Assignment 5

Advanced Android App

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Introduction

In order to complete this assignment, the basic android app design has been changed. In this version, there's only a type of user. This user will be the gestor and it will have all the privileges to delete, solve and create any incidence.
After changing the first version of the app, new features have been added.

Firebase Analytics

Personalized Events

Every time the user clicks any button of the app, an event would be created and thrown. For example, back click event, click_add_incidence event, click_go_to_add_incidence event, click_delete_incidence event, etc.

User Properties

In order to monitorize and classify users by their activity, i have created the commitment property. This activity will be calculated counting users clicks on the different buttons of the app. This user property has different states depending on users behaviour.

- **Beginner** → (0, 50] clicks
- **Intermediate** → (50, 100] clicks
- **Advanced** → (100, 500] clicks
- **Expert** → (500, 1000] clicks
- **Superhero** → (1000, infinity] clicks

Firebase Authentication

As soon as users enter the app, they will be able to authenticate themselves using their google accounts by clicking the google sign in button in the MainActivity.

Once the users are signed in, they will be able to sign out by clicking the option "Sign Out" inside the three dot menu at the navigation bar.

Realtime Database

Structure

Figure 1: Realtime Database Complete Schema

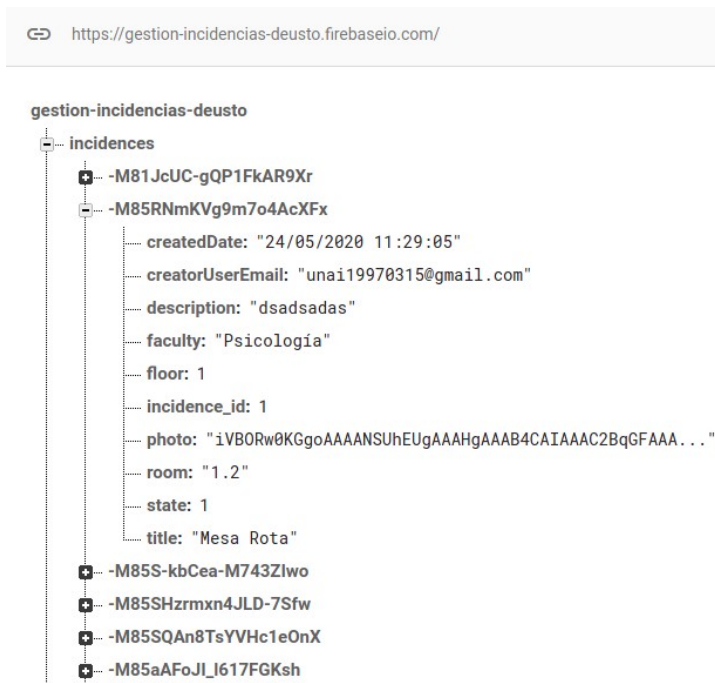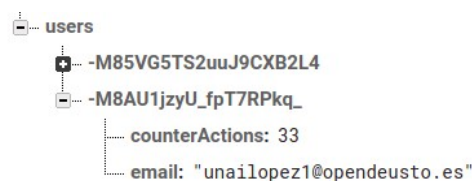**Figure 2:** Realtime Database Incidence Example

Figure 3: Realtime Database User Example

Rules

Only authenticated users with an email finished in @opendeusto.es or @deusto.es will be able to read or write in the realtime database:

```
{
  "rules": {
        ".read": "auth != null && (auth.token.email.endsWith('@opendeusto.es') || auth.token.email.endsWith('@deusto.es'))",
        ".write": "auth != null && (auth.token.email.endsWith('@opendeusto.es') || auth.token.email.endsWith('@deusto.es'))"
  }
}
```

Listeners

There are listeners to handle the changes in incidence list. When an incidence is deleted or updated, it adapts in real time.

Cloud Storage

NOT FINISHED

Cloud Messaging

NOT FINISHED