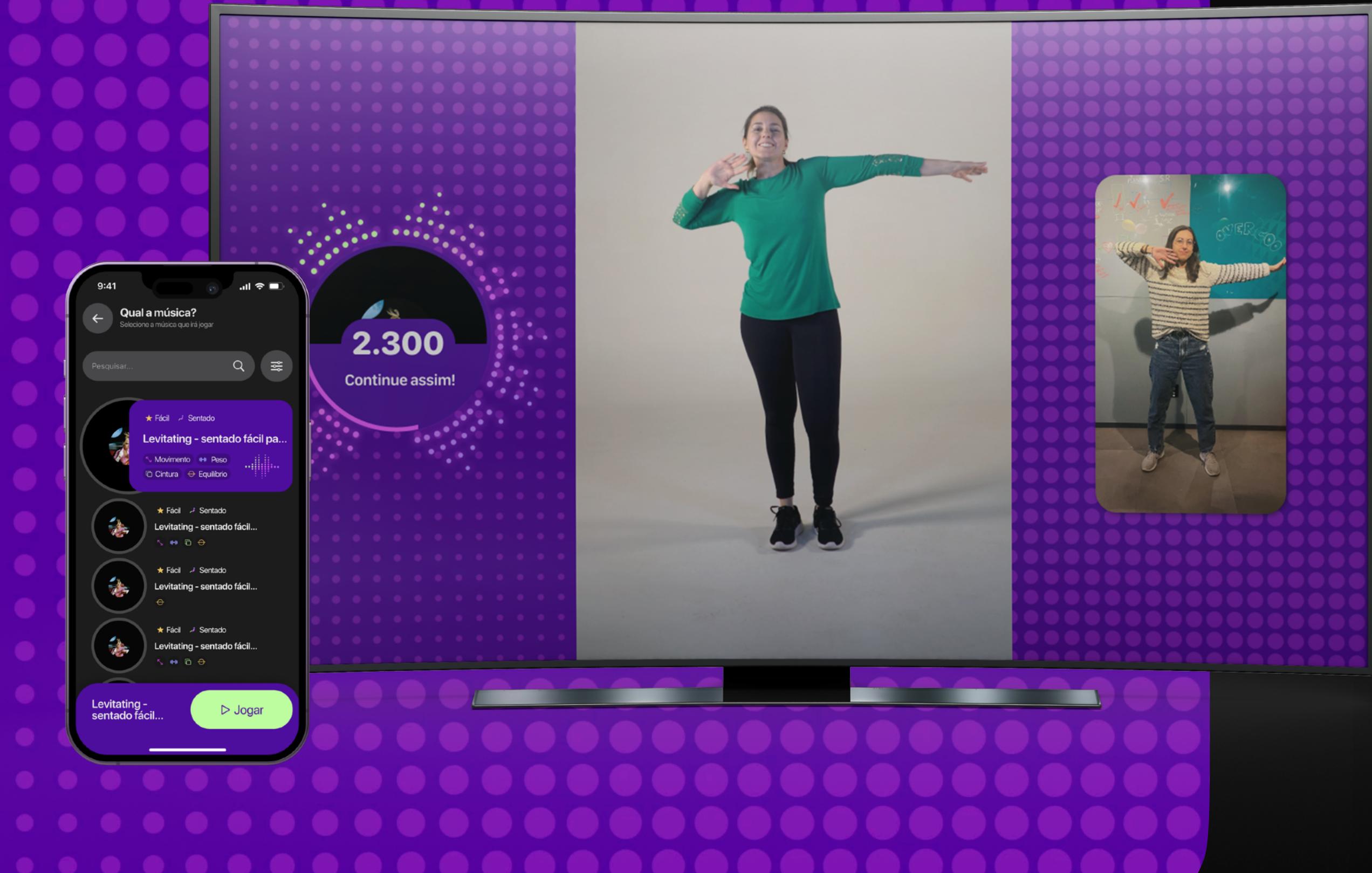


# Get moving again. motion•bundle



## Context

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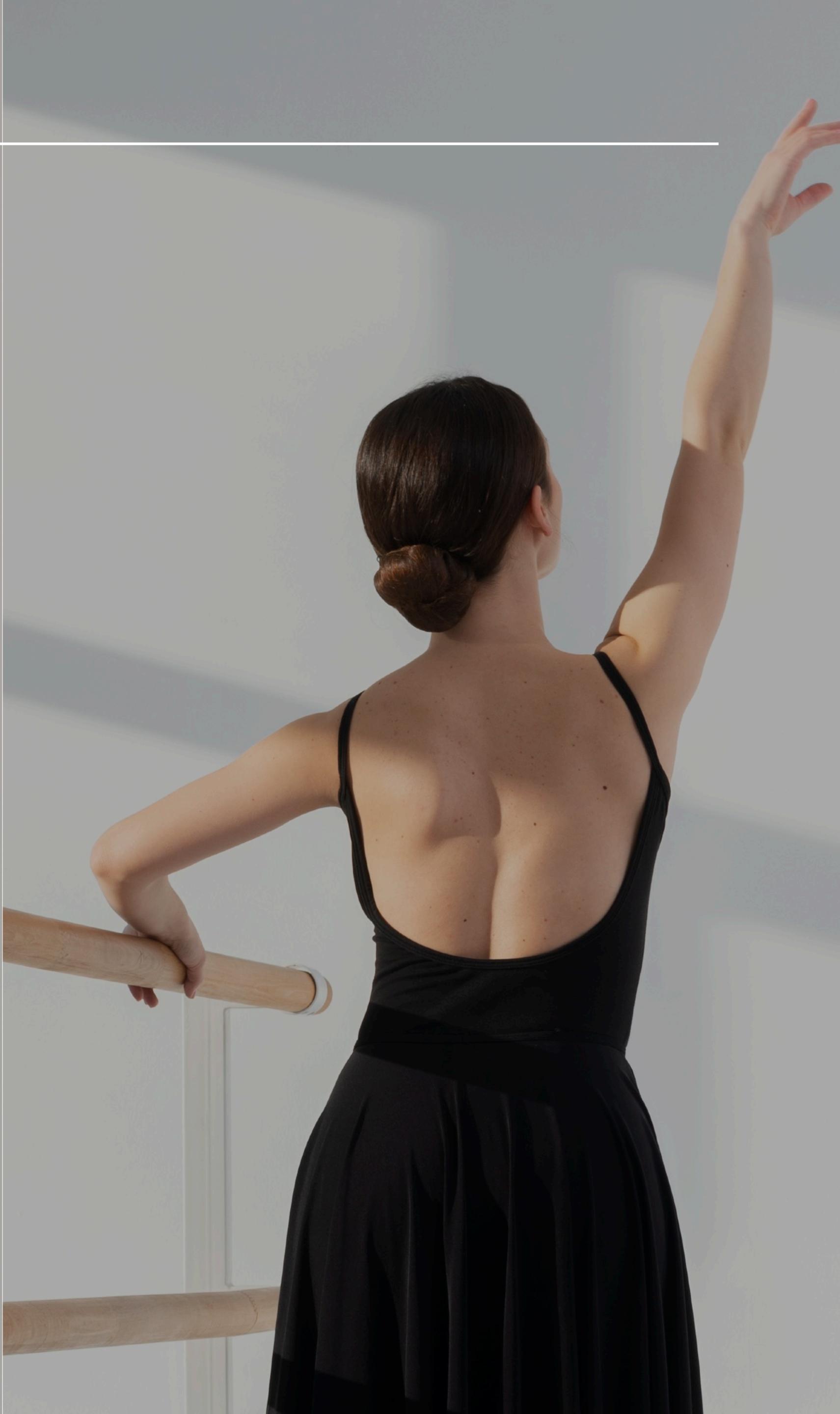
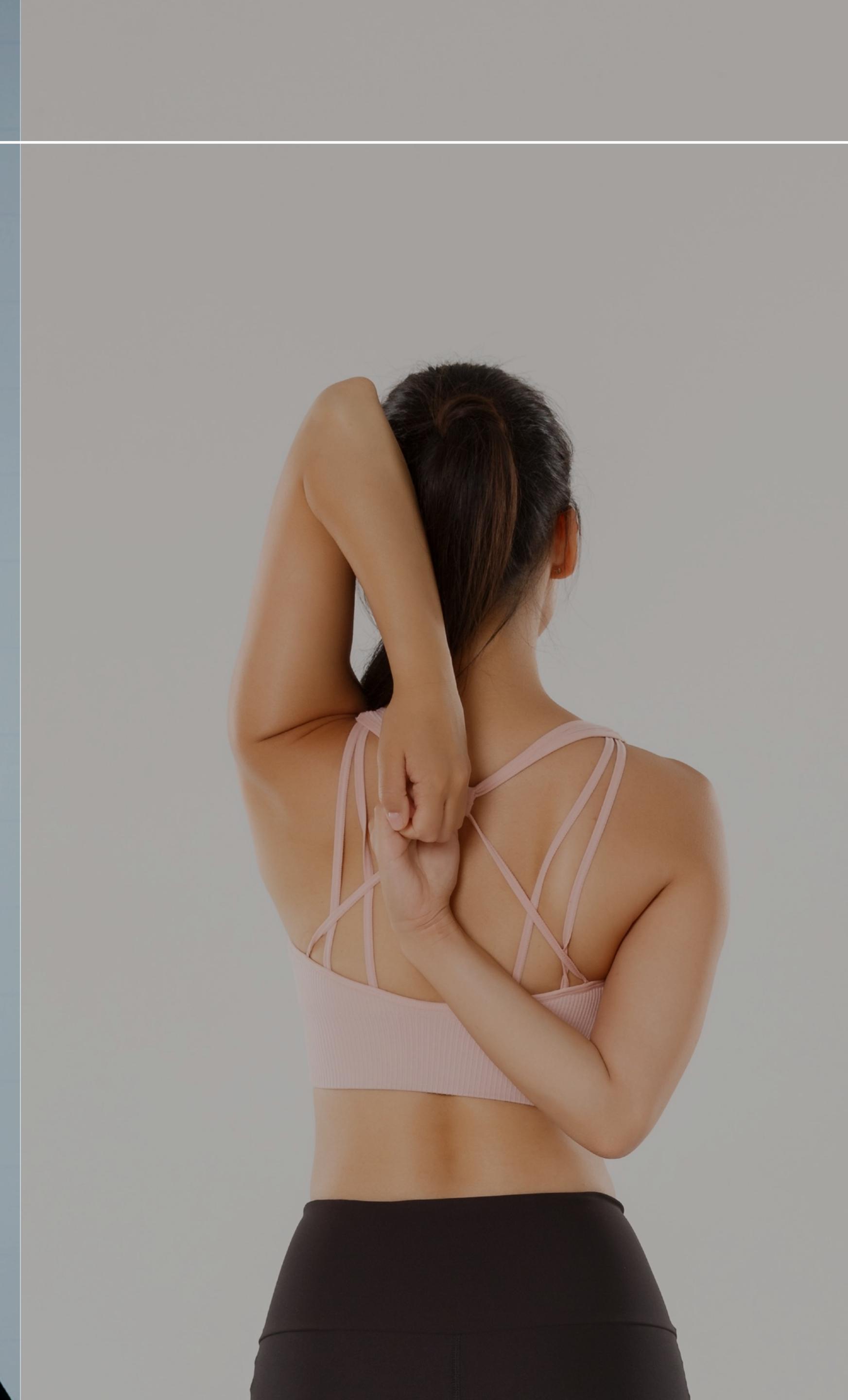
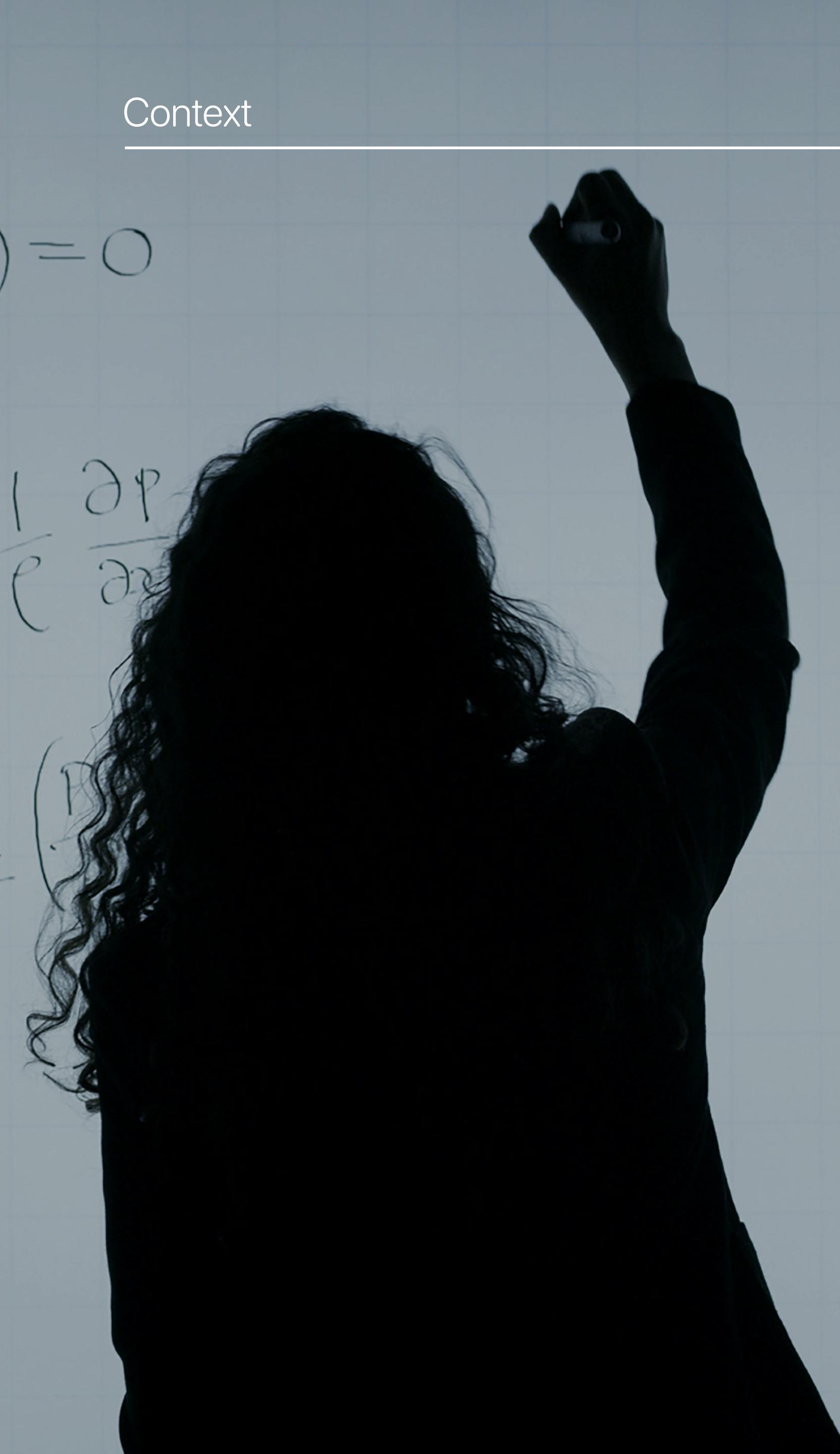
) = 0

$$\frac{\partial P}{\partial x}$$

1. 2. 3.

4. 5. 6.

7. 8. 9.



## Context

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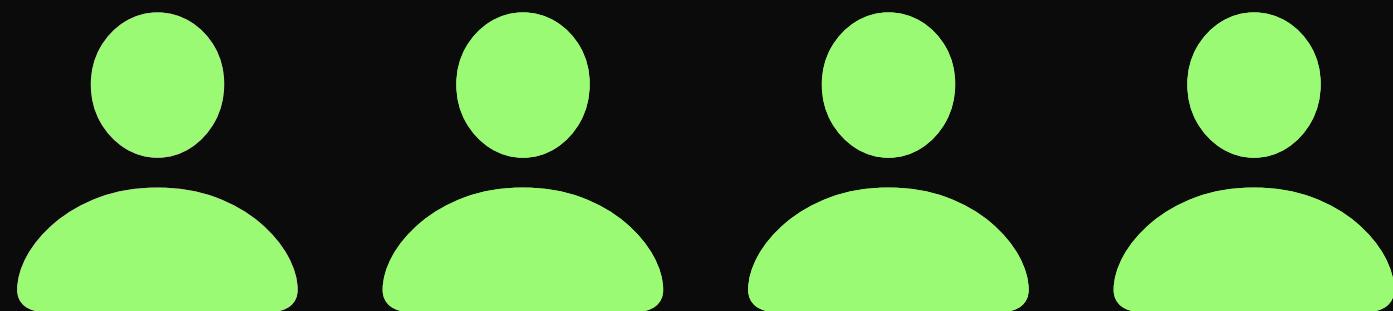
Why now?

---

About

**1 in every 4**

people will suffer a stroke during their lifetime



Source: World Stroke Organization

# Repetitive exercises

**30 - 50%**

of stroke survivors cease doing physical therapy  
within the first year after the stroke

e-motion

**E•motion** assists the **rehabilitation** of stroke survivors, making physical therapy **more engaging** and fun through dance

e•motion

For whom?

---



For physical therapists

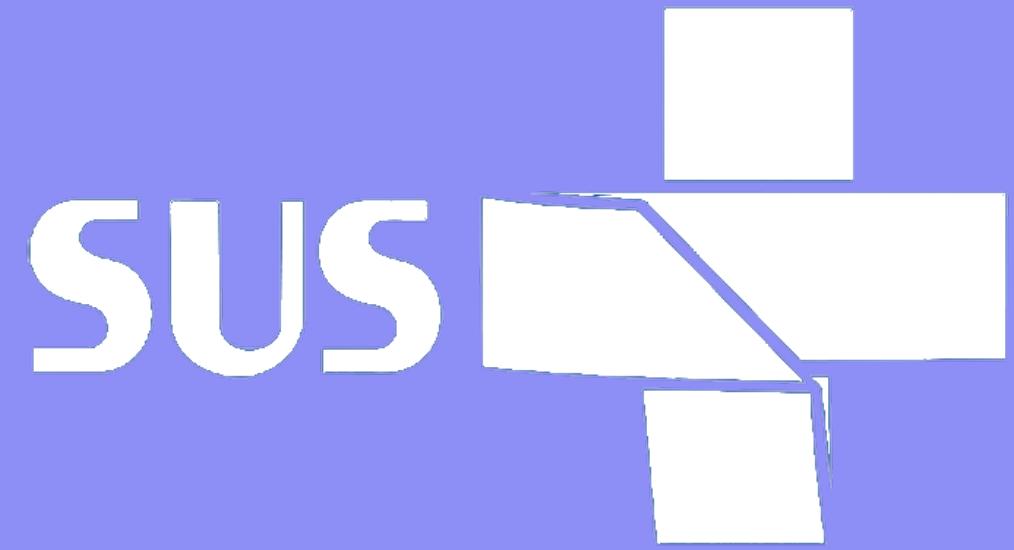
**Designed for stroke survivors.  
Used by physical therapists.  
Complementing physical therapy.**

For stroke survivors

# How did we get here?

## Partnership

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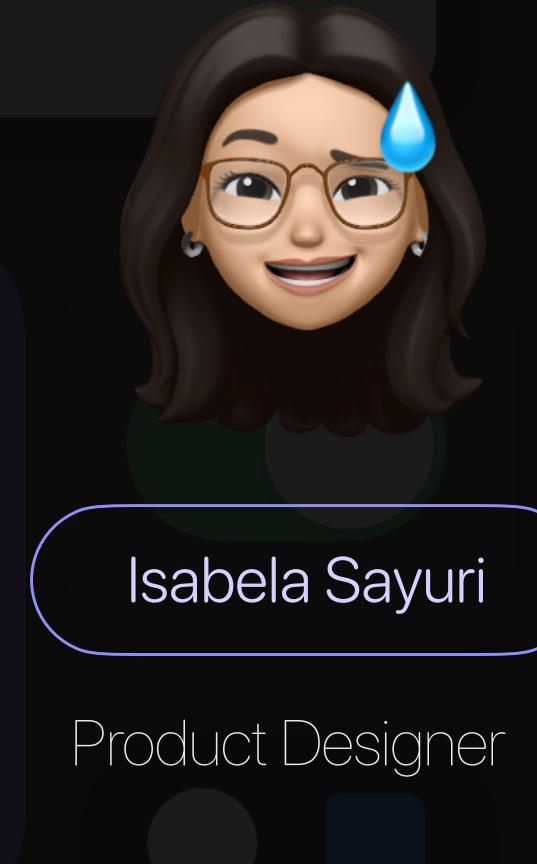
## Team

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Eduardo Paludo

iOS Developer



Isabela Sayuri

Product Designer



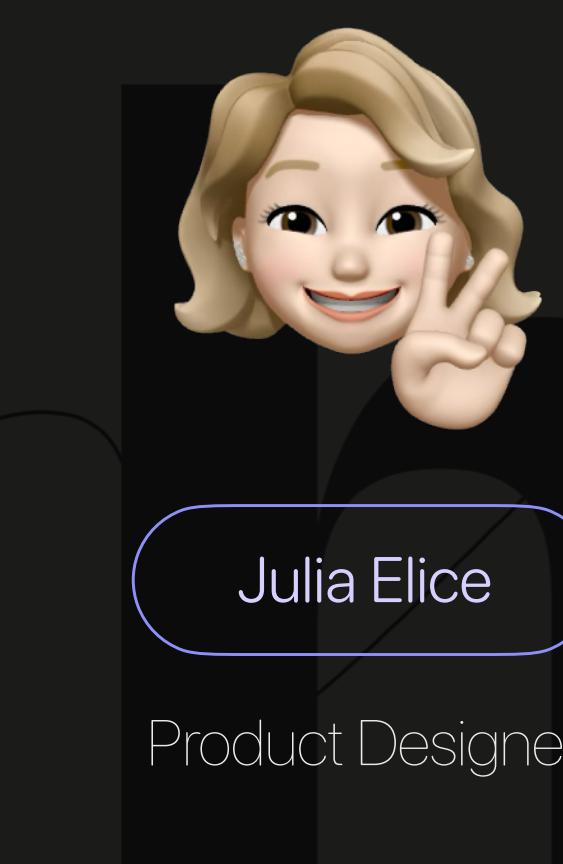
João Pedro

iOS Developer



Júlia Bettuz

Product Manager



Julia Elice

Product Designer



Yerik K.

Tech Lead



**BIG IDEA**

Quality of Life

**ESSENTIAL QUESTION**

How to improve the quality  
of life of stroke survivors?

**CHALLENGE**

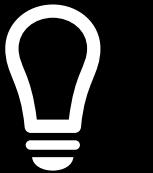
Build a product based on the  
previous research for helping patients  
undergoing stroke rehabilitation.

## INVESTIGATE I

- Key takeaways from papers
- CSD Matrix
- Mapping the available material



 **Real-time feedback**

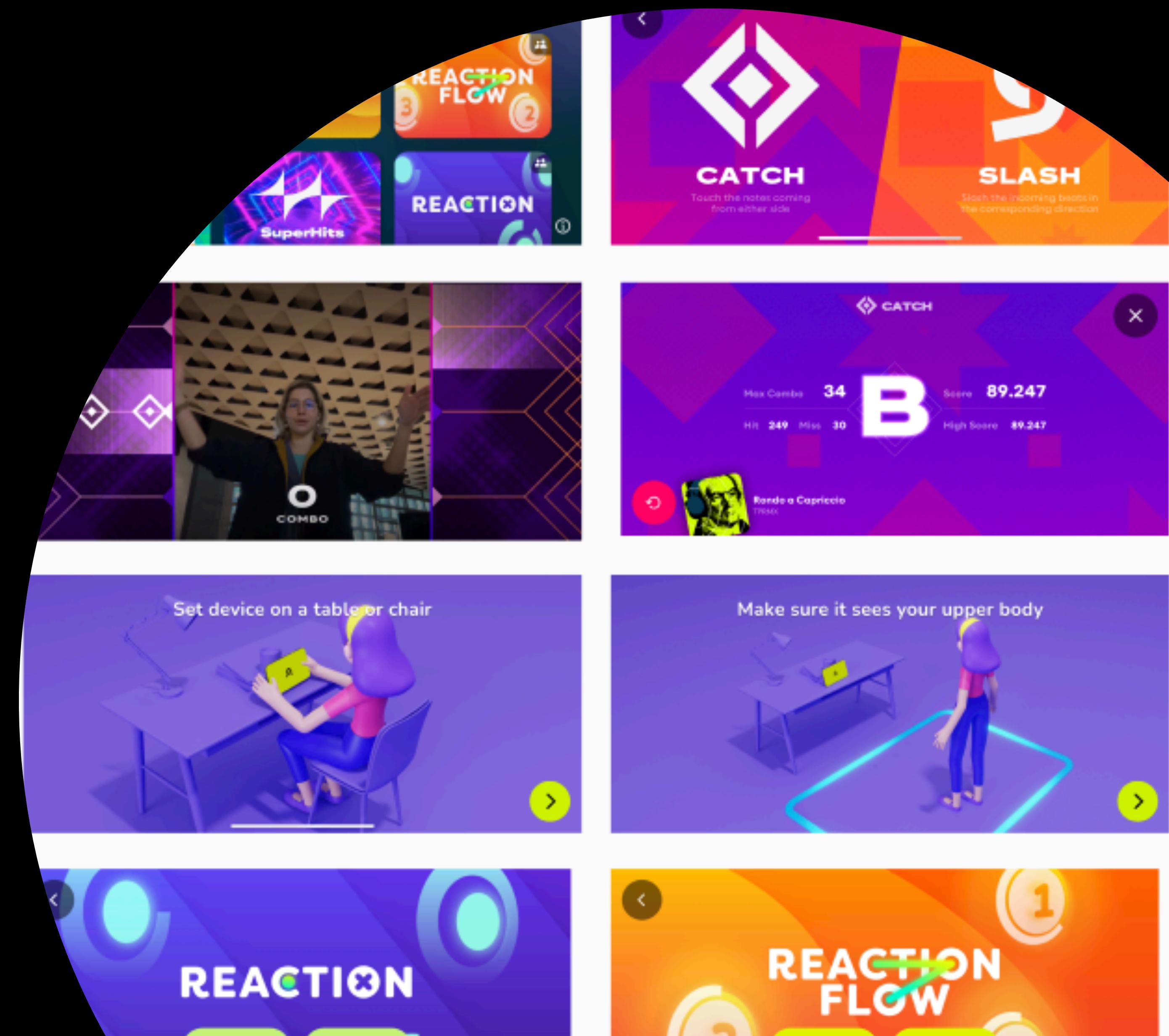
 Patients who tested it showed interest in this new form of physical therapy

 **Used in the SUS\* during physiotherapy sessions** **Connection to TV**

**What****Tradicional exercises** used **during stroke****rehabilitation programs** can become tiring and**Who**monotonous, resulting in **patients' lack of interest****Why****and decreased retention in the programs.****Where**

## INVESTIGATE II

- Benchmarking
- Desk research
- Moodboard
- Interviews





Interview with the project's physical therapists

**“SUS physiotherapy sessions last only half an hour, so the app needs to be fast and intuitive to use. ”**

**Luana and Joseana, physical therapists**

Interview with a patient who tested the first version of the app

**“ I liked the app because it's a different and fun way to do physical therapy. I just wish they had more music options. ”**

**Augusta**, French teacher and stroke survivor





Interview with the last programmer of the project

**“ It took 6 months to implement the first choreography into the app, and the next ones took 3 months. Because of the time it took to implement a new choreography, it was difficult to do more. ”**

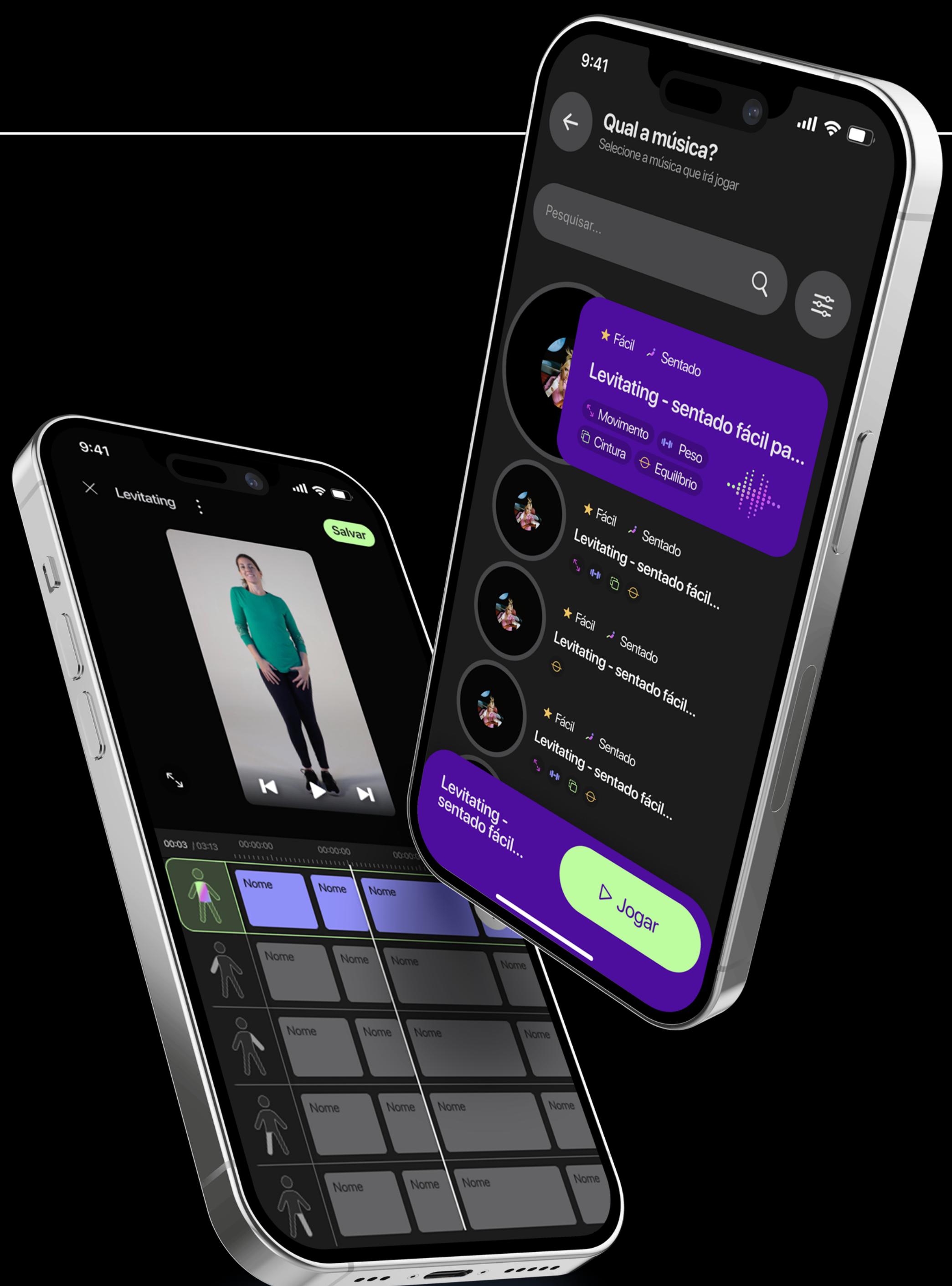
**Forbeck, iOS Developer**

Therefore, in order to improve

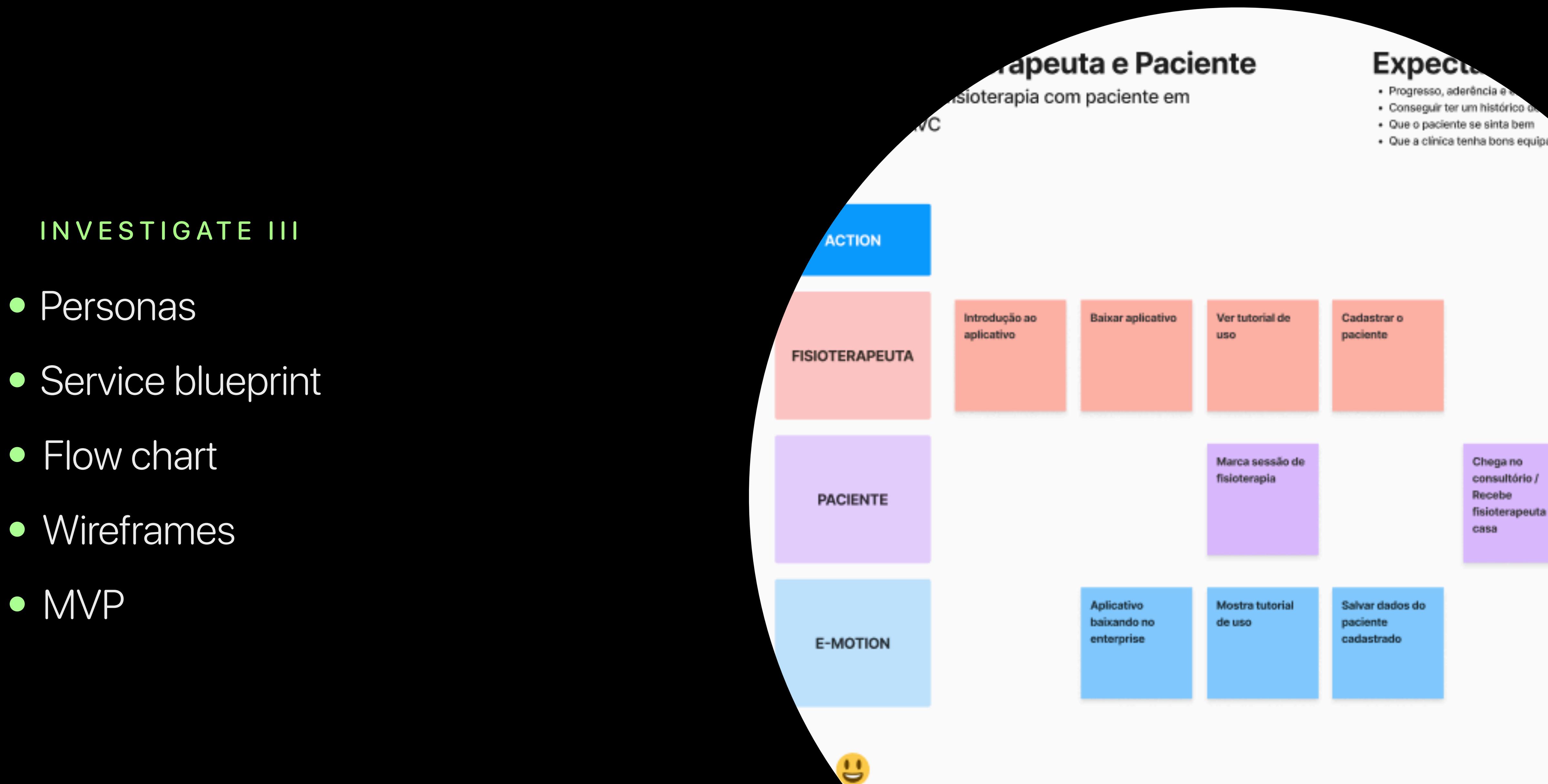
**the choreography roster**

we developed an app for

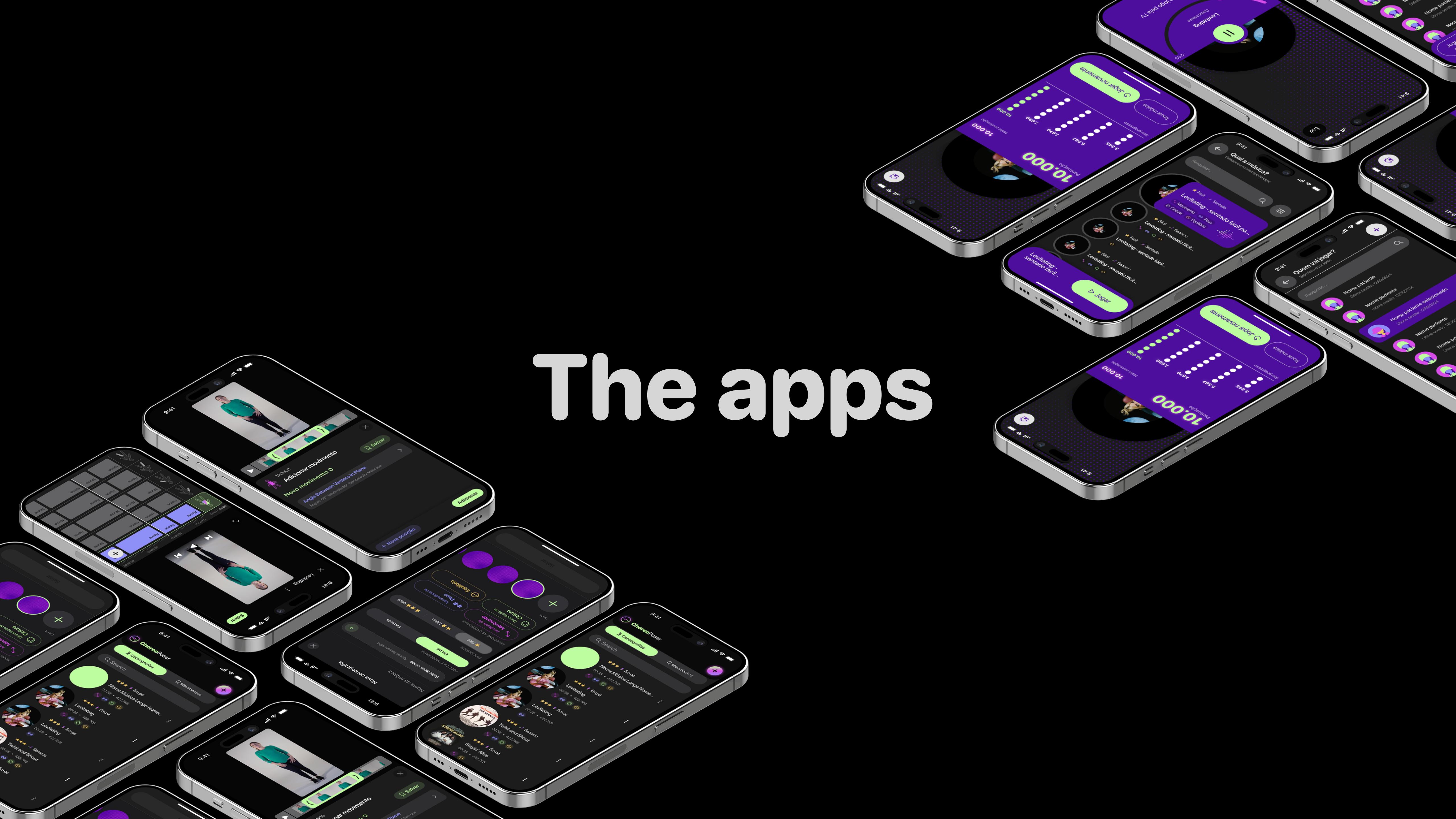
**creating new choreographies**

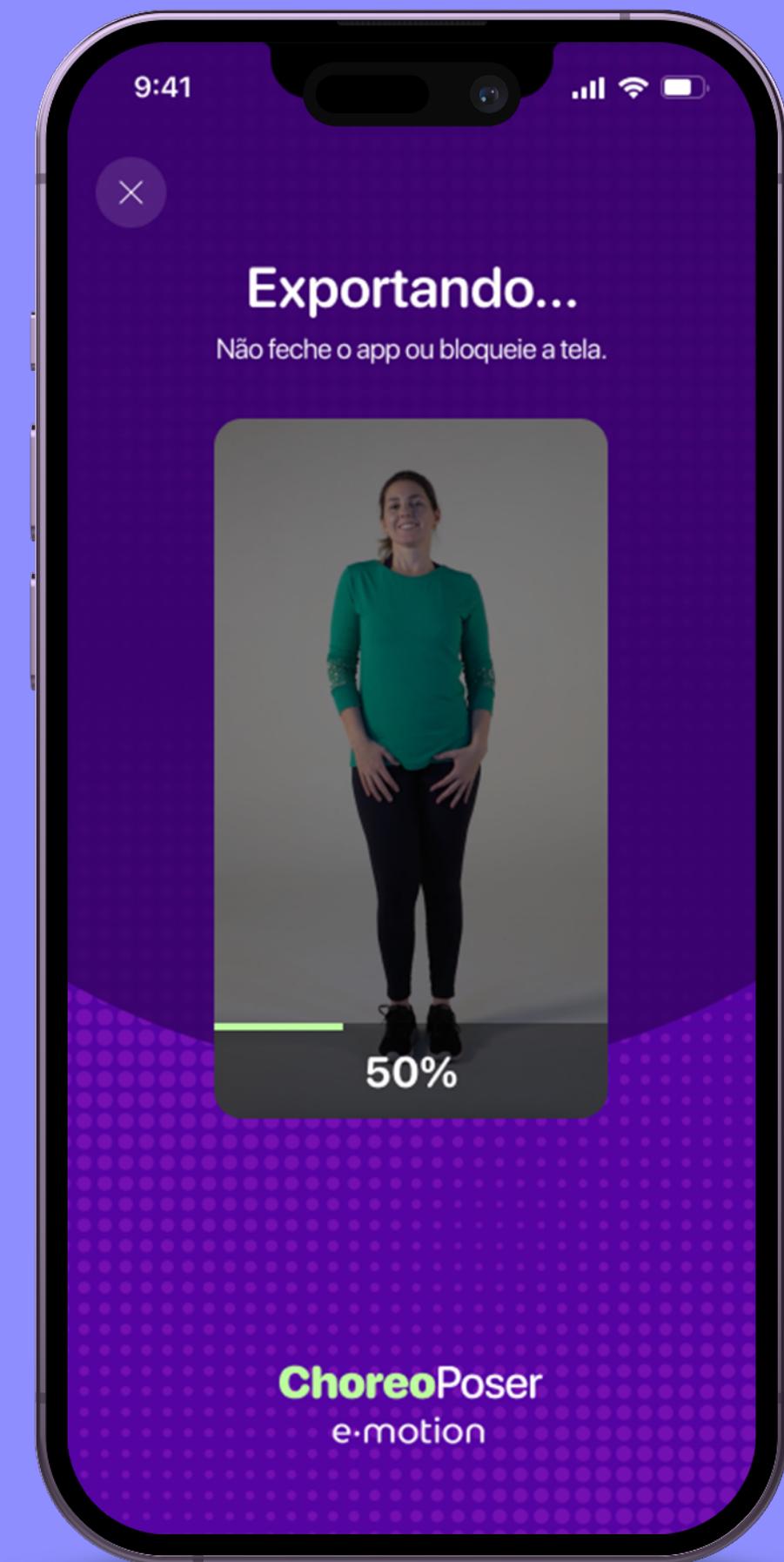


Develop a **serious digital game system**  
from a prototype based on **dance therapy and biomechanical data**  
without the use of markers, in order to  
**encourage the process of motor rehabilitation of stroke victims**



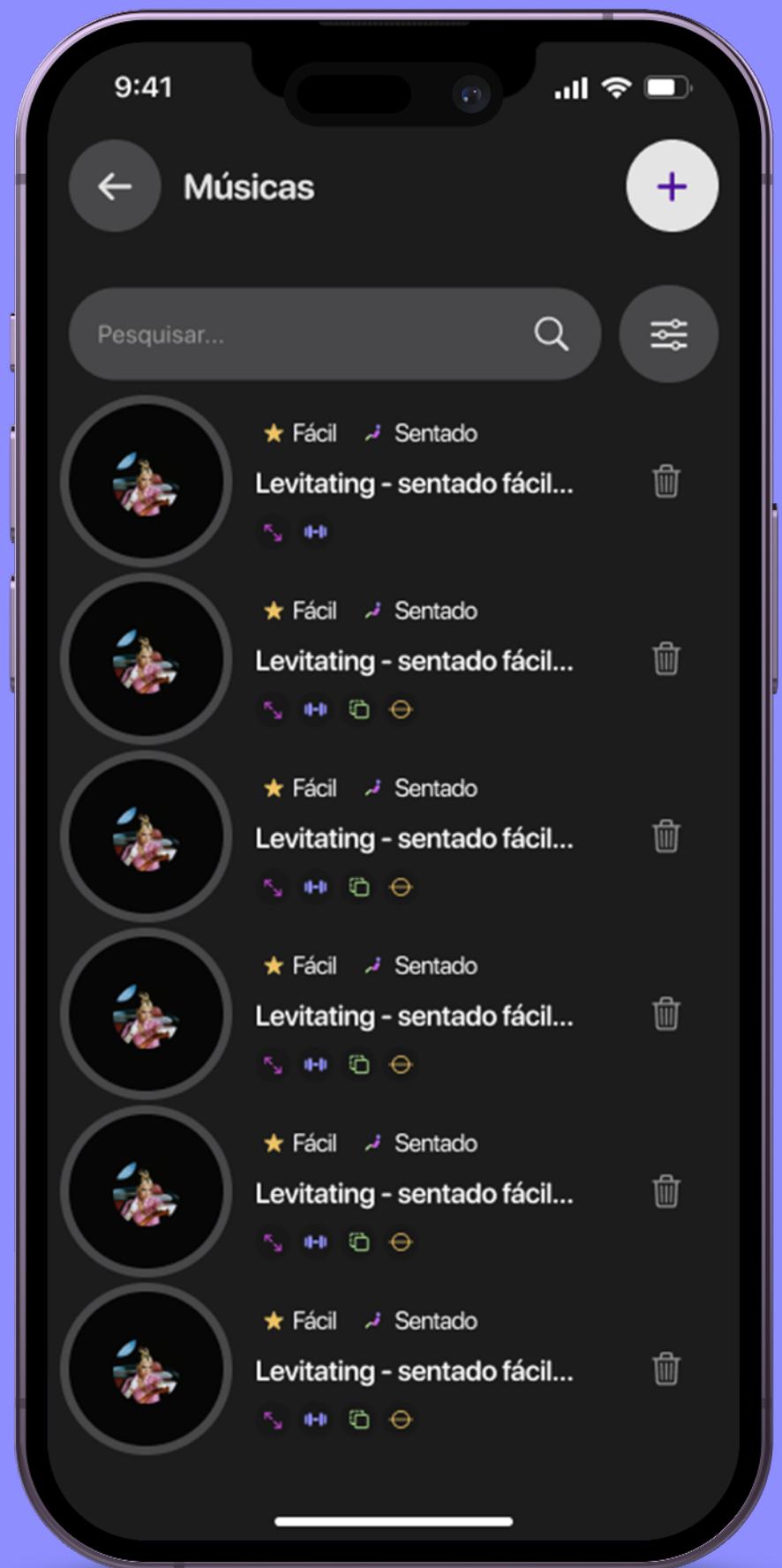
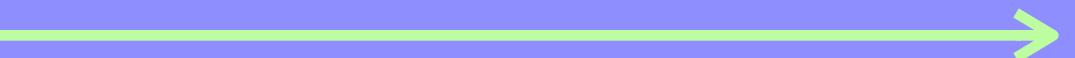
# The apps





ChoreoPoser

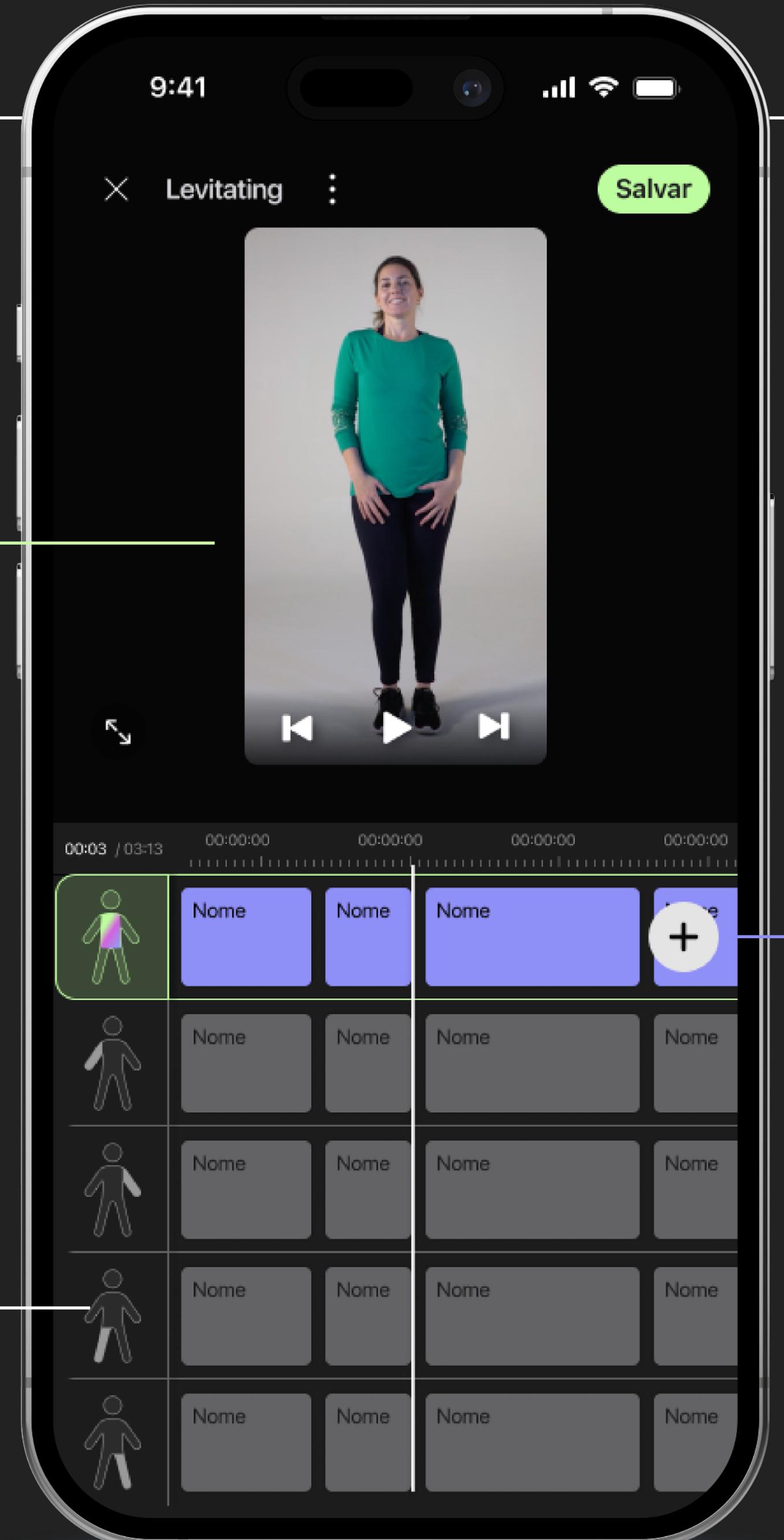
Choreographies created in  
**ChoreoPoser** are exported  
to **e-motion**



e-motion

Import a video

**6 months** reduction to  
only a **few hours** to create  
a new choreography



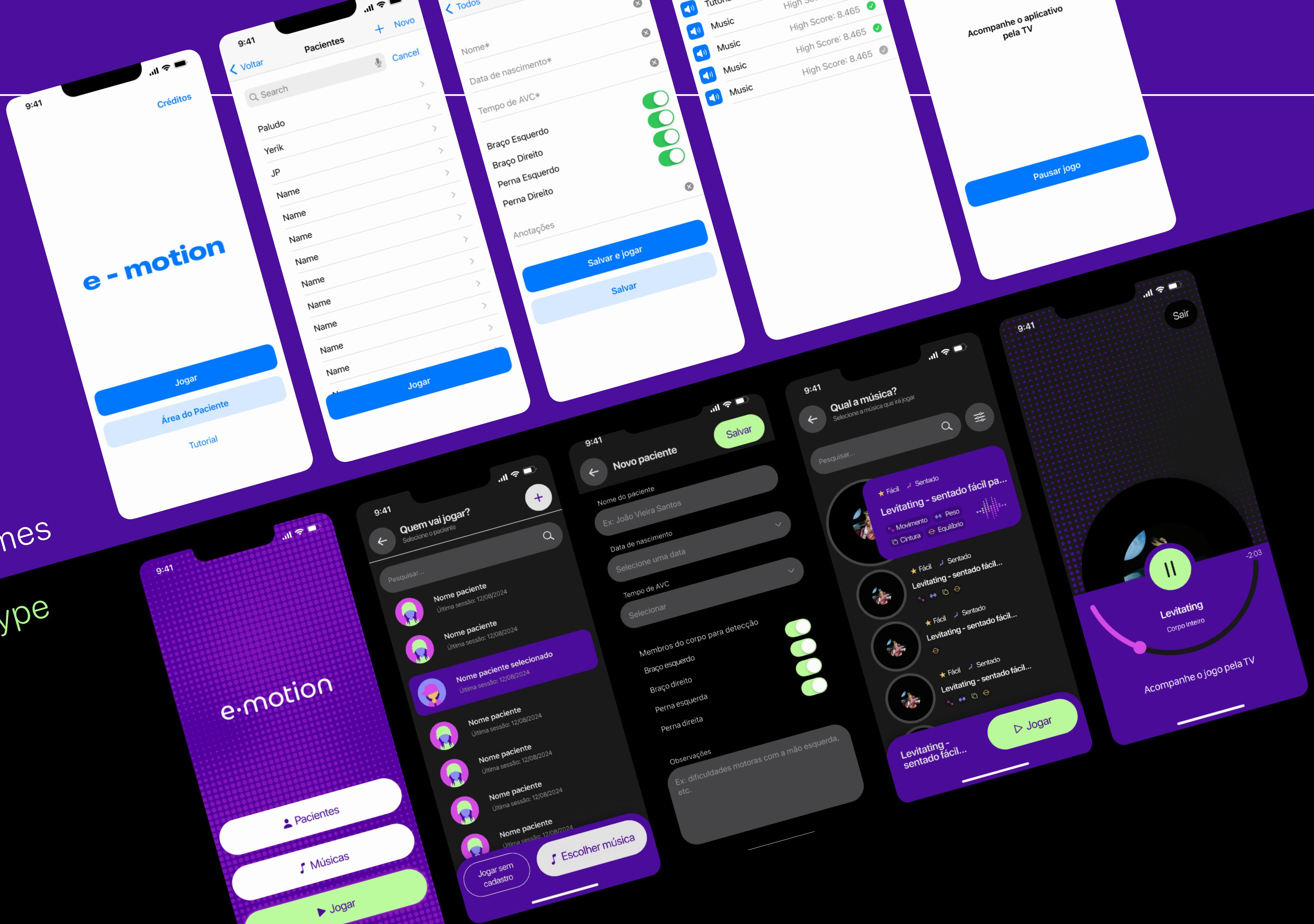
Create and add the movements  
you want to identify

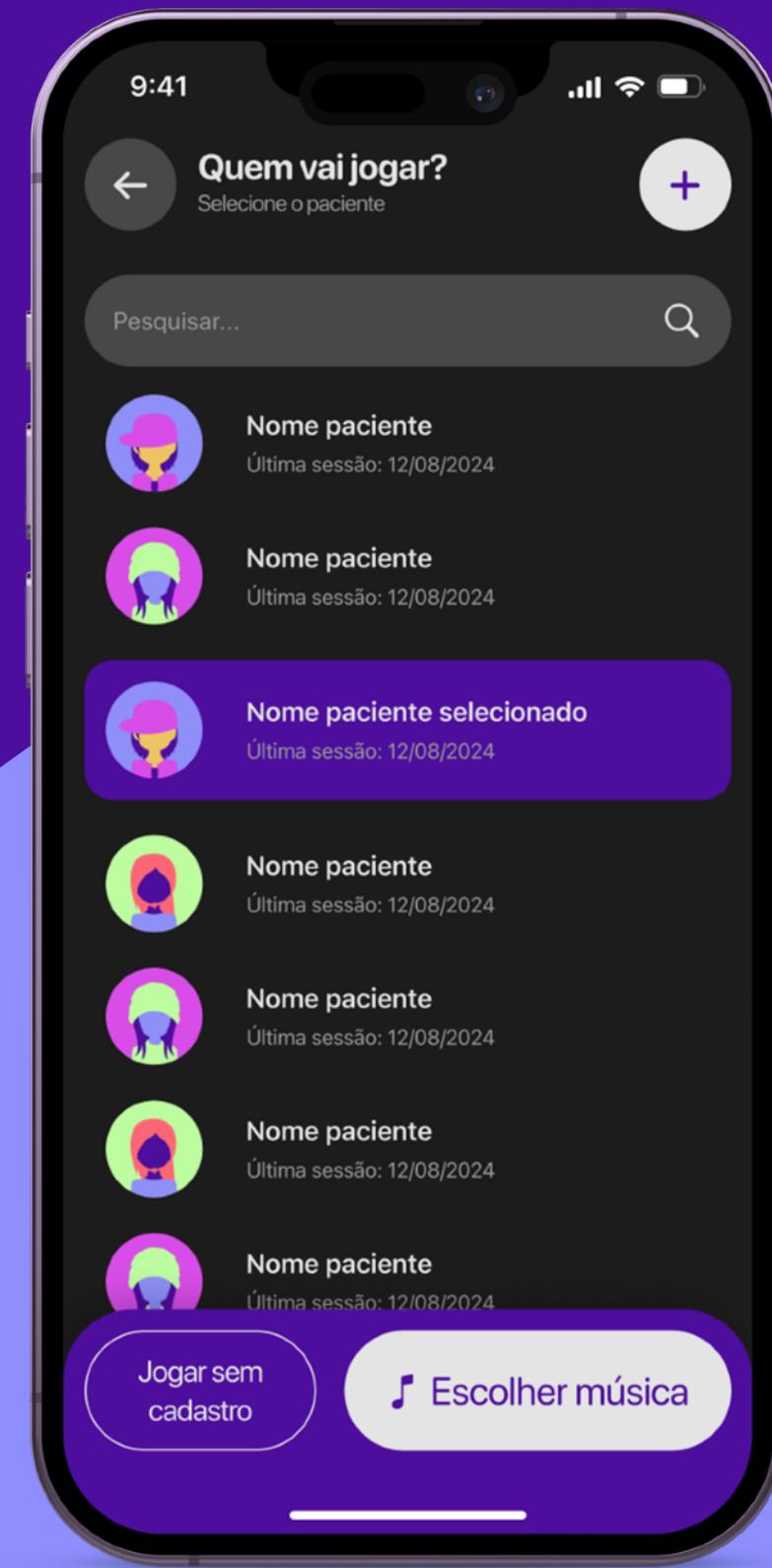


e.motion

# E-motion

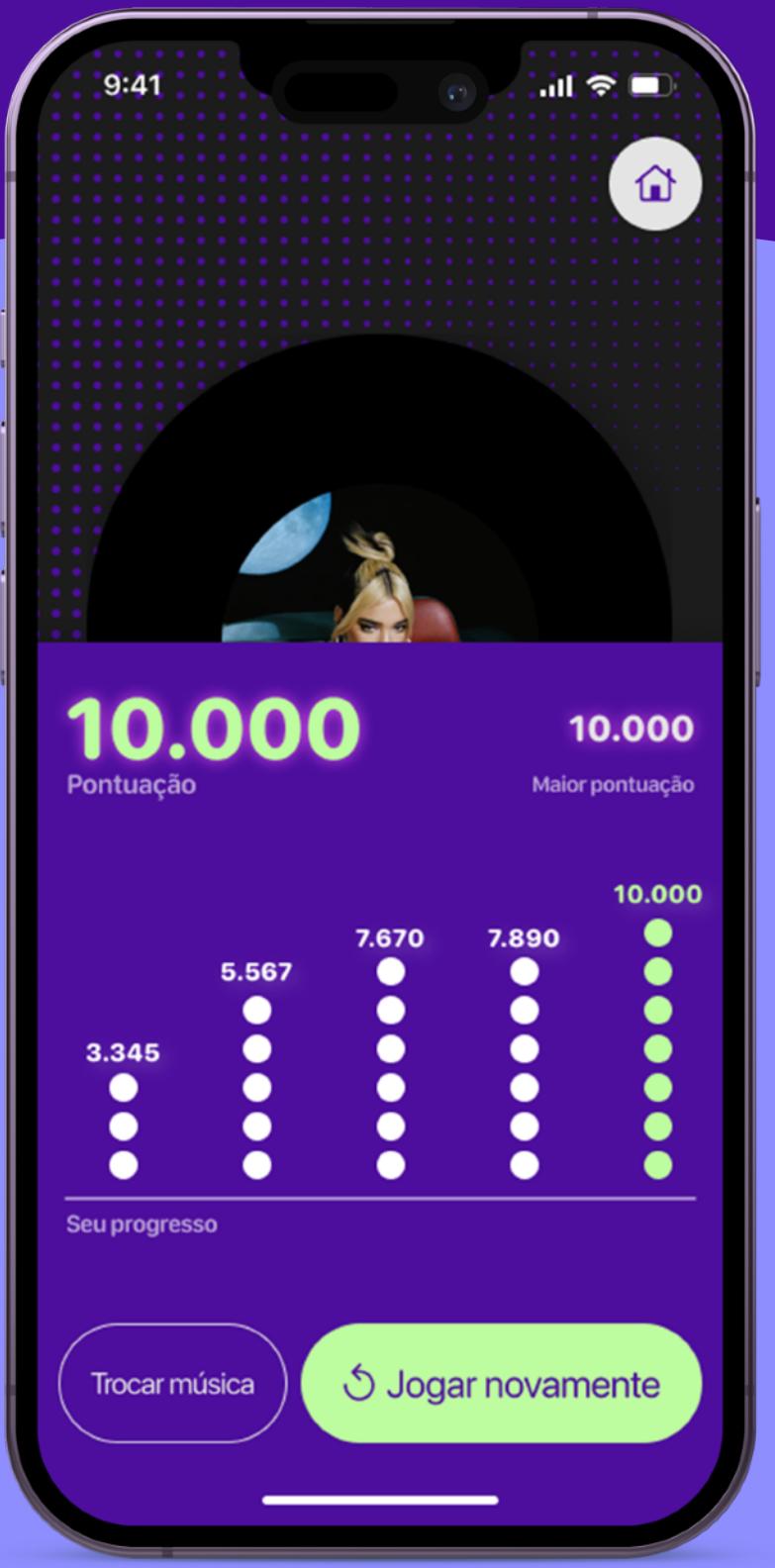
Wireframes  
Prototype





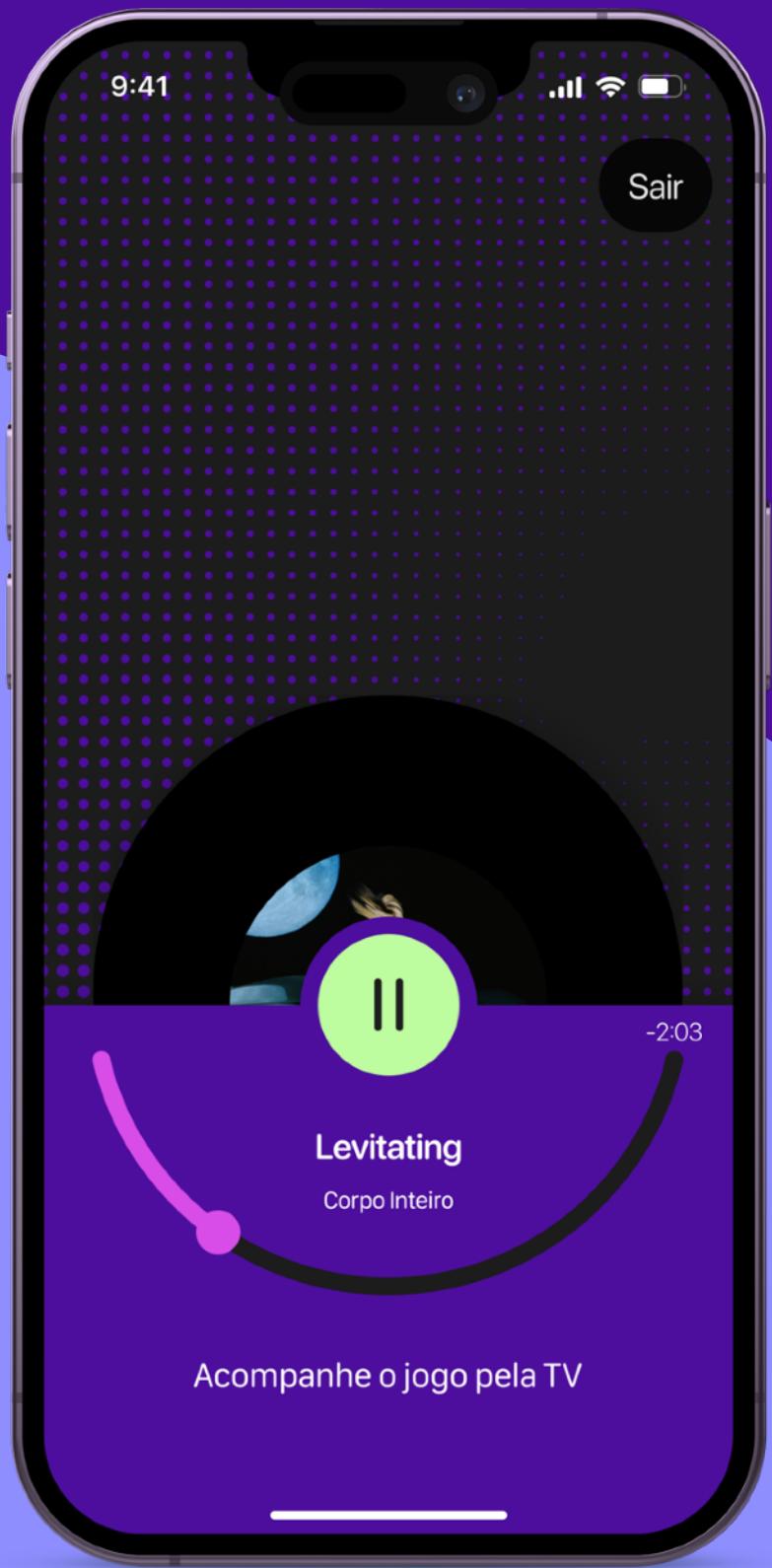
## Patient Records

Keeping all the important information



## Progress Tracking

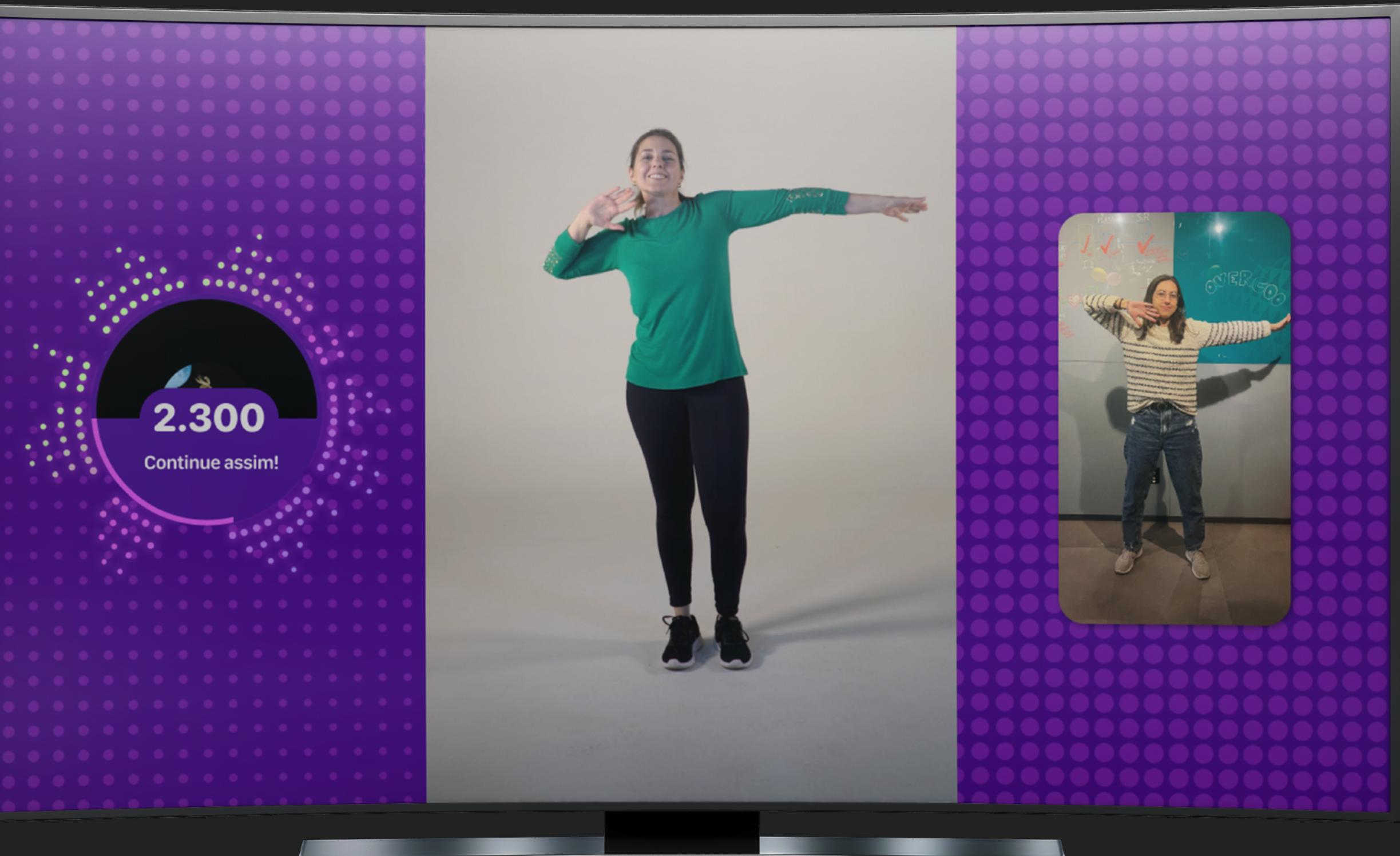
To assess improvements over time



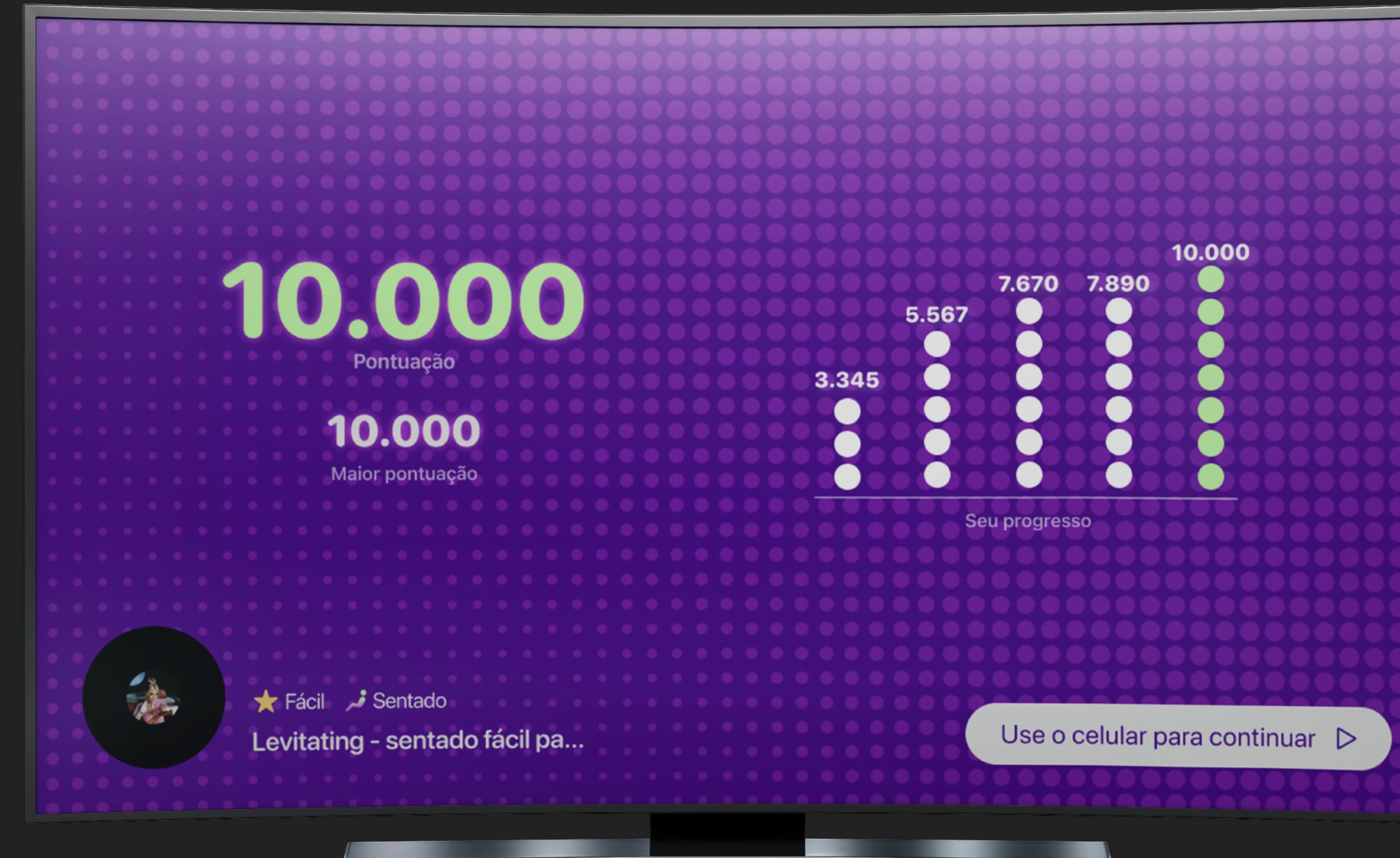
## Multi-screen

The best of both worlds

## Tv connection



While playing



After playing



## Things we have succeeded in

- We were better coordinated to work in parallel
- Our time estimates were correct



## Things we had difficulties with

- Our apps requires a lot of moving parts before we can test it with users
- We didn't understand SwiftUI entirely, mainly structs vs classes

## Next steps

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Create a brand that  
encompasses the  
e-motion universe



Test with physical  
therapists and patients



Publish the app  
on App Store

# Thank you



Developer  
Academy