NOVA SCHOOL OF SCIENCE & TECHNOLOGY

Interação Pessoa-Máquina

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FCT Nav

Stage 4: Functional prototype

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Prototype URL

Startup instructions

It is recommended that the testing user has a mobile device running an *Android* operating system with version 5.0 or higher (API level 21 or higher). Application testers should open an instance of an internet browser on this device (Chrome for example), paste the project URL in the address bar and enter the page. Download should start soon after. Once the download is complete, an application with the name *FCT Nav* will be installed on the device. Once the application icon is found, tapping it will prompt the application to initialize. From there, the application is running and ready for usage.
Testing users will also need to have an internet connection established in order to visualize the map.

Important notes: sometimes we noticed the map could take a while to load. Experiencing a black screen when opening the map (which is also opened when the application first starts) is to be expected. Also if the testing user's device has a screen resolution lower than 720 x 1440 pixels, some visual interface errors may occur (because we didn't scale all of our screen operations)

Briefing

For people studying at the (area-wise) biggest Campus in Portugal, it is difficult for newcomers to find the places where they want to go to (be it classrooms' locations, places to eat, etc.) and useful info on them. Our application sets out to aid them in these problems.

Scenarios

1. Initial view

Tiago is a freshman and he enters the application for the first time. He has already visited the campus for 4 days and knows about the existence and physical location of Edificio II. He is late for a lecture taking place there and does not have time to create an account, he just wants to know where room 112 is located. After checking where the room is, he arrives on time to the lecture.

2. Checking classroom occupancy

Rui wants to find a place to study at the Edificio II. There's a complex group project delivery deadline coming up and he wants to waste no time. He is focused on using every bit of time available to work on this project. Rui wants to find a classroom at Edificio II to study in. He doesn't know which rooms are available or not, so he is using the application to make sure he finds a classroom at Edificio II currently unused for lectures. He sees the classroom is available and enters it.

3. Viewing favorites tab

Ricardo just added one of his favorite places on campus to his favorites list. It is a restaurant called *Casa do Pessoal*. He had lunch there with his friends last week and the cost/quality relation was great in his opinion. Food and service were great and the price was relatively cheap. He wants to access its info today because he wants to have lunch there again! Before getting there, Ricardo wants to make sure nothing's changed since last week and he doesn't find an unpleasant surprise in the form of costly prices. He sees average prices are still the same so he ends up eating lunch there.

Project URLs

Project URL:

https://tiagoavieira.github.io/website-ipm

Regarding implementation details, we wanted to allow more interactivity when it came to rooms and restaurants. Our dialogs are static and present only images but especially in the case of restaurants, we had planned to present the users with a fully interactive popup dialog with options to: leave a rating out of 5 for that restaurant in particular; see a restaurant's menu for that day and days past; see statistics concerning the restaurant's attendance for a set time interval - for example attendance by hours during the last day, average attendance at a set hour during the last given days/weeks, etc. There may also be some readability issues as far as the dialog popups go because we didn't implement the option to zoom in and out of these dialogs

As for the map, it would've been preferable to also include the option of drawing a border alongside each building if the user tapped that region as we feel that would be of great help for users. The markers do the job as well but only point to a region of the building, not the entirety of it.If we were to implement the entirety of the buildings this could be troublesome since for example buildings *Edifício III* and *Edifício IV* are very close to each other - for newcomers it may be hard to tell which regions each contain just from looking at markers in a map. In our opinion a border in addition to this would be useful to identify the areas with more ease. The button located next to the bottom right corner was supposed to center the map according to our gps location but we had some issues implementing this functionality.

The implementation isn't complete, we made available some of the rooms of some of the restaurants available at the campus, not all of them.

When clicking the search button the visual behavior we intended is there but there's no functionality as well.

We developed our application using the *Flutter* framework embedded in an integrated development environment called *Android Studio*.