

# Managing Authentication

---



**Simone Alessandria**

TRAINER, AUTHOR AND PROUD CODER

@simon\_ales [www.softwarehouse.it](http://www.softwarehouse.it)



# Overview



**Firestore Authentication**

**Database Rules**

**Firestore Ui**

**Setting Rules in the App**

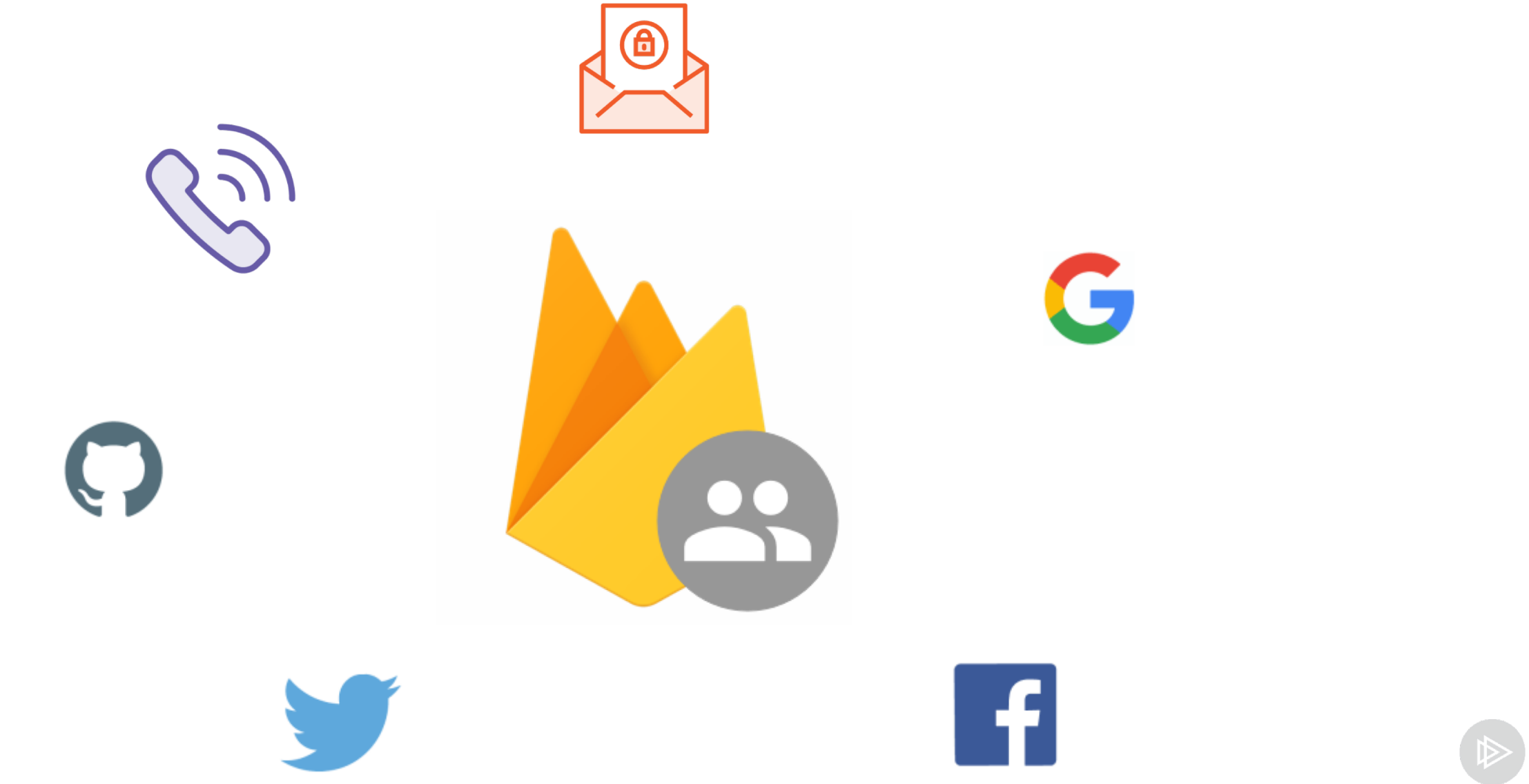


**.read**  
**.write**  
**.validate**  
**.indexOn**

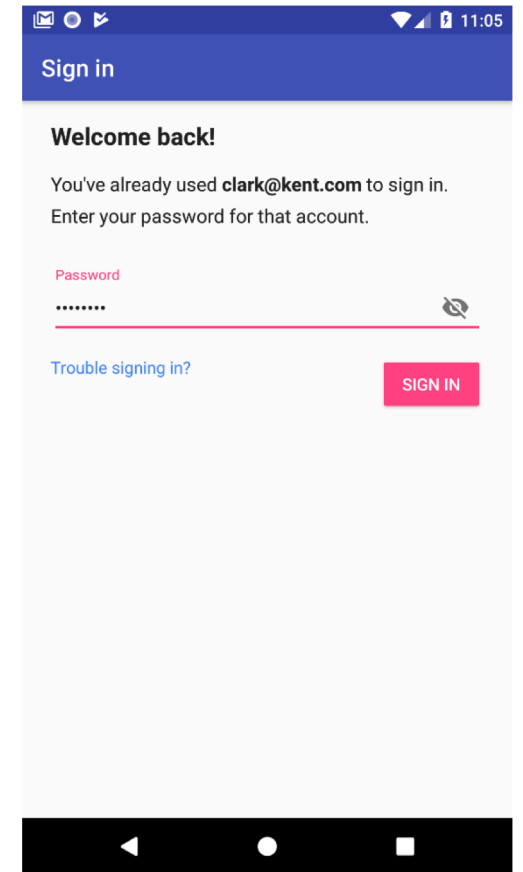
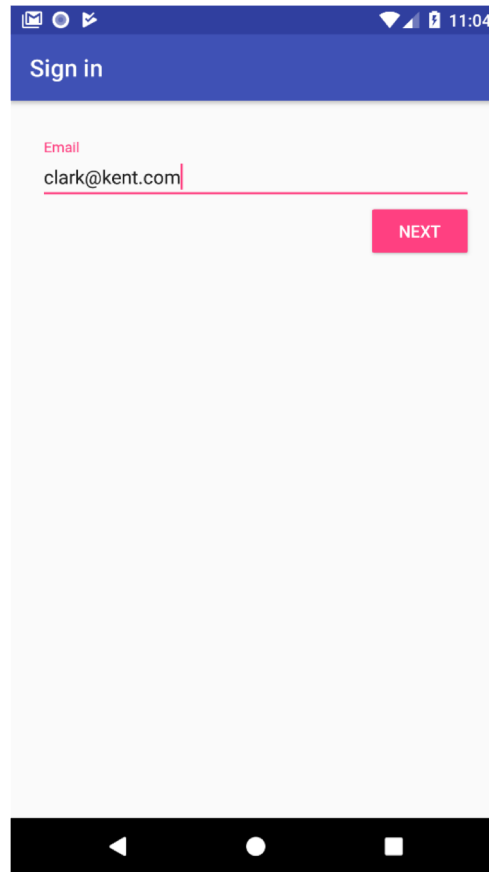
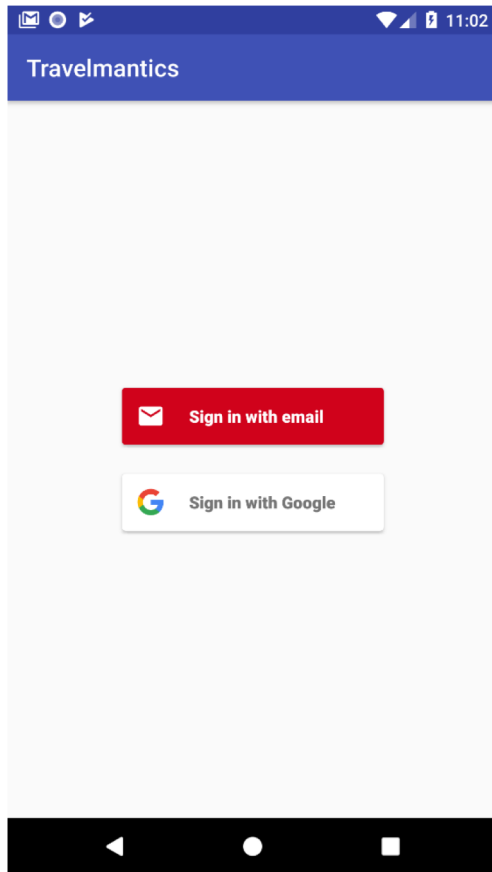
# Firestore Database Rules



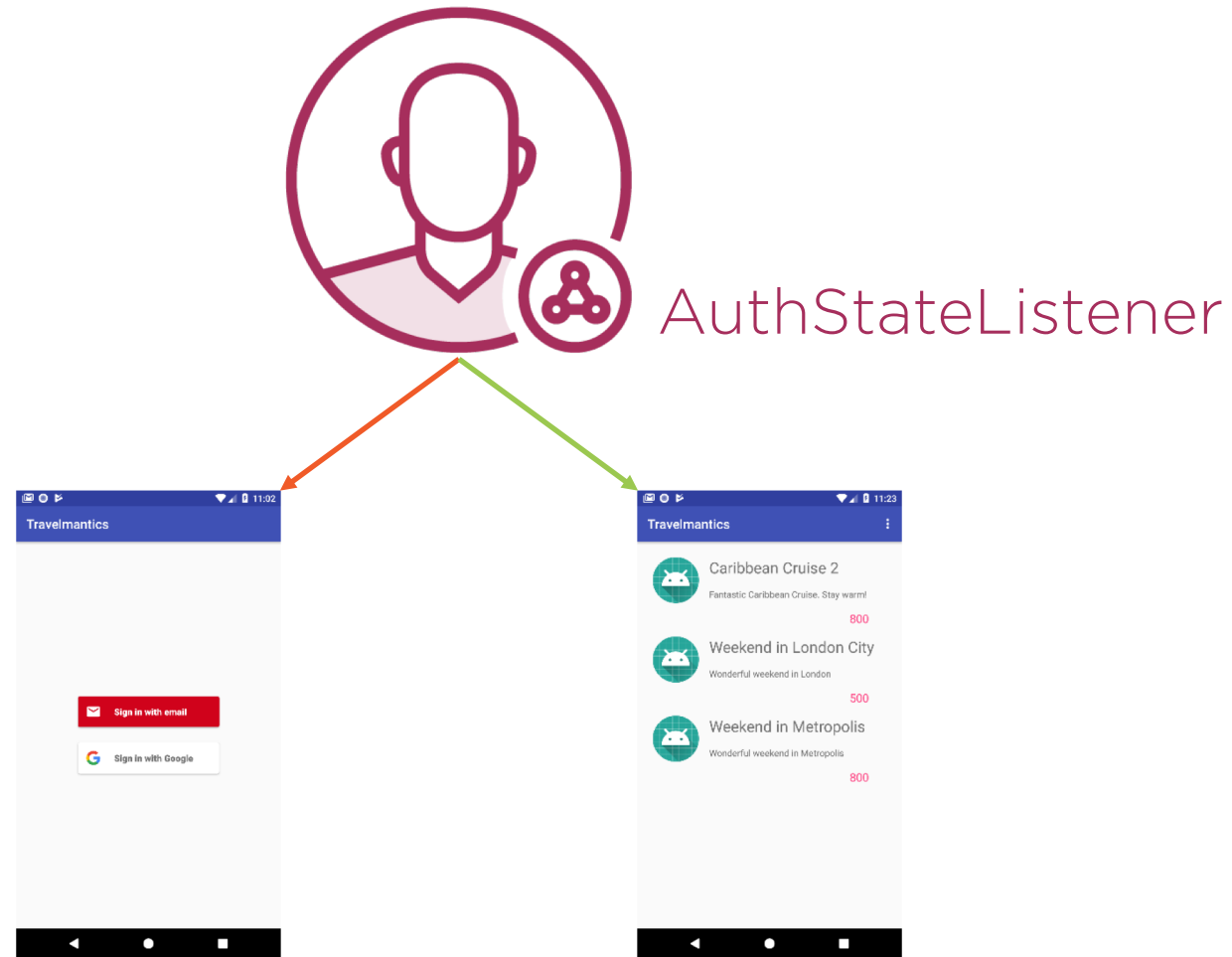
# Firestore Authentication Methods



# FirebaseUI



# Authentication



# AuthStateListener

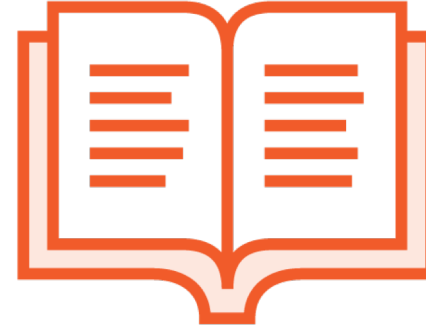
Listener called when there is a change in the authentication state



# Traveldeals Rules



user



admin





# Access Control

## Authentication

Who are you?

Verify identity

Email / password, pin, fingerprint, etc.

## Authorization

What can you do?

Verify permissions

Access to resources, read, write permissions, etc.



# Firestore Database Rules

```
{  
  "rules": {  
    ".read": "auth != null",  
    ".write": "auth != null"  
  }  
}
```



# Firestore Database Rules: Nodes

```
{  
  "rules": {  
    "traveldeals": {  
      ".read" : true  
    }  
    "offers" : {  
      ".read": "auth != null"  
    }  
  }  
}
```



# Firestore Database Rules

```
{  
  "rules": {  
    ".read": "auth.uid != null",  
    ".write": false,  
    "users": {  
      "$uid": {  
        ".write": "$uid == auth.uid"  
      }  
    }  
  } ...
```



# Firestore Database Rules

```
{  
  "rules": {  
    ".read": "auth.uid != null",  
    ".write": true,  
    "users": {  
      "$uid": {  
        ".write": "$uid == auth.uid"  
      }  
    }  
  } ...  
}
```



# Firestore Database Rules

```
{  
  "rules": {  
    ".read": "auth != null",  
    ".write":  
    "root.child('administrators').hasChild(auth.uid)"  
  }  
}
```



# Summary



**Authentication / Authorization**

**Authentication Methods**

**Database Rules**

**AuthStateListener**

**Firebase Ui**

