NOVA SCHOOL OF
SCIENCE & TECHNOLOGY

Interação Pessoa-Máquina

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FCT Nav

Stage 2: User and task analysis

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Problem

Being the 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.

Users

Class	Professors	Students	Visitors
Age	25 to 65	18 to 40	Any
Sex	Both male and female	Both male and female	Both male and female
Physical limitations	May or may not have	May or may not have	May or may not have
Educational Background	Higher education	At least secondary education.	May have no educational background
Computer/IT use	May or may not have good experience using a smartphone.	Probably has good experience with smartphone use.	May have little to no experience using a smartphone.
Motivation	Navigating to classrooms/departments. Add or remove classrooms. Access detailed information of departments.	Navigate to classrooms and university services. Find the best places to eat and see the average queue waiting time during lunch hour.	Navigate to different buildings/departments and/or university services.
Attitude	Slow popularity at first, but will stay loyal to the product if they find it reliable and of easy use.	Will probably be condescending and even suggest improvements, but will switch to a better product if they find one.	Minor bugs might discourage the use. To be expected that depending on the age group, adherency might vary wildly

Tasks

1. Login

Objective: Authenticate user
Preconditions: Is a registered user
Sub-tasks: Write username and password
Exceptions: Credentials not correct and login fails

There will be different functionalities available depending on the account type currently logged in (or not). There will be the possibility of using the application with no login made, and this state will feature the most basic functionalities possible (resembling a visitor user).

2. Navigate the map/Visualize a certain department

Objective: Visualize certain department
Preconditions: Application is opened on smartphone.
Sub-tasks: Select a department to visualize from the initial map or list
Exceptions: No department selected

One of the primary goals we set out to achieve with this application is aiding students in navigating and getting to know the school campus. Options to select which department to visualize in the application need to be available, as well as how that information is presented on the screen.

3. Check classroom occupancy level / waiting queue time

Objective: Visualize a classroom's occupancy level or waiting queue time for a service
Preconditions: User is registered and currently logged in.
Sub-tasks: Select a classroom or service to visualize its stats
Exceptions: Classroom or service statistics unavailable

This is a feature we feel will be very interesting to have in our application. Users of the system are able to select a given room and visualize during a (not yet specified) timeframe how many people are currently occupying it. Both professors and students have access to this information. Useful for example when students want to watch a lecture at different times or know if a classroom is empty and is free to use. Visitors won't have access to this functionality.

4. Viewing a favorites tab

Objective: Access a set of consisting of classrooms and/or services for easy access
Preconditions: User is registered and currently logged in.
Sub-tasks: Open assisting menu. Click on favorites tab
Exceptions: Error loading favorites tab. Internet connection currently unavailable

Professors and students will have access to a favorites tab where they will be able to keep a small list (we're thinking of the maximum size allowed for now) of classrooms or physical services they can quickly access without having to manually search for them through other more tedious steps.

Scenarios

1. Initial view

Tiago enters the application for the first time and sees the initial page. It has two options: "Login" or "Proceed without login". Tiago is late for a lecture and does not have time to create an account, just wants to find the place where the lecture will be. He clicks the "Proceed without login" option and is presented with a view of the building and can easily select the room he wants. He arrives on time to the lecture.

2. Checking classroom occupancy

Rui is logged in the application. He is presented with a view of the full campus. From there, he clicks inside the desired building. From there, he is presented with a view of the classrooms in that building. He clicks inside the room he wants to check. He is presented with the option "Show room occupancy". Rui clicks on that option and is presented with the room occupancy statistics. He sees it's not full and attends the class.

3. Viewing favorites tab

Ricardo added 2 of his favorite places in the campus to his favorites list yesterday. One of them is a restaurant and he wants to access its info today because he's thinking of having lunch there. He is currently logged in the application and clicks the "Show side panel" option. From there, he is presented with a tab that reads "My Favorites". He clicks it and is now seeing the favorite places he added previously. From here, he can now see the current occupation rate of the restaurant and decide if he has enough time to eat there before next class. Luckily the waiting queue isn't too long and he eats there.