

## Introduction

The first challenge was an introductory one. You learned how to pass information in both activities and fragments, how to mess around with views, among other things. Although some of you tried to implement data persistency, it was not mandatory - in this second challenge you will have to do that, but now with the proper tools.

Nowadays, almost every phone has an application for you to take notes. You can give a title/label for the note, write text for its content, search for entries, and perform other operations. Thus, the objective of this challenge is for you to replicate a note-taker app with the characteristics detailed below.

For any questions or doubts, you can send an e-mail to **joaonf@dei.uc.pt**.

## Milestone 2

This second milestone is to be done **individually** and the objectives are the same as the previous Milestone. However:

- You must store all the information into a database (titles and body) instead of FileSystem and SharedPreferences.
- You must use MQTT to share notes. You can send and receive notes from specific topics that you subscribe. Moreover:
  - You can subscribe and unsubscribe to infinite topics and, whenever a note is sent to a topic, you will have to accept it to read the received note.
  - When you want to share a note, you can send to one or multiple topics (and you don't need to be subscribed to the topics that you want to send).
- You are free to choose how to handle the operations in the database and the communication with MQTT.
- The MQTT server to use is tcp://broker.hivemq.com:1883. THIS IS A PUBLIC BROKER

## **Deadlines and Evaluation**

## Milestone 2 (2.5pts)

- The deadline is on December 10<sup>th</sup>.
- There will not be any evaluation on the classes. The evaluation will be based on the code that you submit to Inforestudante.

2021/2022 V1.0