



HCI - Assignment 2 2024/2025

PlaySmart : Smart Sports Complex

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The Problem

The problem we aim to solve is the current difficulty and inefficiency users face when trying to find and book sports facilities, due to the lack of a unified platform that simplifies the entire process.



Personas

| | |
|-------------|---|
| Name | João Esteves |
| Age | 21 |
| Occupation | Student |
| Location | Aveiro, Portugal |
| Goals | He wants a quick and easy way to find and book sports fields near him. |
| Pain Points | The booking process often requires phone calls or travel. |
| Motivation | "I want to book a game quickly and without hassle. I just need to know where there are available fields and split the costs with my friends without any trouble." |



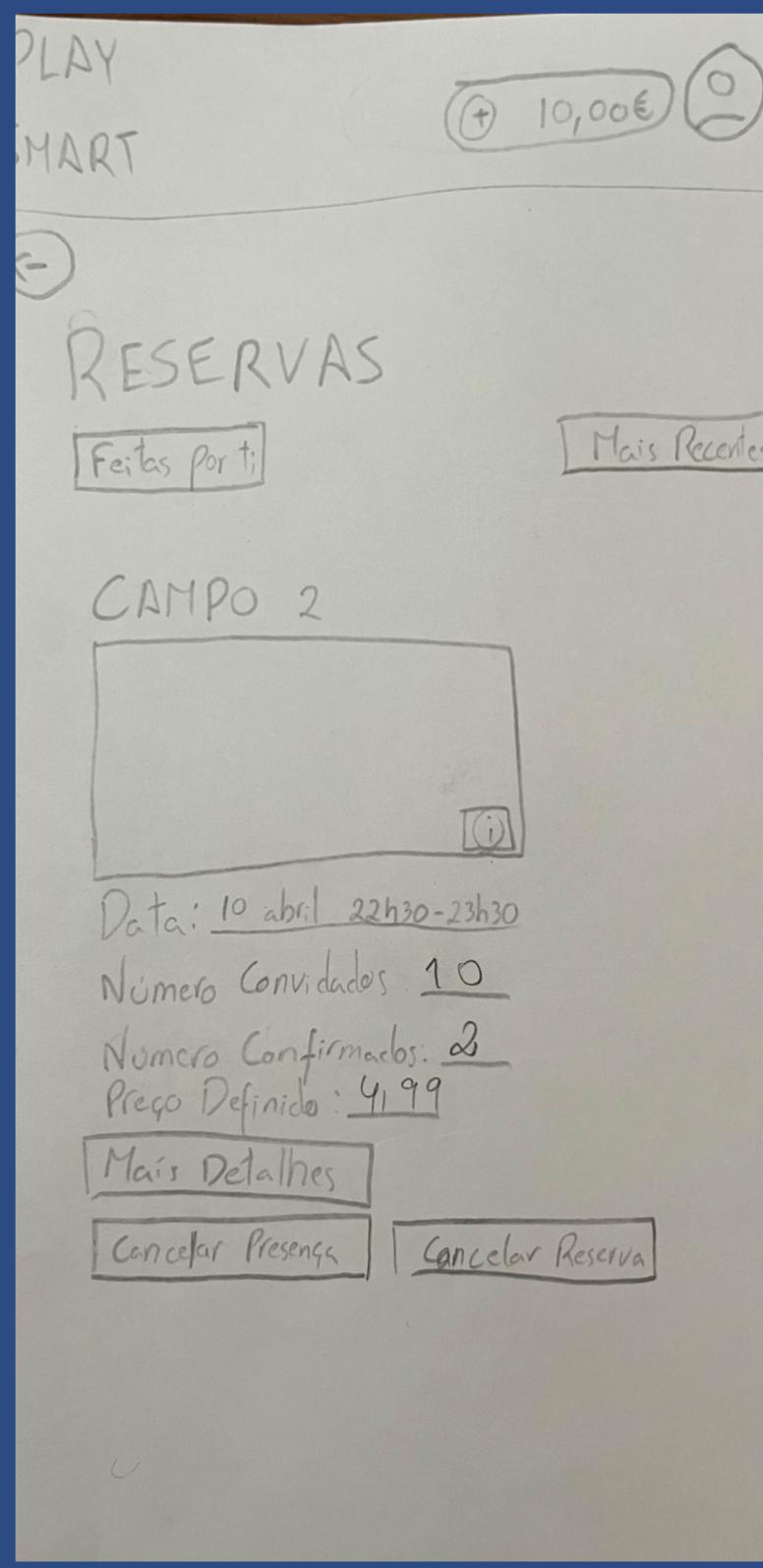
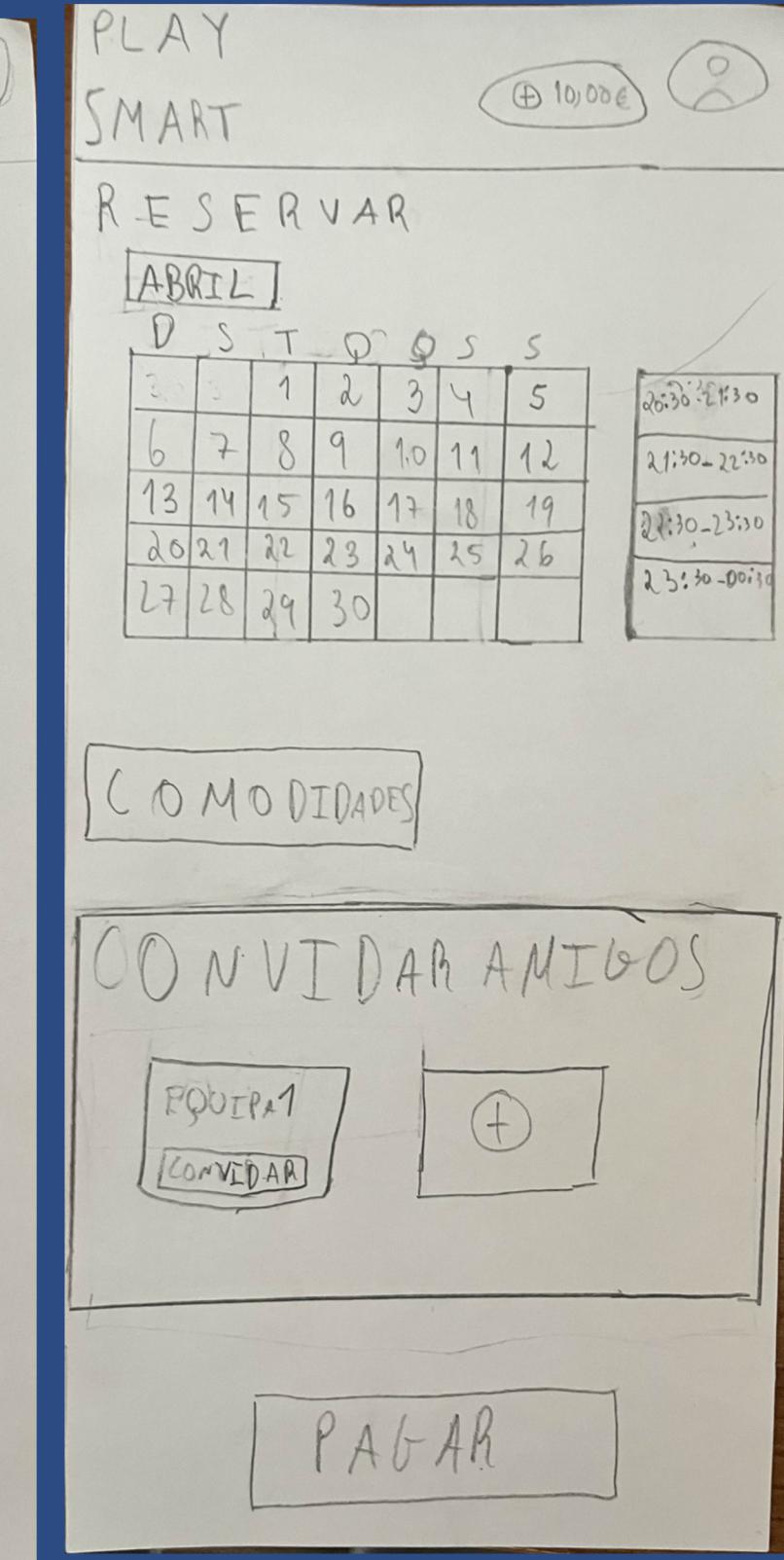
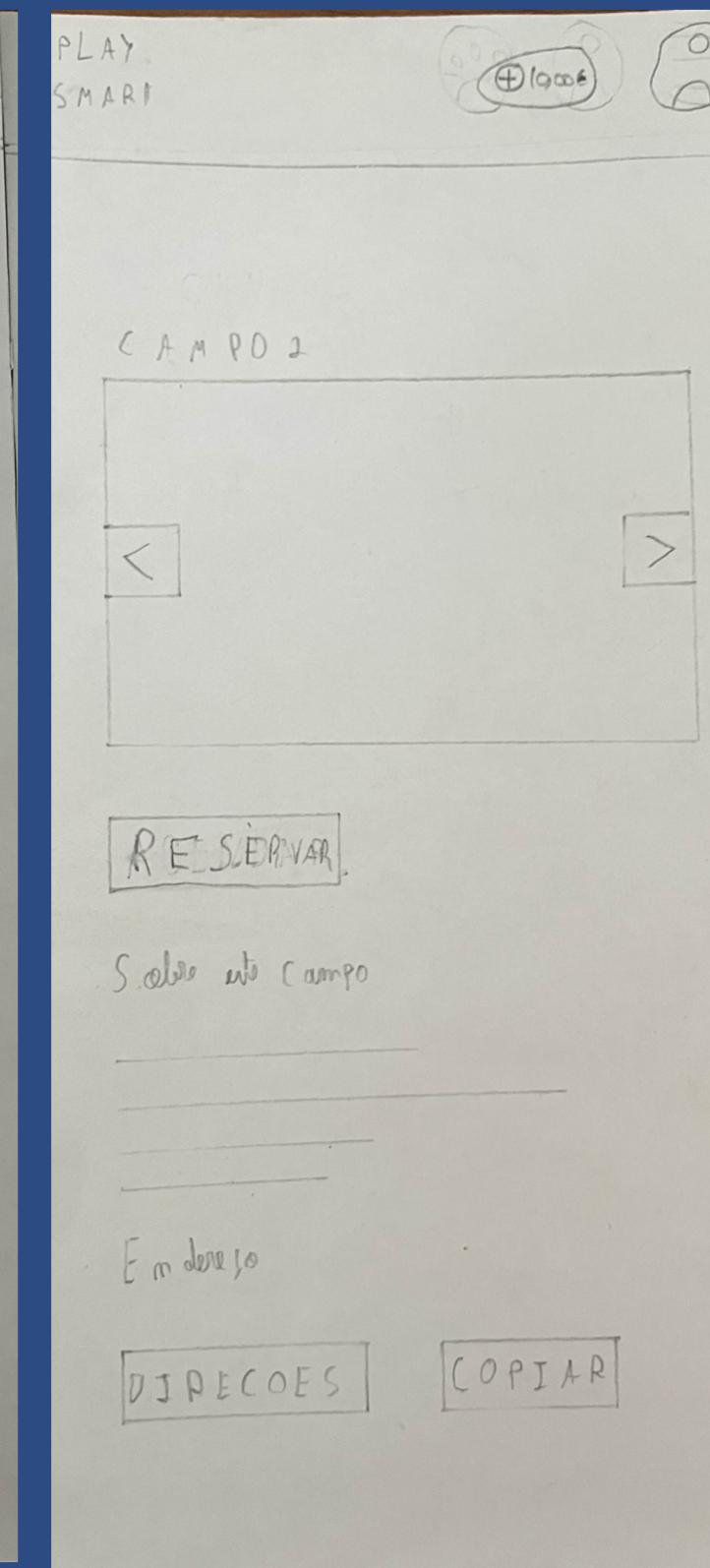
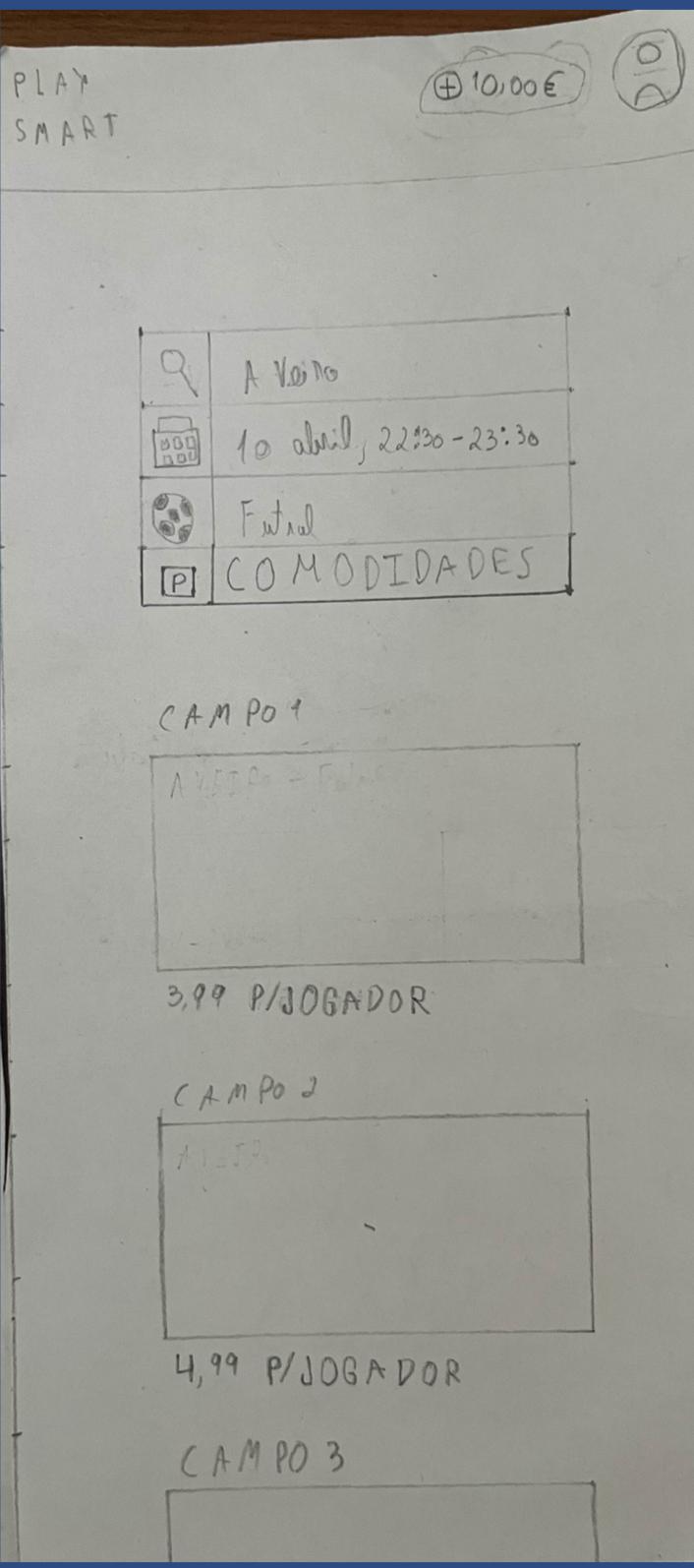
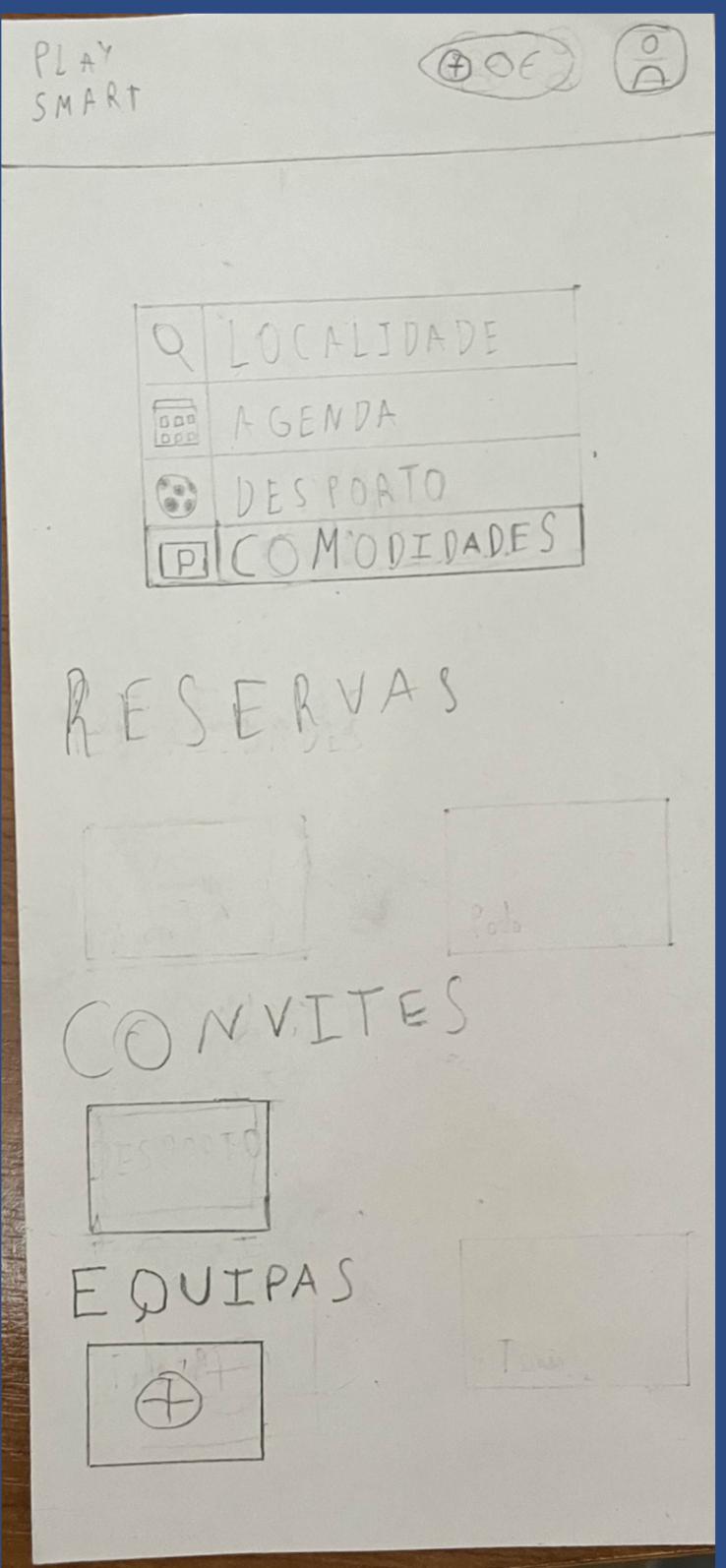
| | |
|-------------|---|
| Name | Manuel Ferreira |
| Age | 45 |
| Occupation | Sports Complex Manager |
| Location | Porto, Portugal |
| Goals | He wants a platform that makes it easier to manage climbing session bookings. |
| Pain Points | Time wasted with manual bookings and disorganized schedule management |
| Motivation | "I want to manage my climbing space more efficiently. If customers can book online and I can easily update schedules, I can focus on improving the service and attracting more people." |



Requirements

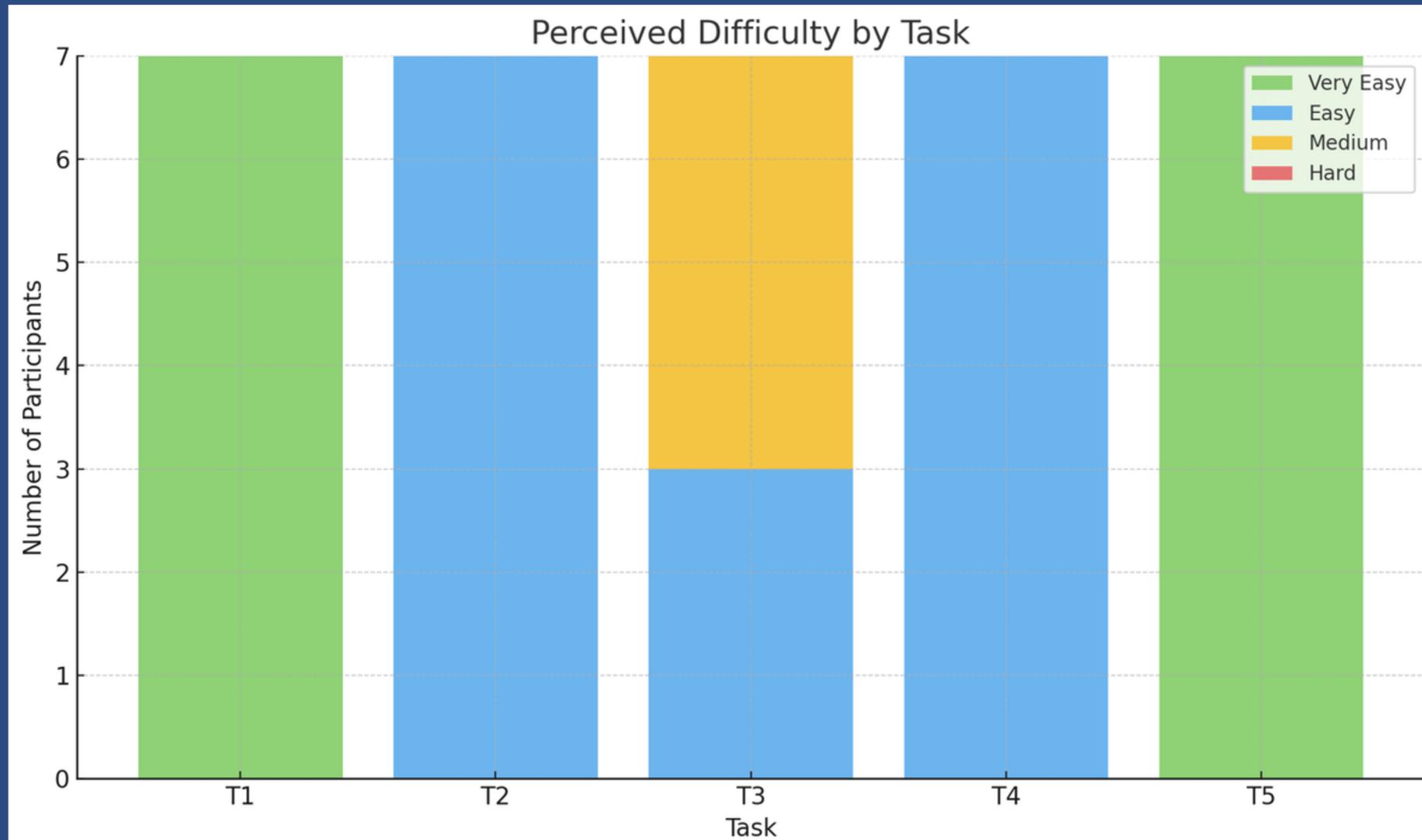
| Non-Functional Requirements | Functional Requirements |
|--|---|
| The application must function 24/7 | Display a list of available sports fields for booking. |
| The application must have a secure payment system | Send notifications to users about the booking confirmation. |
| The application must be compatible with various devices, such as smartphones, tablets, and desktops. | Cost splitting with all participants |
| User data, including payment information, should be encrypted and stored securely. | Filter the fields by facility |
| | Deposit in case of cancellation 24/48 hours before the booking. |
| | Booking equipment and parking spot |

Low-Fidelity Prototype



Low-Fidelity Prototype - User Evaluation

| NºTask | Tasks |
|--------|---|
| T1 | Deposit 10€ |
| T2 | Create a Team |
| T3 | Reserve a Football field in Aveiro at 22:30 - 23:30 |
| T4 | Accept an invite from João and reserve a vest |
| T5 | Cancel the reservation |



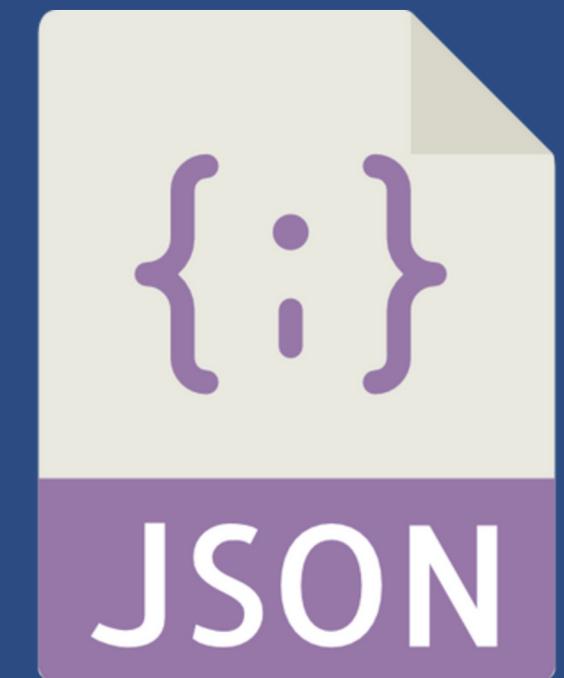
New features identify

In create a team interface choose the team sport

Add a friend with app ID

Classify equipment as either individual or collective, since collective equipment is funded by all users, whereas individual equipment is not.

Tools used



High-Fidelity Prototype

The screenshot displays two main sections of the Play Smart platform:

- Agendar (Schedule):** A modal window showing a calendar for May 2025. It includes a grid of dates from 1 to 31, with arrows for navigating months. Below the calendar is a section titled "Horários Disponíveis" (Available Times) listing time intervals: 09:00 - 10:00, 10:00 - 11:00, 11:00 - 12:00, and 12:00 - 13:00. At the bottom are buttons for "Comodidades" (Conveniences) and "Equipamento" (Equipment), and a "Confirmar Reserva" (Confirm Reservation) button.
- Minhas Reservas (My Reservations):** A list titled "Convites Pendentes" (Pending Invitations). It shows a single invitation for a football game at the Complexo Desportivo da Gafanha on August 10th at 18:00, invited by Amigos da Gafanha. The total price is 8.00€. A confirmation dialog box is overlaid on this screen, asking if the user wants to accept and reserve the invitation. It lists items: Bola de Futebol (+1.00€) and Coletes (+1.00€), with a total cost of 0.00€. Buttons for "Sim, Aceitar e Reservar" (Yes, Accept and Reserve) and "Recusar" (Reject) are present.

The screenshot shows the "Minhas Equipas" (My Teams) section and a modal for "Criar Nova Equipa" (Create New Team):

- Minhas Equipas:** Shows a placeholder box with a plus sign and the text "+ Criar Equipa".
- Criar Nova Equipa:** A modal with fields for "Nome da Equipa" (Team Name), "Selecionar o Desporto" (Select Sport), and "Pesquisar Amigos" (Search Friends). It also lists "Adicionar Amigos" (Add Friends) with names like Francisco Pinho, Bruno Aguiar, António Carlos, Joana Silva, Ana Martins, Guilherme Pina, Miguel Pires, Pedro Costa, and Rui Pereira. A "Criar Equipa" (Create Team) button is at the bottom.

Demo

The screenshot displays the main interface of the Play Smart application. At the top, there is a blue header bar with the "Play Smart" logo, a user icon, and a balance indicator showing "0,00€". Below the header, a search bar contains four input fields: "Localidade" (Para onde?), "Data/Hora" (Escolher...), "Comodidades" (Escolher...), and "Desporto" (Escolher...). A blue "Pesquisar" button is positioned to the right of these fields. A cursor icon is visible near the top right corner of the search bar.

Reservas

Estádio Municipal

CONVITE

Data: 15/07/2025
Hora: 19:00
Convidado por: Equipa "Os Campeões"
Preço para si: 10.00€

[Ver todas as reservas e convites](#)

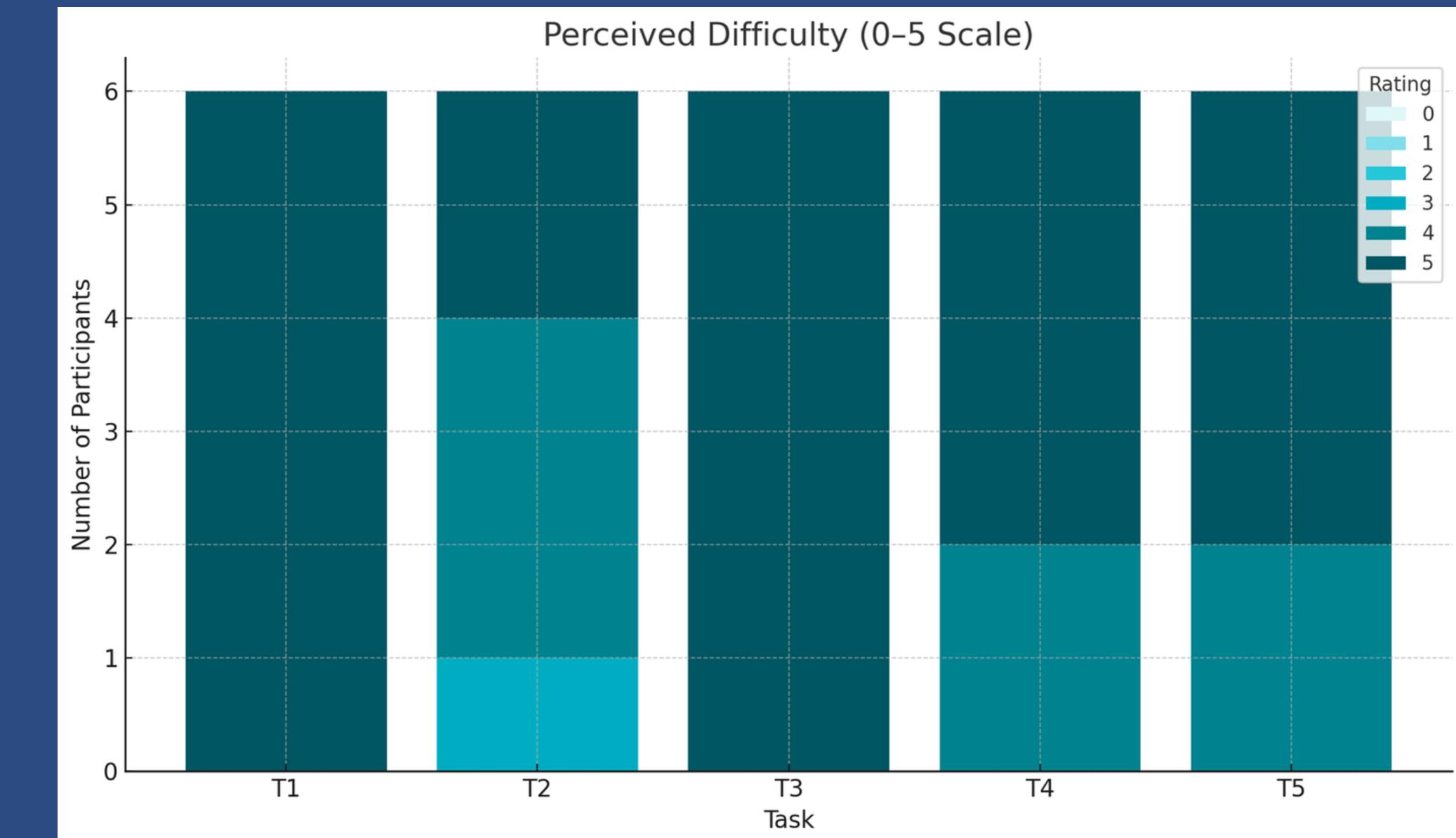
Equipas

[+ Criar Equipa](#)

Adicionar Saldo

High-Fidelity Prototype - User Evaluation

| NºTask | Task |
|--------|---|
| T1 | Deposit 10€ and find a football field in Gafanha da Nazaré, that have parking spot, locker rooms and illumination, for a game in night. |
| T2 | Create a team of Padel with 4 people to play 2vs2. |
| T3 | Reserve a Padel field in Gaia in any hour of your choice, reserve equipment (racket) and invite the team you just create. |
| T4 | Verify if all the members of the team accepted your invite. |
| T5 | Cancel the reservation. |



High-Fidelity Prototype - User Evaluation

New features identify

Improve the add friends interface

Make the reservation interface easier

Make the money distribution clearer

Implement the invite to a game interface

Future Work

- Implement an admin panel in the web app for administrators
- Cancel the reservation in 5 hours, if no confirmation from the clients
- Improve the friends list organization
- Implement an account history
- Implement suggested fields to reserve

Group Assessment

Effort of each member

- João Pinho, 113602 - 33,3%
- Joaquim Martins, 115931 - 33,3%
- Guilherme Gabino, 114947 - 33,3%

Self-evaluation

15 out of 20