

This application shows you how to create an E-post office where you receive instant notifications on bills, alerts among others.

Note: this application is only android and firebase no backend interface. We will add a sample mailer in the future versions.

Working features

1. Real-time sync between firebase and the app
2. Login and register
3. Ad mob
4. Document Download
5. Share features

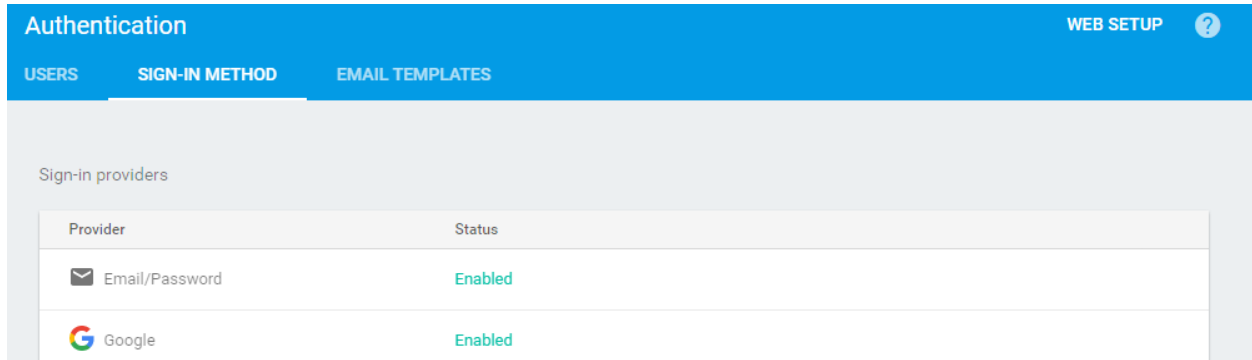
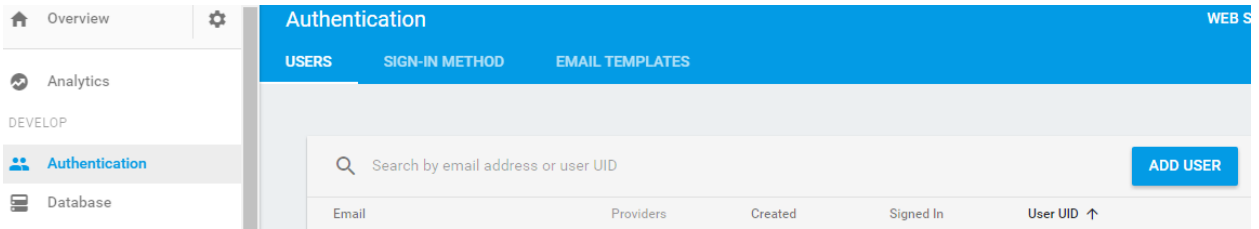
To be added

1. Backend to send alerts and bills
2. Paypal to be incorporated for payment
3. FCM for new notifications
4. Box Number customization

How to create Firebase account and add to the application

To add Firebase to your app you'll need a Firebase project and a Firebase configuration file for your app.

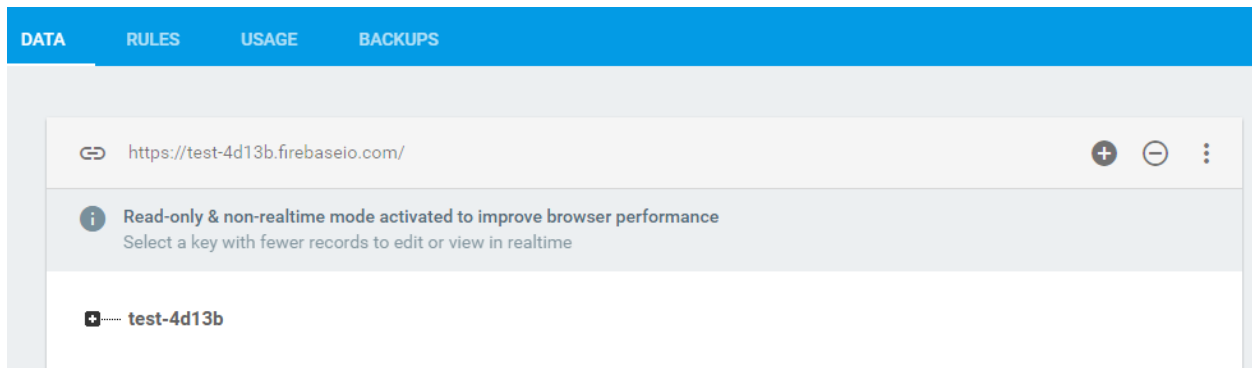
- Create a Firebase project in the [Firebase console](#), if you don't already have one. If you already have an existing Google project associated with your mobile app, click Import Google Project. Otherwise, click Create New Project.
- Click Add Firebase to your Android app and follow the setup steps. If you're importing an existing Google project, this may happen automatically and you can just download the config file.
- When prompted, enter your app's package name. It's important to enter the package name your app is using; this can only be set when you add an app to your Firebase project.
- At the end, you'll download a google-services.json file. You can download this file again at any time.
- If you haven't done so already, copy this into your project's module folder, typically app/.
- After successful process of adding firebase to the application open firebase console the select you app
- Click on authentication then sign in methods. Activate both Email/password and gmail



- Then click on database>>rules then paste the script below

```
{
  "rules": {
    ".read": true,
    ".write": true,
  }
}
```

- Click on data then select the root of you database



On the right your right you will see a menu icon, click on it then select upload. Select the import.json file in the application files.

Android APP setup

- Extract the downloaded zip you will get the following sub folders
 1. Ebills – Application source code
 2. Sample data – JSON to use as sample
 3. Screenshots – captured images of the application
- Open Android Studio
- Click on File>>Open and then select the application source code from the extracted folder
- Open the app source code under app sub folder and paste JSON file downloaded from Firebase during the setup
- Copy JSON file downloaded from Firebase during the setup
- Make sure you have internet to enable Gradle build and sync
- Open string.xml and add your *server_client_id*

```
<string name="server_client_id">763619642531-nafseiqv9q9ck7bobio25faij6c6ruti.apps.googleusercontent.com</string>
```

- Also update *banner_home_footer* on string.xml file to enable Google Ads

```
<string name="banner_home_footer">ca-app-pub-7831729606838174/6211991043</string>
```
- You can adjust your box number in firebase and then change the directory under Mybox.java

mCommentsReference =

```
FirebaseDatabase.getInstance().getReference("eboxes").child("327-30700").child("0").child("received");
```

- Compile you application to test all the functionalities
 - Use the links below for more information
1. Firebase JSON import -
https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=2&cad=rja&uact=8&ved=0ahUKEwiF6_j5uuTRAhVDDcAKHahMCw0QFggbMAE&url=https%3A%2F%2Fsupport.google.com%2Ffirebase%2Fanswer%2F6386780%3Fhl%3Den&usq=AFQjCNFU0LQcyTHoeIJS9-ergM6XyeVy9Q&sig2=BB0ru84UfXSgv0NYsbj-KQ&bvm=bv.145822982,d.d24
 2. Android Studio Rename Package -
<http://stackoverflow.com/questions/25848046/how-to-change-package-name-in-android-studio>

JSON

The attached import.json file shows you the basic structure of the format to use to push notifications and bills to Firebase. It can be easily be incorporated to any JSON based API endpoints.

Basic structure of an alert

```
"-KbOhjlr-Xzv8_s2zH5Z" : {  
  "added" : 1485416365308, (Timespamp)  
  "from" : "titusbatson@gmail.com", (from email)  
  "message" : "You are highly welcomed to the use our app manage, received aand share  
bills and alerts.", (alert body)  
  "read" : false,  
  "senderProfile" : "/posta-icon.png", (sender avatar)  
  "subject" : "Welcome to the ePosta", (Subject)  
  "to" : "327-30500",  
  "type" : "alert" (alert type)  
}
```