Interação Pessoa-Máquina

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Project title

Stage 4: Computational prototype

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URL for prototype

Startup instructions

There is at least two recommend ways do run our app.

- The first one (and more desirable for the user) is to install the apk in the url given in an android device. This way the user can experience the touchscreen features which is not possible if running in an android emulator.

- Run the apk in an Android Emulator. It's possible to use any working android emulator. However, we recommend using pixel 3 in android studio, since it has the optimized dimensions.

   In android studio, select Pixel 3 in devices and run it. Simply drag the apk file to the emulator screen in order to install it.

   Go to settings -> apps, and then run the Futurouse app.

There might be an issue where the apk generates 5 icons for the app. We kindly ask the professor to open the one that presents the Home screen.

Briefing

Futurouse offers the user a smart way to manage the devices in their house. It offers multiple tools such as:

- Changing the lights
- Change the thermostat temperature
- Close or open the blinds
- Program the oven
- Program irrigation
- Change devices in specific room
- Change profiles

The application homepage presents the basic house information. The user can navigate through rooms and change the devices state.

Scenarios

TURN OFF LIGHTS

I am Asdrúbal and I forgot to verify if I turned off the kitchen light before leaving home.
Unable to return home until the end of the day to turn them off, I access the application and check if the light is on and turn it off.

TURN ON THE WATERING/IRRIGATION

My name is Luís, and I would like to have my lawn always green, so I need a system that
allows me to schedule waterings without having to always be at home to do it by myself. For this purpose, I simply access the application and with the irrigation scheduling system
perform this operation, choosing the irrigation time from 18:00 to 18:20. (If the irrigation is on, it should be indicated by some animation)

OVEN AND CHANGE KITCHEN TEMPERATURE

I'm Vanessa and I'm done with my work today and I'm heading home with dinner, a lasagna that just needs to go in the oven to be ready. As it is winter and it is also very cold, I can access the application and in addition to programming the oven so that when I get home it is at 180º to be able to cook the lasagna, I also want to be comfortable with the temperature in my kitchen, so I changed the thermostat temperature in this division.

URL of the project

https://github.com/RodrigoRalhaMoreira/kotlin-app.git

Additional information

Unfortunately, the group didn't have time to make the app work with persistent data since our focus was mainly the development of a dynamic frontend application. The state of the program is not saved and every time we switch screens the changes are lost. In the oven functionality it is not possible to make a specific program work with the schedule indicated, even though it's possible to select on.

The consensual opinion of the group is that this project was very challenging in a very positive way. We believe our ambitious goals in this app forced us to develop our knowledge in android development, although it was very difficult to learn android development and kotlin from scratch in a short period of time in order to make the app.