Introdução à Computação Móvel

Flutter Project:

StickTogether

ICM – g1 StickTogether

Members:

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Application Context

Sometimes we want company for many reasons: to grab a beer, to study together, to go to a party tonight, to say you're gonna be somewhere after you've been there, etc., But we might not know who to contact. Or maybe you just want to add a little note to someone in specific, and leave it at a specific place... that's where our app introduces itself

Application Purpose

This is app's purpose is to give you the opportunity of sharing sticky notes at a geographical location for your friends to see (or someone of your choice). You can then have conversations starting from that sticky note. That way, you will plan things with others with more precision and maybe get the company you were wishing for, you just didn't knew who to contact.

Motivation

Our native Android project was a "Clima" environment monitoring application, we could implement the same project in flutter, but we were told that it was too simple for this course's goals. And it was on that occasion that our teacher José Maria Fernandes came with an idea, as a challenge, to create an application that could create "post-its" a.k.a. sticky-notes and leave them in geographical locations. And we accepted the challenge and with that **StickTogether** was born**.**

Sensors & mobile functionalities

- GPS/Location

Architecture & Technical Options

Our project had, for pages where overflow was possible, SingleChildScrollView widgets to avoid those errors. Also, for "the most important" navigations (map page, profile page, new sticky note page, search page), we did a common page called "HomePage", where we had a bottom navigation bar to help us navigate through those pages. The rest of the navigations were made with pushes/pops on the route stack.

We created functions associated with the required functionalities of each page (related to Firebase). We also created classes to represent users and notes (UserModel and NoteModel).

Goals achieved

We managed to meet most of the objectives:

- Creation and disposal of sticky-notes on a map,
- Searching for people and adding them as a friends
- Costumizable profile

We couldn’t do the bluetooth connection challenge.

Problems found

At first, we tried to implement our database in SQL, with the intention of making a local Database, but due to our lack of knowledge of database, we gave up on that idea and decided to implement firebase. We had more problems with setting up firebase and with the functionalities associated with it. Also, the disposal of the sticky-notes on the map was very tricky to do, we thought it would be easier. Besides that, we just had to deal with random errors that appeared and made us search almost endlessly towards solutions (ex: gradle files related errors).

Contribuitions

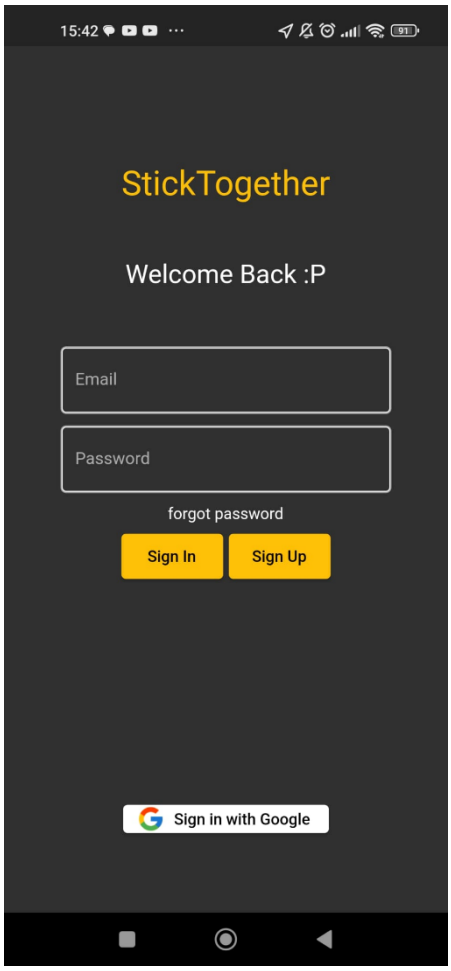
We agree that both of us did 50% of the work. While Samuel did the implementation of firebase, the profile functionality and login/register of users and most of the UI, Adalberto did the Friends functionality (which was quite tricky) and creation of sticky notes, as well as some extra UI pages. Both of us worked together on the disposal of information on the map.

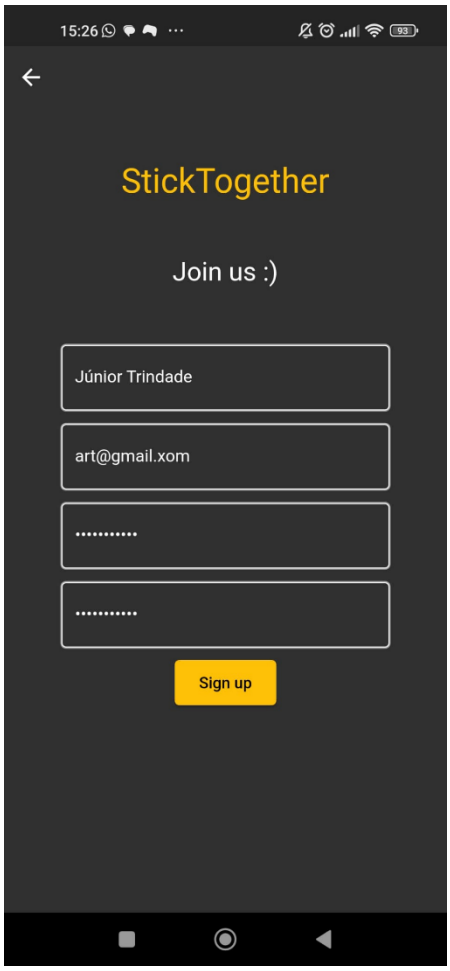
Tutorial

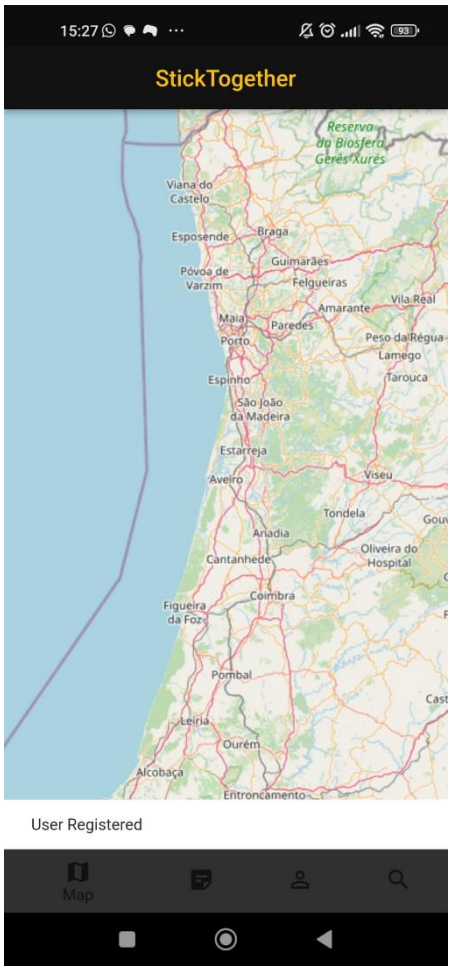
Running the App:

Type flutter pub get to get the dependencies, then flutter run to run the app on the device (must have an android device connected to the computer)

Create a acount:

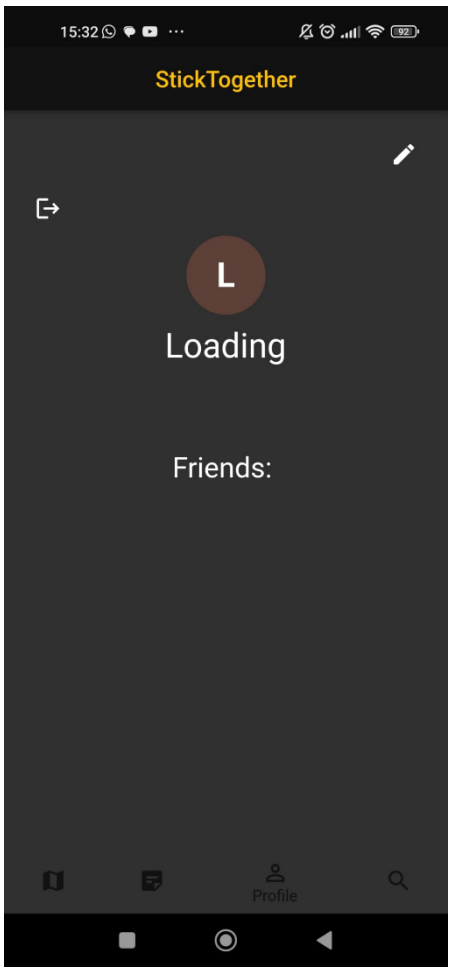


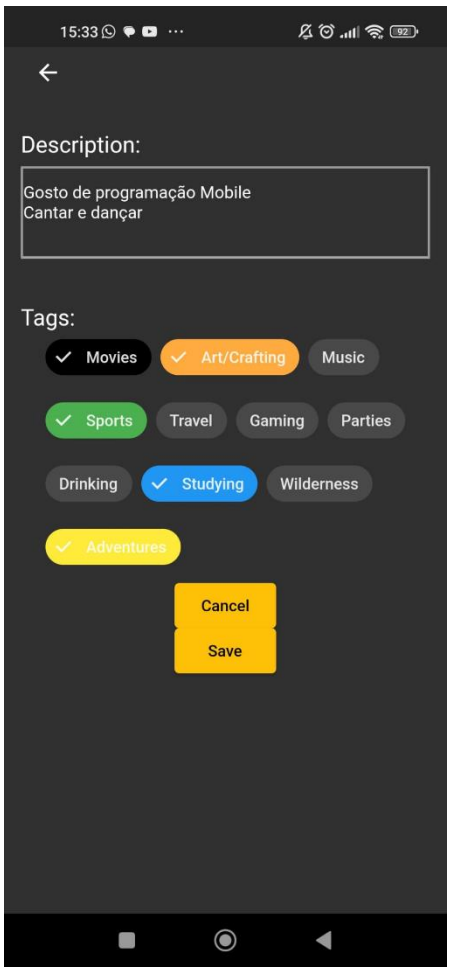


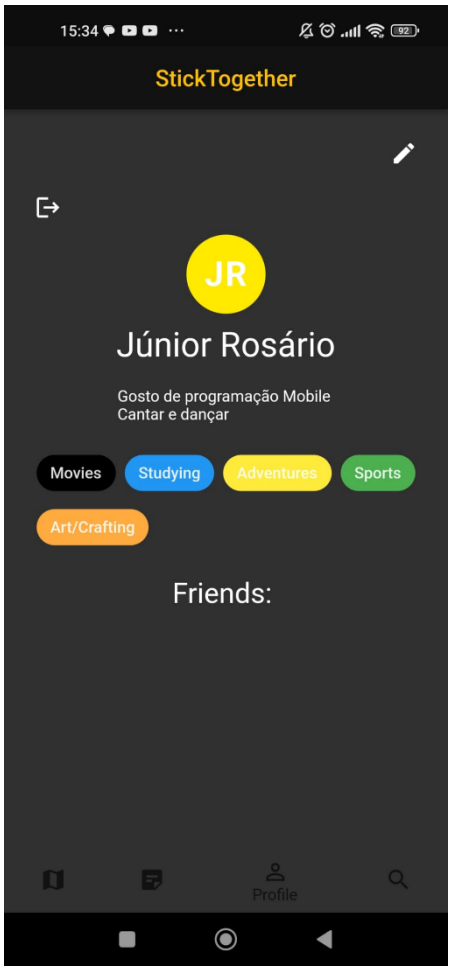


User Registered

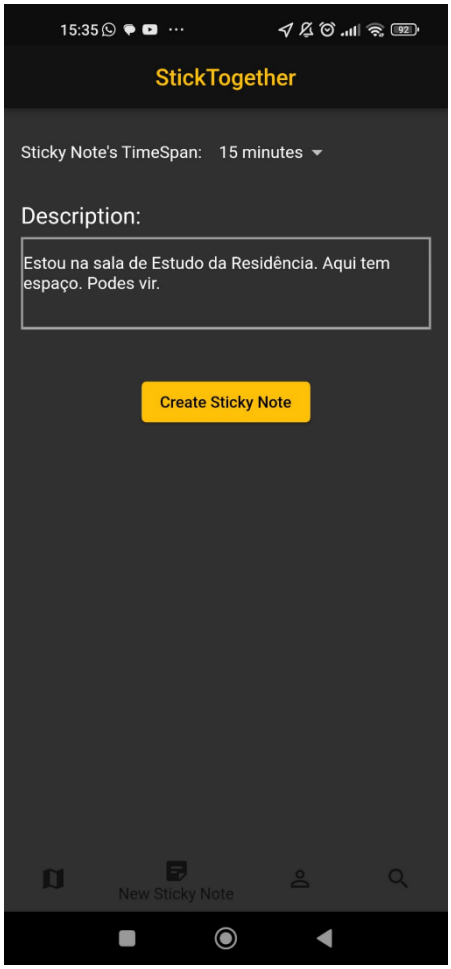
Edit Profile:

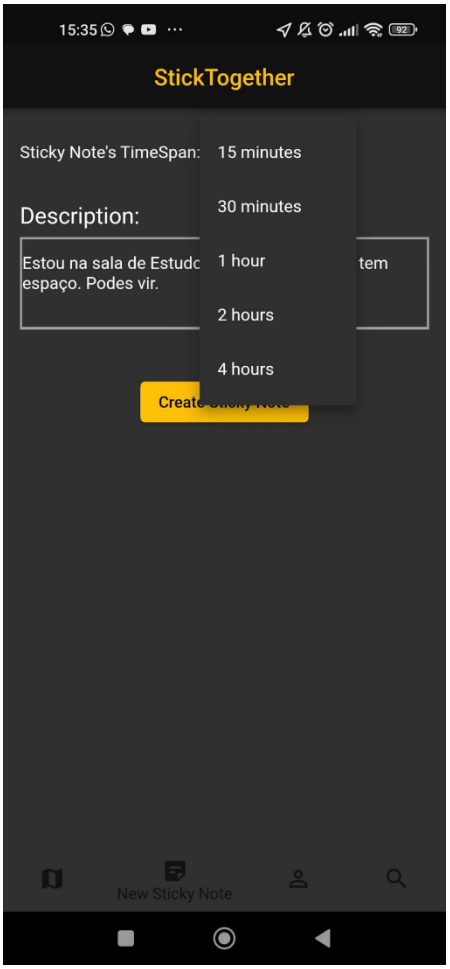


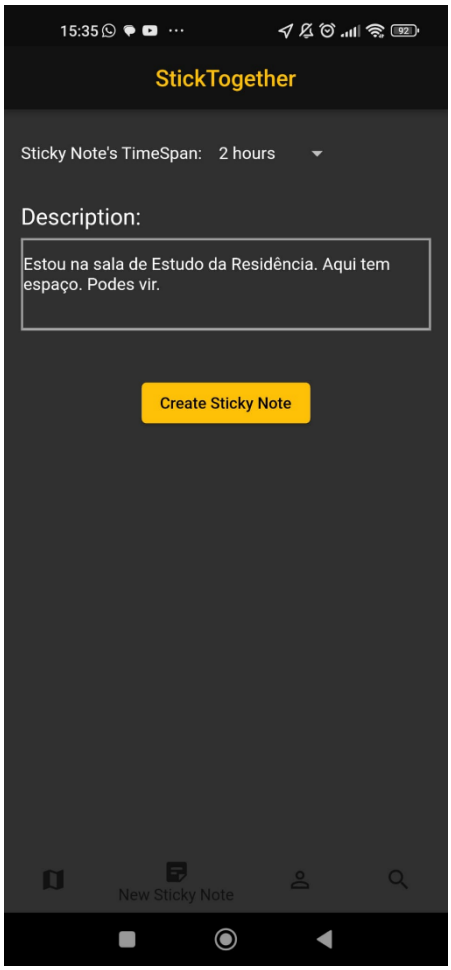


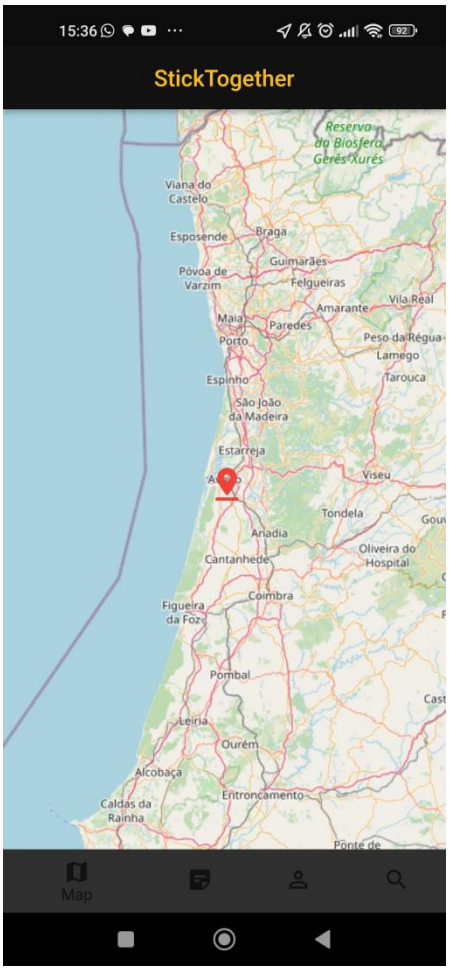

15:34
StickTogether
JR
Júnior Rosário
Gosto de programação Mobile
Cantar e dançar
Movies
Studying
Adventures
Sports
Art/Crafting
Friends:
Profile

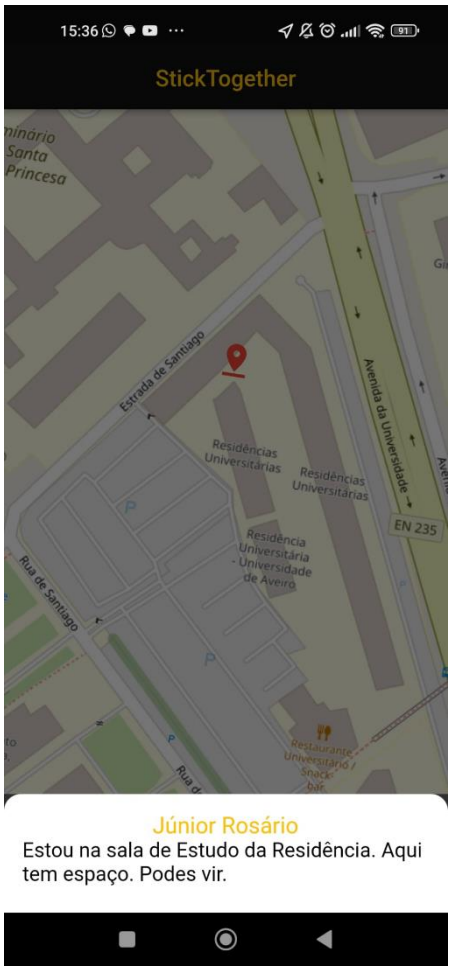
Create Sticky notes:



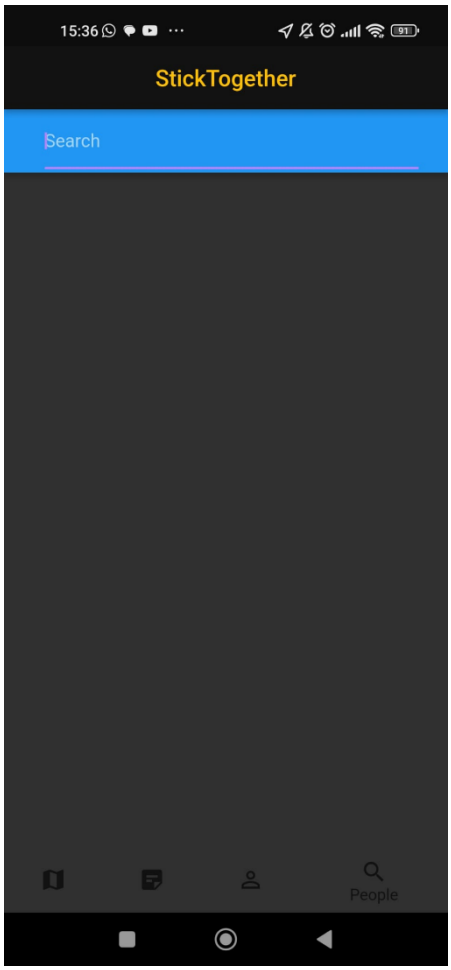


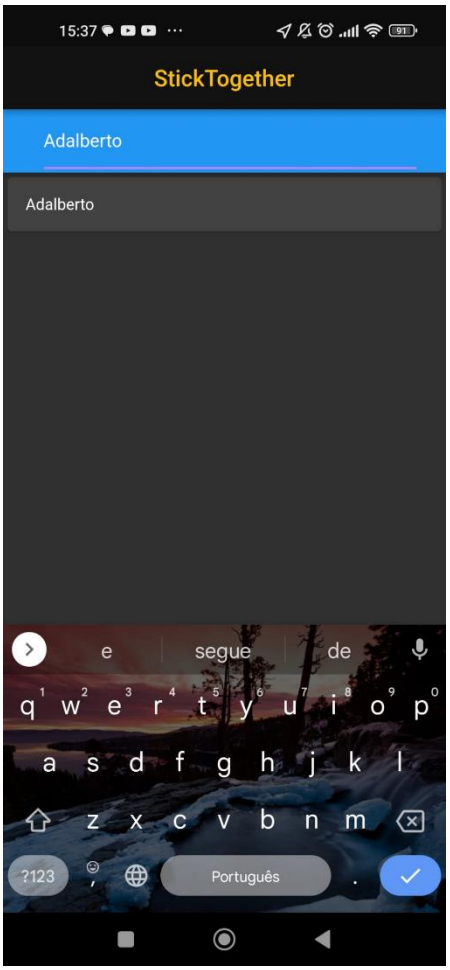

15:35
StickTogether
Sticky Note's TimeSpan: 2 hours
Description:
Estou na sala de Estudo da Residência. Aqui tem espaço. Podes vir.
Create Sticky Note
New Sticky Note


15:36
StickTogether
Reserva da Biosfera Gerês-Xurés
Viana do Castelo
Esposende
Braga
Guimarães
Póvoa de Varzim
Felgueiras
Vila Real
Amarante
Maia
Paredes
Porto
Peso da Régua
Lamego
Tarouca
Espinho
São João da Madeira
Estarreja
Viseu
Tondela
Anadia
Oliveira do Hospital
Cantanhede
Coimbra
Figueira da Foz
Pombal
Leiria
Ourém
Alcobaça
Caldas da Rainha
Entroncamento
Map

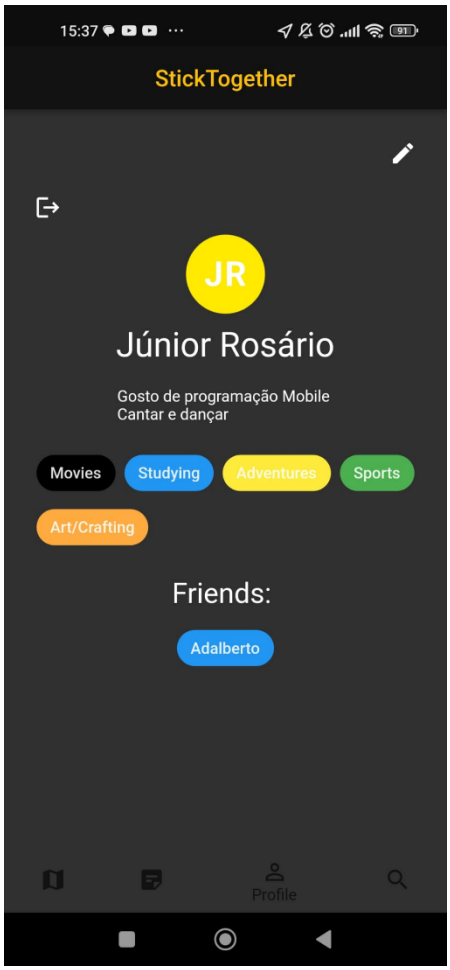

15:36
StickTogether
Estrada de Santiago
Avenida da Universidade
Residências Universitárias
Residências Universitárias
Residência Universitária - Universidade de Aveiro
EN 235
Rua de Santiago
Júnior Rosário
Estou na sala de Estudo da Residência. Aqui tem espaço. Podes vir.

Add Friends:


15:36
StickTogether
Search
People


15:37
StickTogether
Adalberto
Adalberto
e
segue
de
Português

15:37
A
Adalberto
Gosto de mangá e filmes
Music
Drinking
Movies
Wilderness
Studying
Travel
Friends:
Pedro
Add Friend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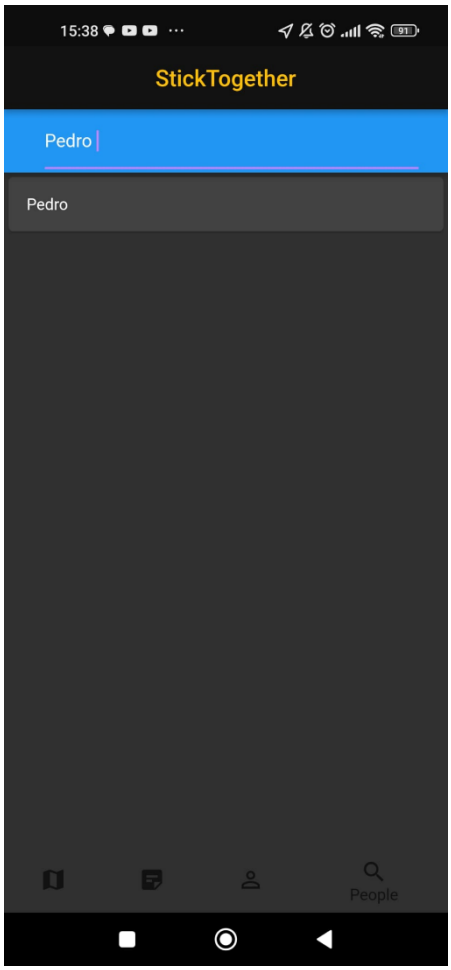
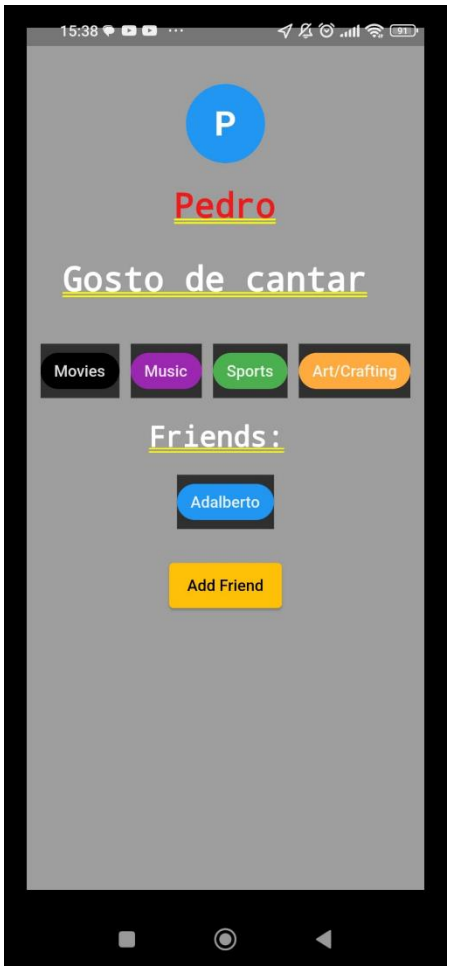
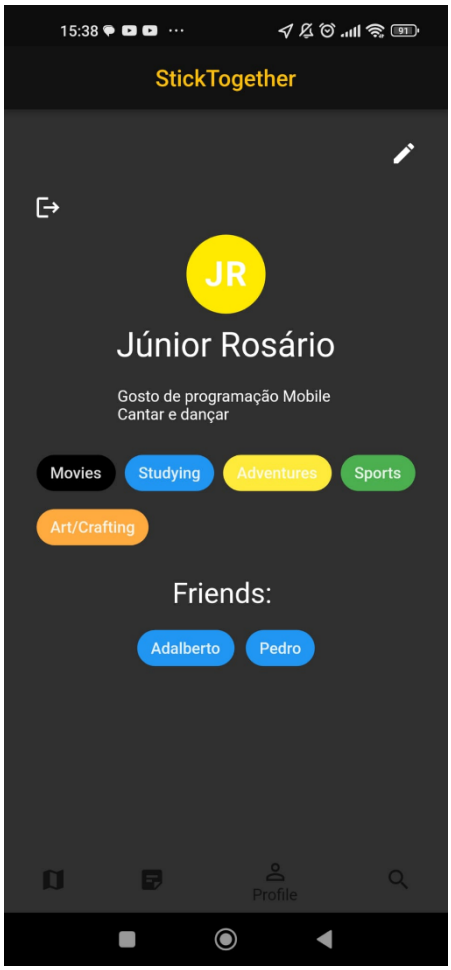
Profile


15:38
StickTogether
Pedro
Pedro
People


15:38
P
Pedro
Gosto de cantar
Movies
Music
Sports
Art/Crafting
Friends:
Adalberto
Add Friend



Other informations

Git repository - https://github.com/SamuTheCoder/StickTogether