



NOVA SCHOOL OF
SCIENCE & TECHNOLOGY

Interação Pessoa-Máquina

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Pool Tool

Stage 2: User and Task Analysis



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Describe the problem you will try to solve during the project:

To use the pool's services the customer must call or go to the facility and speak personally with a receptionist to check the availability, sign in and book a lane. There may be other activities going on that a customer might be interested in, but, due to lack of phone assistance, the only way to get that information is going to the pool physically.

A user also in most cases needs to use a card to access the pool that could be forgotten and can be a burden to carry around. There is currently no way to check the card balance, therefore the user must also go to the facility and check.

In essence, the difficulties are related to the fact that there is no communication channel available, so the user must go to the facility to do everything associated with the facility's services, elevating frustration towards the receptionists and making it an unhealthy environment to work at.

Brief description of user pool characteristics by group:

User Characteristic	Pool User Characteristics, by group			
Age	Minors		Adults	Senior
	Children	Teen		
	0-10	10-17		
Physical limitations	Cannot use the app due to being underage.	Cannot use the app due to being underage.	Lack of phone.	May have trouble using technologies.
Educational Background	Some or none educational background.	Plenty educational background.	Plenty or some educational background.	Some or none. educational background.
Computer/ IT use	Some or none experience using mobile applications.	Plenty of experience using mobile applications.	Plenty or some experience using mobile applications.	Can vary, from none to plenty experience technologies.
Motivation	Inclined to use the app through a guardian's account.	Inclined to use the app through a guardian's account.	Inclined to use the app due to efficiency, since they don't have to call to schedule.	May not use since this generating might be more inclined to human assistancy.

Some tasks that our system will allow:

Task 1 - Create Pool account/card	
Pre-condition	Over 18 years old and re-registration at the pool.
Sub-task	Introduce credencials (email, name, password) and verify account with email.
Where is the Action performed	Inside the app and at the reception.
Time or resource constraints	2 minutes
What can go wrong	Not verifying email; failure to communicate with the server or no phone assistance.

Task 2 - Charge pool card	
Pre-condition	Have a pool account/card.
Sub-task	Define the amount of money with which to charge the card and charge the card.
Where is the Action performed	Inside the app to get the payment details, later could be finish by PayPal, Mbway or ATM.
Time or resource constraints	2 minutes
What can go wrong	Failure to communicate with the server or ATM unreachable or not having a MBWay account.

Task 3 - Reserve pool lane	
Pre-condition	Have a pool account/card and a charged card.
Sub-task	Check availability; consult the card's balance and choose the desired lane.
Where is the Action performed	Inside the app or at the reception/phone service.
Time or resource constraints	5 minutes
What can go wrong	Failure to communicate with the server and no phone assistance.

Task 4 - Enroll a minor in a class	
Pre-condition	Have a pool account/card, charged and class availability.
Sub-task	Check availability; consult the card's balance and choose the desired class.
Where is the Action performed	Inside the app or at the reception/phone service.
Time or resource constraints	5 minutes
What can go wrong	Failure to communicate with the server and no phone assistance.

Task 5 - Cancel reservation of pool lane	
Pre-condition	Having a pool lane reserved.
Sub-task	Consult reservation and cancel it.
Where is the Action performed	Inside the app or at the reception/phone service.
Time or resource constraints	2 minutes
What can go wrong	Failure to communicate with the server and no phone assistance.

Task 6 - Consult the Card Balance	
Pre-condition	Having a pole lane reserved.
Sub-task	Consult reservation and cancel it.
Where is the Action performed	Inside the app or at the reception/phone service.
Time or resource constraints	2 minutes
What can go wrong	Failure to communicate with the server and no phone assistance.

Task 7 - Cancel the class registration.	
Pre-condition	Being enrolled in a class.
Sub-task	Consult reservation and cancel it.
Where is the Action performed	Inside the app or at the reception/phone service.
Time or resource constraints	2 minutes
What can go wrong	Failure to communicate with the server and no phone assistance.

SCENARIOS

Task 2 Scenario: Micaela wants to go to the swimming pool tomorrow, but she has no money in her card she uses to access the facility. She opens the pool tool application and selects the charge card option; there she selects the amount and a form of payment. After that she is free to swipe the card at the facility tomorrow.

Task 3 Scenario: The pool has been really crowded lately and Mr. Agostinho would rather have a separate space to swim by himself. So, he opens the app and goes to the reserve lane section, checks the availability, and selects the time that best suits him. Mr. Agostinho just reserved a lane without needing to visit the pool first.

Task 4 Scenario: Mr. Américo wants to enroll her daughter Rita in a swimming class based on her age and swimming level. So, he opens the app, consults the classes and for whom they are destined, proceeds to create a subcategory for the minor usage, and enrolls her in the class.

User Interviews

We visited the Municipal swimming complex of Caparica to conduct some questions since we learnt that they themselves don't possess an application for the services of the pool.

We were greeted by the facility's coordinator and after explaining our project, she was very interested in our idea saying that an application is exactly what the place needed. She went on showing us how difficult it is for the clients to find out information about the pool like the timetable for classes and if there was any space for new members... just to name a few. She even gave us some ideas for the app and jokingly said that she wanted to use our application when it was completed.

At the pool we saw firsthand people coming into the facility and using their card to access the pool and even saw people signing up to become new members. Thus, concluding that throughout the app this process would be easier.

Interview 1 - Man with daughter

We talked to a man who was in line to sign up his daughter for a class. He was claiming that he tried to call through the phone, but no one answered. There was coincidentally also a big queue to sign up. Therefore, it would be more efficient to do it via mobile phone.

Interview 2 - Senior scheduling hydro gymnastics

We talked to a senior lady who was at the reception desk booking her next hydro gymnastics class. We asked if she would be interested in using a mobile phone application, she said she didn't feel comfortable using her mobile phone and prefers to do it in person as it's more pleasant to converse with the receptionist.

Interview 3 - Lady trying to book a lane

We talked to a young woman that was checking in to go swim in a free lane. She characterized the process of reservation as unnecessarily long and uncomfortable. Having to call to get a free lane and not being answered delayed the process as she couldn't go to the facility to make the reservation in person. She was very receptive of the mobile app saying it would be a significant improvement to her experience.

In conclusion, to obtain information and use the facility's services the user must first call or go there. Therefore, an application that has a way to check the pool's timetable, the ability to reserve a lane and many other features is a must for this day and age.