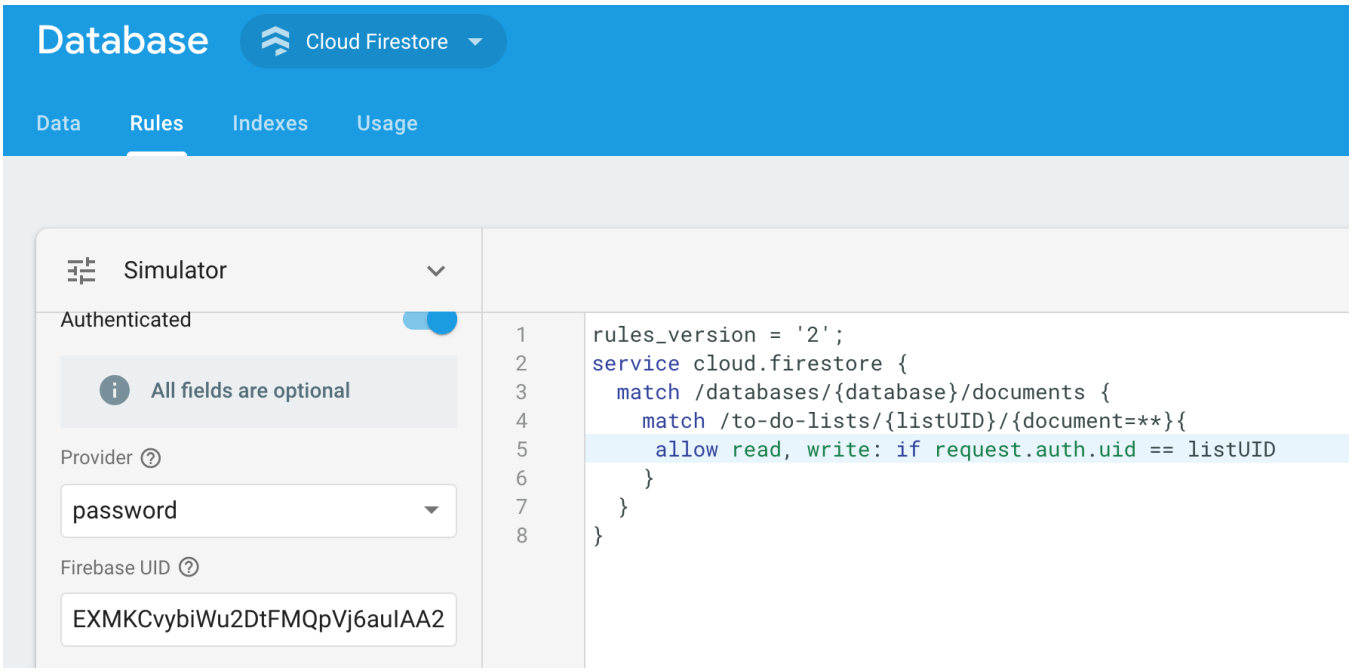
In this lesson, we will edit security rules so that only authorized users can make a 'write' request. This protects you from potential hackers.

We'll cover the following

Change Your Rules

For your to-do list, we can set our rules like you see below so that the user who is signed in only has `read` and `write` access to their specific list of *to-do items*.

```
rules_version = '2';
service cloud.firestore {
  match /databases/{database}/documents {
    match /to-do-lists/{listUID}/{document=**}{
     allow read, write: if request.auth.uid == listUID
    }
  }
}
```



Let's Break This Down

Match the Database

Where you see the `match /databases/{database}/documents {}` is the starting point for any rule you want to add. You can add as many rules as you want between the `{}`.

Match the List

Inside that you see `match /to-do-lists/{listUID}/{document=**}{}` where inside the `{}` is where we will define access levels for lists.

Now check out the `{listUID}`. This is a wild card basically saying give us access to any list no matter what the ID. If you wanted to give access to a specific list, you could put an actual ID there like this `{WMPlOss0AxQr3xLspfQPJFXqwwu2}`.

Define Who Can do What

At the inner part of the code, you see `allow read, write: if request.auth.uid == listUID`, meaning that if your UID matches the list ID, then you can read, and write to that list. The list ID will match up with a user because we made the list ID the UID of the signed-in user for this very purpose. Remember the query that looks like this when we add a to-do item `database.collection('to-do-lists').doc(uid).collection('my-list').add({})`. You can see that we name

the doc after the signed-in users UID by doing this `.doc(uid)`. This is how the magic happens!

Your Lists are Secure

Your user's lists are now 100% secure because of the rules we implemented. If someone has your publicly available Firebase keys, they are not able to do anything with them that would affect your application.

Put Your Knowledge to the Test!

Ready to test your knowledge of authorization? Join me in the next section for a quick quiz.