

## **Human Computer Interaction**

### **PlanItFit**

### **First Prototype and Heuristic Evaluation**

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**Group 6 Class 9**

Report presented within the scope of the  
Human Computer Interaction course.

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# Chapter 1

## Project Abridged Description

In the realm of fitness innovation, our project stands as a beacon of progress, introducing a groundbreaking web TV app poised to revolutionize home-based workouts. This chapter delves into the abridged description of our venture, shedding light on the core elements that set us apart. We base our approach on the fusion of customizable training programs with cutting-edge sensor technology, elevating the user experience to unprecedented heights. Through meticulous attention to detail and a commitment to flexibility, we have crafted a platform that not only caters to diverse fitness goals but also adapts greatly to individual preferences and schedules. Join us as we forge a new path through our distinctive functionalities, designed to redefine the fitness landscape and usher in a new era of personalized and interactive well-being.

### 1.1 Elevated User Experience Through Distinctive Functionalities

In our unwavering commitment to setting our app apart, we have meticulously crafted essential features designed to enhance the user experience. Below, we present a comprehensive breakdown of our key functionalities.

#### 1.1.1 Tailored Account Personalization

Our platform prides itself on a heightened sense of personalization. Beyond basic details such as name, age, and preferred language, individuals can curate their accounts to a remarkable degree.

When it comes to shaping their workout experience, users wield significant flexibility. They can fine-tune their preferences to ensure that the curated content aligns precisely with their choices. This customization spans an extensive array of workout categories, encompassing everything from yoga and pilates to home-based gym routines and beyond.

Moreover, users hold the power to define the duration of their workouts, setting both minimum and maximum time limits. This wide-ranging customization allows them to tailor the time spent on each workout, granting them unparalleled control over their fitness routines. This adaptability ensures that the platform perfectly integrates with their unique preferences and schedules.

### **1.1.2 Precision in Personalized Training and Effort Measurement**

In addition to the personalized video content on each user's homepage, our platform employs sophisticated algorithms that continuously learn and adapt to individual preferences. The user's age, chosen categories, and preferred time frame serve as the foundation for a dynamic content recommendation system, ensuring that the videos presented align with their evolving fitness goals and interests.

The integration of cutting-edge infrared and motion sensors represents a groundbreaking leap in the realm of interactive fitness. These sensors work in tandem to monitor users' movements with unparalleled precision, allowing our platform to gauge the effectiveness of their exercises. By capturing real-time data on body temperature and heart rate, our system goes beyond traditional fitness tracking, providing users with immediate and detailed insights into the physiological impact of their workouts.

Imagine receiving instant feedback on the intensity of your exercise routine, with personalized recommendations for optimizing your performance based on your body's response. Whether you're pushing your limits in a high-intensity interval training session or engaging in a calming yoga practice, our platform adapts to your unique needs, offering guidance that evolves with your fitness path.

This innovative approach not only fosters a sense of accountability but also pushes users to make informed decisions about their health and well-being. The personalized feedback serves as a virtual fitness companion, helping users refine their techniques, set realistic goals, and track their progress over time.

Furthermore, the data collected from these sensors contributes to ongoing research and development, enhancing our understanding of individualized fitness requirements. This commitment to innovation ensures that our platform remains at the forefront of the fitness industry, continually refining its capabilities to meet the diverse needs of our users.

In summary, by blending personalized video content with state-of-the-art sensor technology, our platform redefines the fitness experience. It goes beyond conventional workout platforms, providing users with not just a collection of exercises, but a comprehensive and adaptive fitness solution that responds to their unique physiology and goals. Welcome to a new era of fitness where every movement is an opportunity for growth, guided by the precision of cutting-edge technology.

### **1.1.3 Post-Workout Insights**

Giving our users a personalized fitness experience, our platform integrates their workout preferences into their accounts. Whether it's the desired duration of each session or the frequency of their workouts, individuals have the capability to fine-tune their fitness routine according to their unique goals and lifestyle.

After each workout session, our platform goes beyond the ordinary by providing users with a detailed and insightful post-workout report. This comprehensive report serves as a testament to their dedication and progress, offering a consolidated view of performance metrics and noteworthy achievements. It's more than just numbers – it's a celebration of milestones reached and goals surpassed.

But our commitment doesn't stop there. We understand that a truly holistic fitness

journey requires continuous improvement. That's why our post-workout report doesn't just stop at showcasing accomplishments; it also delivers tailored recommendations for ongoing enhancement. These personalized insights are designed to guide users on their fitness goals, suggesting adjustments and modifications that align with their evolving goals.

In essence, our platform isn't just a tool for tracking workouts; it's a dynamic companion that adapts to the unique needs of each user. By seamlessly integrating preferences, delivering comprehensive post-workout reports, and offering tailored recommendations, we ensure that every step of the fitness progress is a step towards a healthier, stronger, and more fulfilled life.

# Chapter 2

## Prototype's Wireflow

### 2.1 Account Personalization

To customize their account, users can navigate to the menu and choose to access their account. Here, they have the opportunity to input personal details such as their name and age, and choose their preferred language for the app.

Users can also personalize their workout experience. Specifically, they can determine the duration of their workouts and select preferred workout categories. The wireframe below illustrates this capability. By accessing their account through the menu, users can incorporate weights into selected categories alongside pilates, yoga, and gym workout. This is achieved by utilizing the "Add More" button, followed by selecting the specific category they wish to add.

This level of customization not only enhances user engagement but also aligns perfectly with the app's core objective of delivering personalized and effective workout suggestions.

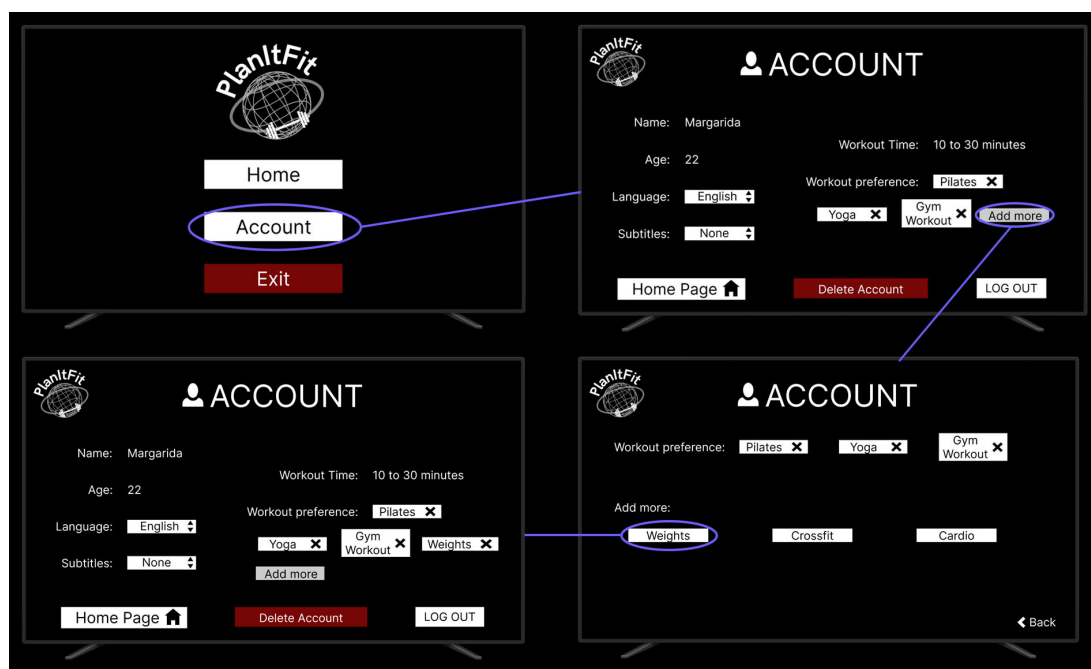


Figure 2.1: Personalize Account

## 2.2 Precision in Personalized Training and Effort Measurement

To access personalized video suggestions based on their preferences, users can navigate to the Home Page by clicking the dedicated button. Here, they can find curated workout videos tailored to their individual choices. Upon selecting a video, their workout begins.

In our pursuit of creating an informative and personalized experience, we've incorporated not only the workout video but also a detailed description of each exercise on the side. A notable innovation of our app is the real-time display of the user's heart rate and body temperature during the workout. This feature enables us to gauge if the user is exerting more effort than recommended and analyze their performance accordingly.

To provide users with flexibility, we've included a "Hide Description" button. This allows users to focus solely on the effort measurements and the video, providing a customizable experience that caters to individual preferences.

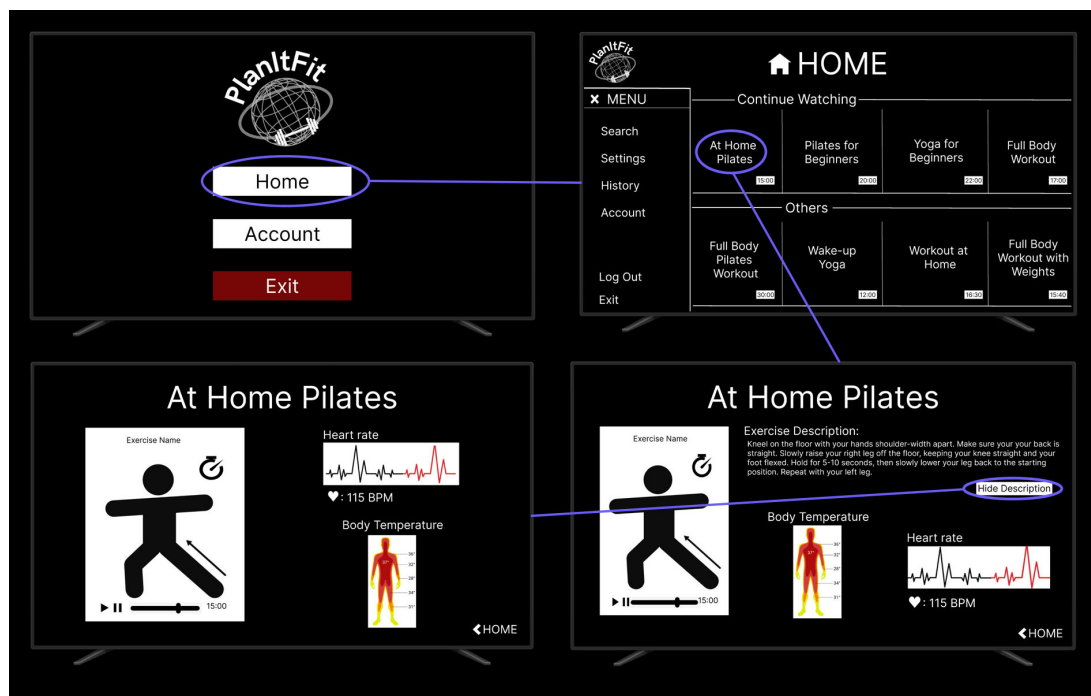


Figure 2.2: Personalized Videos and Effort Measurement

## 2.3 Post-Workout Insights

To receive the workout report, the user begins by selecting a workout video from the options displayed on their Home Page.

Post-workout, the user can click on the workout image, presenting them with the option to either view the detailed report of the completed workout or return to the Home Page. Opting for the first choice grants the user access to comprehensive insights into their workout session. However, it's important to mention that in the final version of the app, this additional step of clicking on the workout image to reach the end of the workout would be eliminated. As the workout concludes, the options to view the report or return to the Home Page would automatically appear.



This streamlined process ensures that users can effortlessly track their progress and learn valuable information about their fitness journey.

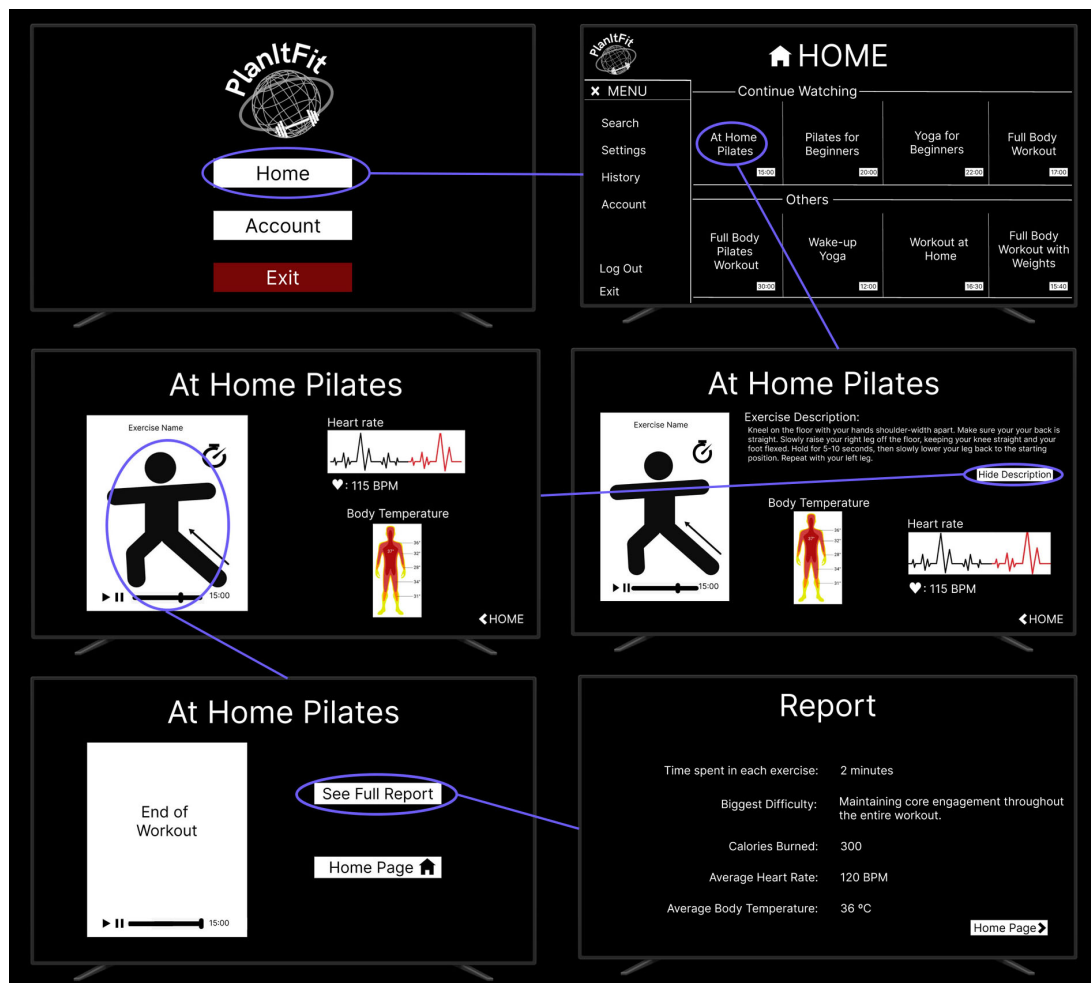


Figure 2.3: Receive Report

# Chapter 3

## Heuristic Evaluation Results

Our heuristic evaluations were conducted by groups 2 and 5.

In this section, we will expand on their conclusions. The complete document that was brought to us is in the appendix A of this documents.

### 3.1 Missing Button to return to Home page after start of training session

Both groups pointed out this design failure (check Figure 3.1), and gave it the same severity, 3/4. According to them, the Violated Heuristics were the following: **Visibility of System Status**, **User Control and Freedom**, **Consistency and Standards** and **Flexibility and Efficiency of use**.

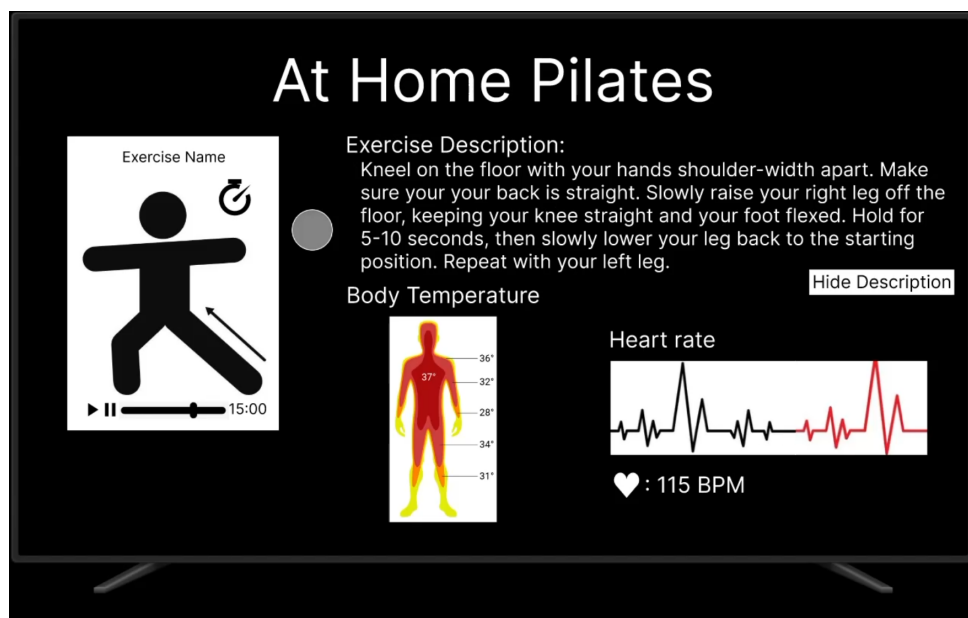


Figure 3.1: Start of training session without the back button

**Our Point of View:** This point was very useful for our application to be more usable. With that, we totally agree and have changed the application in order to make the user experience with the application easier, as we can see in Figure 3.2.

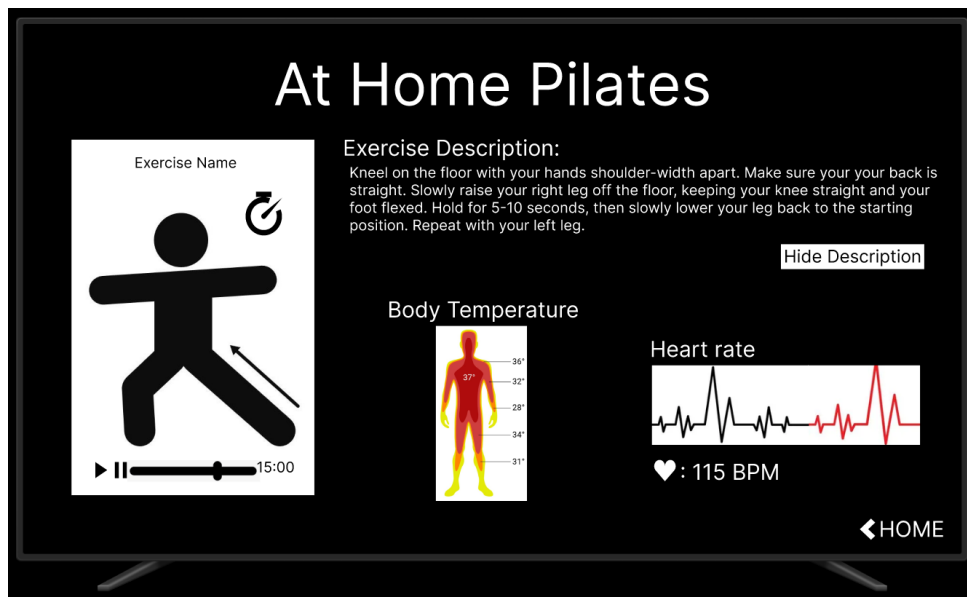


Figure 3.2: Revised Start of training session with the back button

### 3.2 Missing customization of user account information

Group 2 pointed out that it was not possible to alter the account info in the dedicated page. They attributed this failure a severity of 2/4. According to them, the Violated heuristics were **User Control and Freedom** and **Flexibility and Efficiency of use**.

**Our Point of View:** Our opinion converges with this, even though we have never thought about it. This error had to be corrected because it could violate the requirements that were made for our application. Therefore, we have already implemented it, as seen below.

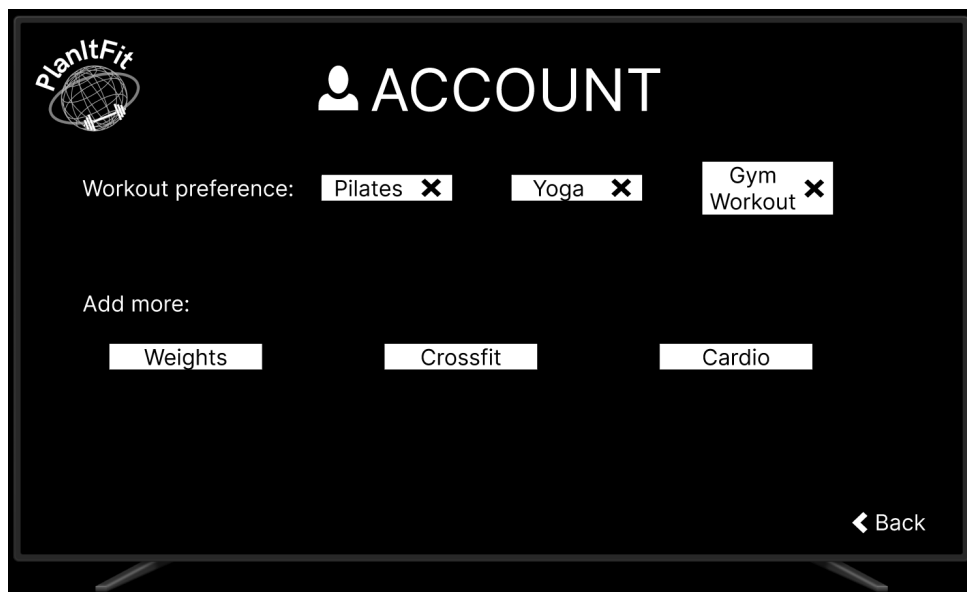


Figure 3.3: Customize Account

### 3.3 Outdated Overall Design

Group 2 considered our design outdated, and gave this violation a severity of 2/4. According to them, the **Aesthetic and Minimalistic Design** heuristic was violated. In figure 3.4 it is possible to see the homepage as a representation of the overall design of our application.

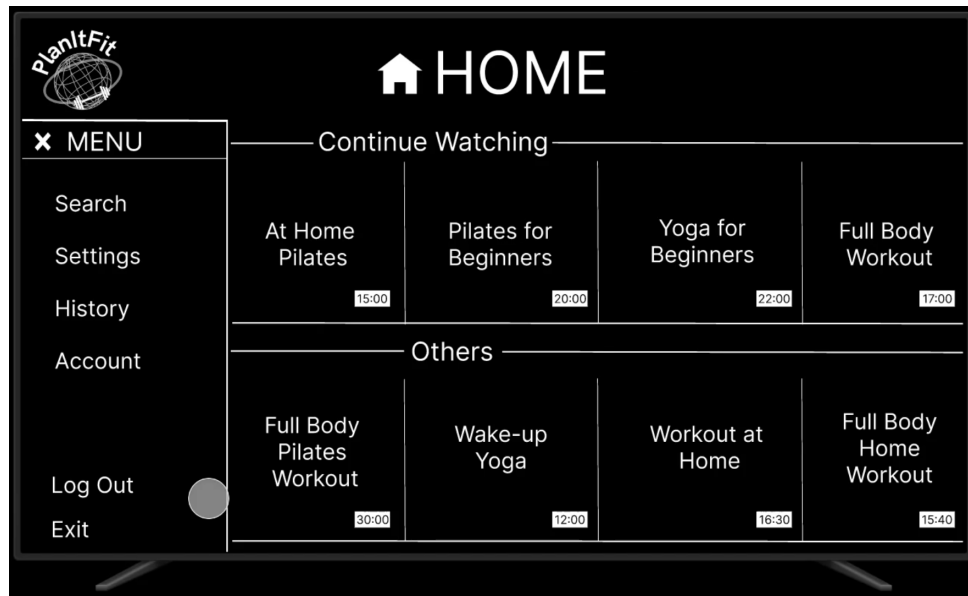


Figure 3.4: Homepage of the application

**Our Point of View:** We agree with this evaluation. However, we think that it was not the intent of this iteration of the project. This iteration was focused on a Low fidelity prototype and the design was a little out of scope of this iteration

### 3.4 Inability to return to exercise in report screen

Group 5 suggested we add a button to return to and repeat the corresponding exercise, in the report screen. They attributed a severity of 3/4 and considered we violated the **Flexibility and Efficiency of use** heuristic.

**Our opinion:** We disagree with this, and will not make this change because of two points:

- This does not apply to the scope of our project.
- If a user wants to do so, they can go back to the main menu and repeat the process.

### 3.5 Overshadowing of the Exercise Video

Group 5 considered that the exercise video was overshadowed by other elements on the screen, such as the heart rate. This violation was given a severity of 4/4, and violates the **Aesthetic and Minimalistic Design** heuristic.

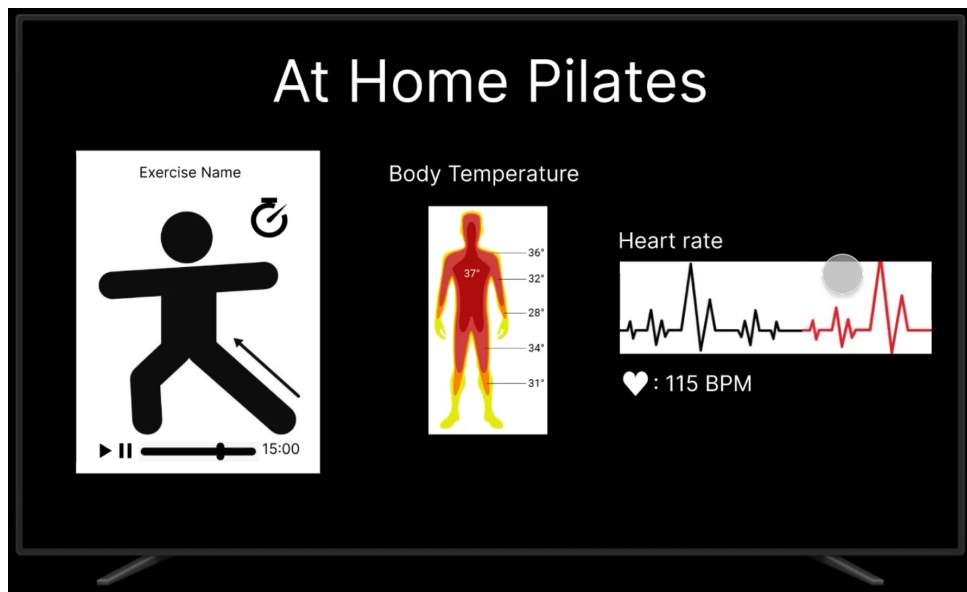


Figure 3.5: Application running an exercise

**Our Opinion:** We agree with this appointment and we have already made changes to guarantee that the focus of our application, the exercise, is highlighted as it must be. The alterations can be seen in the Figure below.

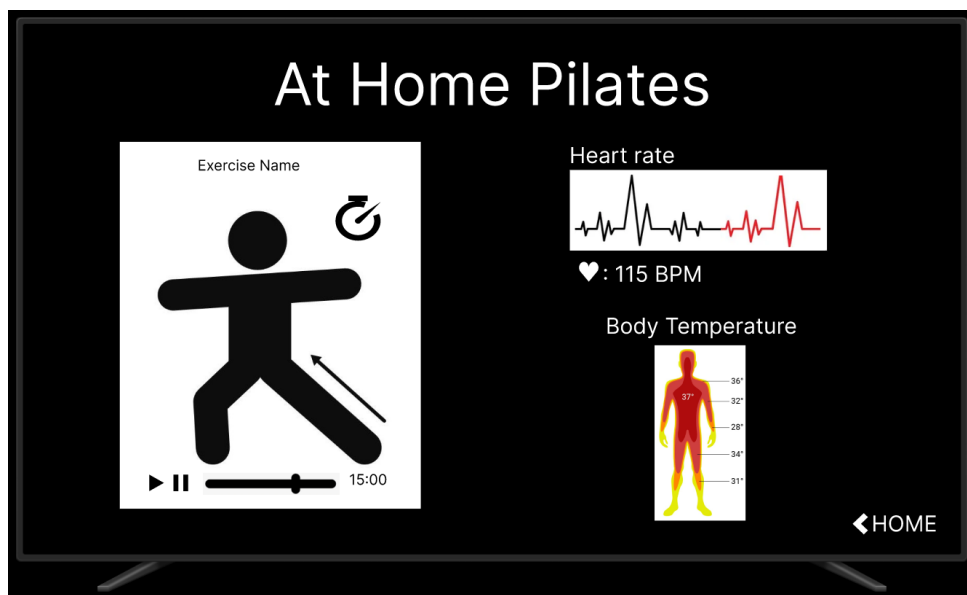


Figure 3.6: Revised Application running an exercise

# Chapter 4

## Corrections to Perform in Phase 3

Before discussing what we will improve for the next phase, we would like to point out what we have already fixed, using the results of the heuristic evaluation.

### 4.1 Things that were previously changed

Corrections that have been performed with Heuristic Evaluation feedback:

- **Back button:** We have included a dedicated button to allow users to easily navigate back to the previous page
- **Customizables Parameters:** This will allow empowering users to modify their account settings according to their preferences.
- **Highlight the training video:** This ensures it garners appropriate attention within the interface.

### 4.2 Things for the next iteration

Corrections that will be performed on the next iteration:

- **Focus on Design:** For the next phase, we will work on improving our design, making it more aesthetically pleasing and guaranteeing it follows every heuristic. This also lead us into our next point.
- **High Fidelity Prototypes:** With a higher focus on design, we will be able to make a high-fidelity prototype, that will display every feature of the app in a pleasant manner.

# **Appendix A**

## **Heuristic Evaluation**

Throughout the progression of our project, we extended invitations to other groups, specifically Group 2 and Group 5, to conduct a heuristic evaluation of our work. The ensuing evaluation yielded the following results:

# Heuristic Evaluation Report

Class Nr.: LEIC09 - 09/11/23 - Thiago Sobral

Group evaluated: 06 - PlanItFit

By group: 02

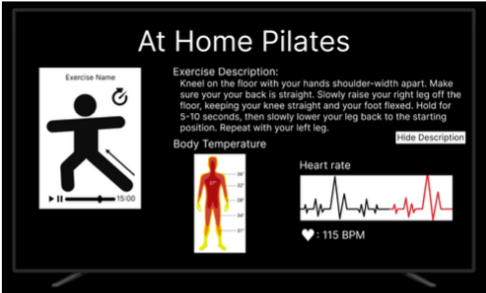
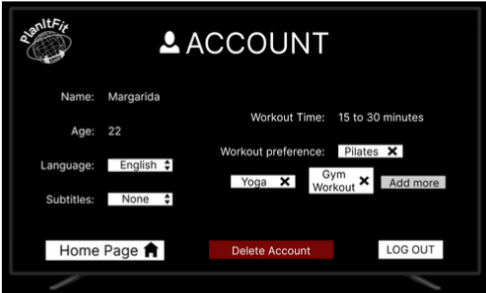
Problem #	Issue (include screenshot)	Heuristic(s)	Severity (1-4)
1	<p>After entering a class is not possible to go back to the menu's class</p> 	1, 3, 4, 7	3
2	<p>It is possible to open the account page, but it is not possible to edit the user account info</p> 	3, 7	2

Figure A.1: Heuristic Evaluation from Group 2 - Page 1



3	Overall Design looks a bit outdated	8	2
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Figure A.2: Heuristic Evaluation from Group 2 - Page 2

# Heuristic Evaluation Report

Class Nr.: LEIC09 - Date - Thiago Sobral

Group evaluated: 06 - PLANITFIT

By group: 05


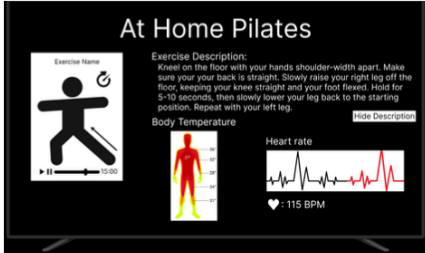
Problem #	Issue (include screenshot)	Heuristic(s)	Severity (1-4)
1	 <p>After doing the exercise and accessing their personalized report, the user does not have the opportunity to return and repeat the exercise.</p>	7	3
2	 <p>After accessing an exercise video, the user has no option to return to the home page, in case he regrets his choice of video.</p>	7	3

Figure A.3: Heuristic Evaluation from Group 5 - Page 1

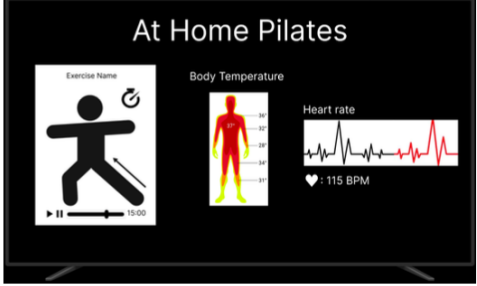
3	 <p>The video of the exercise is not given the spotlight it deserves, it shares the same dimensions as the complementary information about the body performance analytics.</p>	8	4
4			
5			

Figure A.4: Heuristic Evaluation from Group 5 - Page 2

# Appendix B

## Useful Links

There is a video with a sequence of steps in the wireframes. Check here: [https://drive.google.com/file/d/1HW2VTwNc2oMAg8ei6anrlCdDpNTWb1DM/view?usp=share\\_link](https://drive.google.com/file/d/1HW2VTwNc2oMAg8ei6anrlCdDpNTWb1DM/view?usp=share_link)

The prototype link in figma can be found here: <https://www.figma.com/proto/tcqt0TDSGdOVM2jXrHYDP1/Figma-basics?node-id=561-66&mode=design&t=12G24qIQ8EVuIQdO-1>