Kingdom of Saudi Arabia
Ministry of Education
Jouf University
College of Computer and Information Sciences

Software Engineering Department

Project User Interface Design

SWE 421

# WORKOUT APPLICATION

.

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# OVERVIEW

## 1.1 Abstract:

The Workout Application aims to develop a user-friendly and visually appealing application that assists users in their fitness journey. The project focuses on creating an intuitive user interface (UI) design to enhance user engagement and provide a seamless experience for individuals of all fitness levels. The application will offer a comprehensive range of workout programs and exercises, catering to various goals such as weight loss and overall fitness. The UI design will prioritize simplicity, ensuring that users can easily navigate through different sections of the application, access exercise instructions, and track progress. The project will incorporate design principles, including a clean and minimalist aesthetic, clear typography, and visually appealing graphics.

Overall, the project aims to create a user-centered and visually engaging application that motivates users to achieve their fitness goals.

## 1.2 Defining Usability And User Experience Goals

### 1.2.1 Usability Goals:

**1. Clear Exercise Instructions**

- **Importance**: Users should receive clear and concise instructions for each exercise, allowing them to perform the exercises correctly and safely.
- **Approach**: Include detailed written instructions, along with visual aids such as videos, for each exercise. Use a consistent format to present the instructions, including important details like proper form, equipment used, and variations for different fitness levels. Provide the option for users to replay or pause instructional videos during workouts.

**2. Seamless Progress Tracking**

- **Importance**: Users should be able to track their progress easily and accurately within the home workout app, enabling them to monitor their achievements, set new goals, and stay motivated.
- **Approach**: Clarify completed workouts, duration, calories burned, and other relevant metrics. Provide visual representations, such as graphs, to illustrate progress over time. Notify and remind users of upcoming workouts.

**3. Simplified User Interface:**

- **Importance**: The goal of a simplified user interface is crucial for a workout application, particularly one designed for home use. This is because individuals exercising at home often seek convenience and ease of use. A simplified user interface reduces barriers to entry, and improves user engagement.
- **Approach**: In our workout application designed for home use, we will achieve this goal by implementing a clean and uncluttered design with thoughtfully organized and visually distinct elements such as buttons, menus, and icons. This will guide users through the app effortlessly and provide them with a visually appealing and intuitive interface.

### 1.2.2 User Experience Goals:

**1. Engaging and Varied Workouts**

- **Importance**: The home workout app should offer a diverse range of engaging workouts to keep users motivated and prevent boredom.
- **Approach**: Include a library of workout routines with various styles, such as cardio, strength training, and yoga. Offer different difficulty levels and duration. Incorporate gamification elements, such as achievements to make workouts more interactive and enjoyable.

**2. Motivational Features**

- **Importance**: A workout app should inspire and motivate users to stay consistent with their fitness routines. Motivational features help users stay engaged, track their progress, and reach their goals, ultimately enhancing the overall user experience.
- **Approach**: Incorporate features like progress tracking, achievement badges, and reminders to keep users motivated. Provide visualizations of progress, such as graphs, to showcase achievements and improvements over time.

3. **Intuitive Navigation**

- **Importance**: Intuitive navigation is crucial for a workout app as it allows users to easily find and access the features and content they need. It eliminates confusion and frustration, enhancing the overall user experience .
- **Approach**: To meet this goal, the app should have a clear and well-organized menu structure, intuitive icons, and consistent navigation patterns. A search function and well-labeled categories can also help users quickly locate specific workouts or exercises.

4. **Seamless Integration with Wearable Devices**

- **Importance**: Many users rely on wearable devices, such as fitness trackers or smartwatches, to monitor their workouts. Seamless integration with these devices enhances the user experience by providing accurate and real-time data.
- **Approach**: We would ensure compatibility with popular wearable devices and enable seamless synchronization of workout data. Users can easily connect their devices to the application, allowing automatic tracking of metrics like heart rate, calorie burn, and steps during workouts.

# ESTABLISHING DESIGN REQUIREMENTS

## 2.1 Steps to Define Design Requirements

Defining our design requirements based on four steps:

1. **Defined the Problem:** First, we clearly understood the problem we wanted to solve. For our workout app, the problem was that there wasn't an easy-to-use and comprehensive platform for tracking workouts and helping users achieve their fitness goals.
2. **Collected Information:** Next, we gathered information to learn more about our users and the existing market. We talked to a few users, and studied other workout apps. This helped us understand what users needed and what features were already available.
3. **Analyzed Ideas:** We came up with lots of ideas for our app and thought about how they could solve the problem. Then, we carefully evaluated each idea to see if it was feasible and if it would make our app better. We considered things like how it looked, what it could do, and how it could be fun and engaging for users.
4. **Developed the Solution:** Once we had the best ideas, we started creating designs and sketches to visualize how it would look and work. We kept improving and refining our app until it was user-friendly and met the needs of our users.

## 2.2 Design Requirements

❖ There should be focused on the aged +16 and above, both male and female.

❖ There should be using a multimodal interface this type can affect how much users like to feel as reality.

❖ There should be an easy way to use the system in terms of initial registration, enrollment and frequent login.

❖ The possibility to get started and explore various workout components.

❖ The possibilities to search and navigate to workout programs within the system.

❖ GUI elements must be consistent in shape, color and easy to understand.

❖ There should be an easy way to browse the workout programs and interact with it.

❖ There should be an easy way to deal with workout by video.

❖ There should be an easy way to browse the progress report when choses some workout programs.

❖ There should be an easy way to choose what workout programs the users want and need.

❖ There should be an easy way to show a dashboard for the user when she/he successfully signs in by pares on the home button.

❖ There are possibilities to show a brief description about the workout program for users to review before making their selection.

❖ There are possibilities to navigate between light and dark mode.

❖ There should be clear vision on font size used in the UI, and the ability of users who have vision problems to choose the appropriate font size to be clearer.

❖ There should be seamless integration with wearable devices, to track and sync workout data, such as heart rate, steps, and calories burned, for a comprehensive fitness experience.

❖ There should be a visual indication, such as a checkmark sign, after the user finishes watching a video.

❖ There should be a message displayed to the user once they have finished all components of the workout, displaying the number of exercises completed, time completed, and calories burned.

❖ There should be the ability for the user to search for a specific workout.

## 2.3 Design Issues

Development of user interface for personal computers is easier than for mobile devices because of the following reasons:

- PCs support higher resolution
- PCs have a full size keyboard
- Development of a GUI of a mobile application for all platforms and resolutions at this time is a difficult task.
- The popular schemes are not applicable to mobile devices since they have a small screen, small keyboard and limited methods of navigation.
- System response time
- The “language” Here is actually denoting the words that are used in an application. While designing the application, with respect to selection of application words.
- GUI can seem to be more comfortable to the ‘Naïve Users’ as it uses images and graphics to represent different functionalities.

## 2.4 Resources

- User research.
- Studied other workout apps.
- Online design communities and forums.

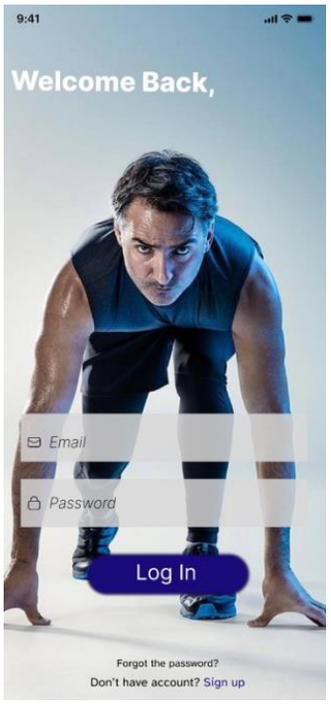
# ALTERNATIVES AND PROTOTYPING

## Iteration 1

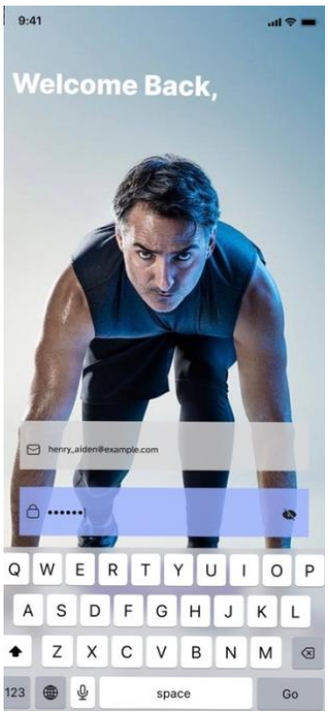
Landing Page


Sing Up - Log In Page


Log In Page

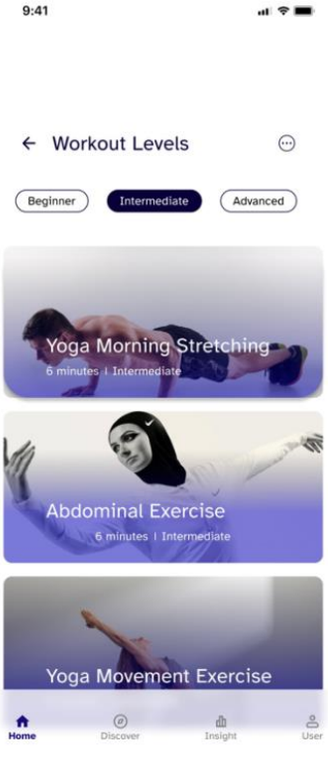



Log In Page

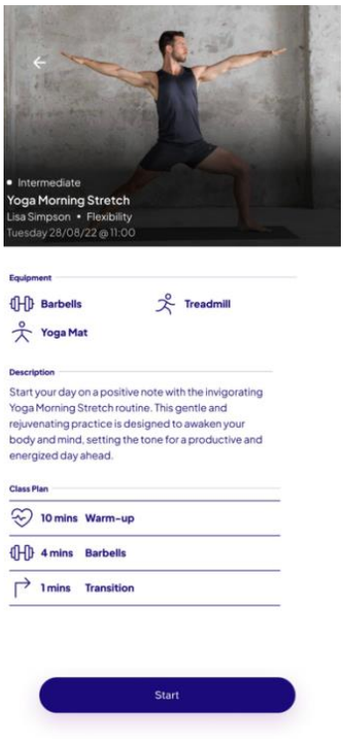



Home Page

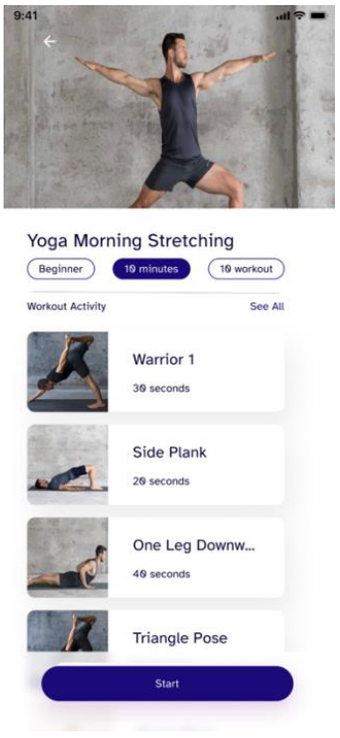

Workout Level Page



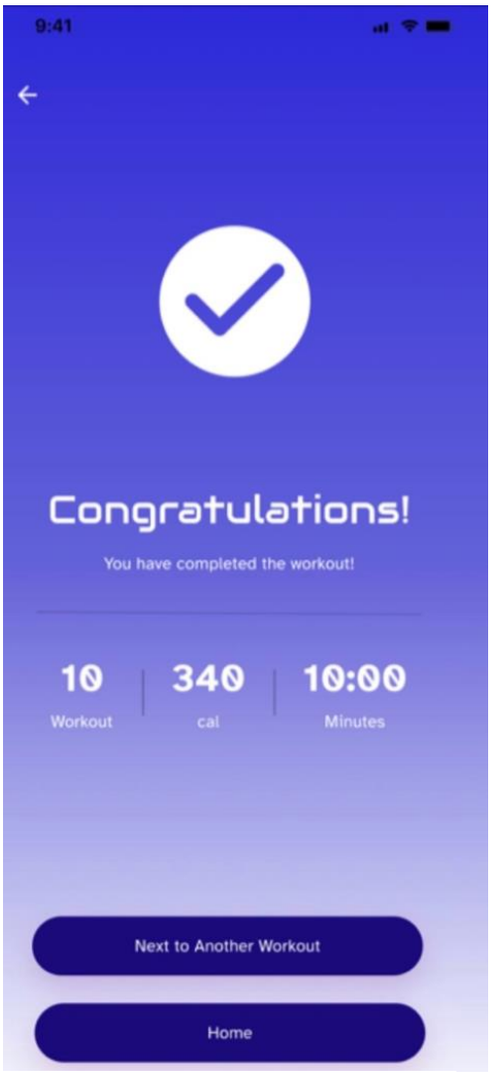

Workout Page



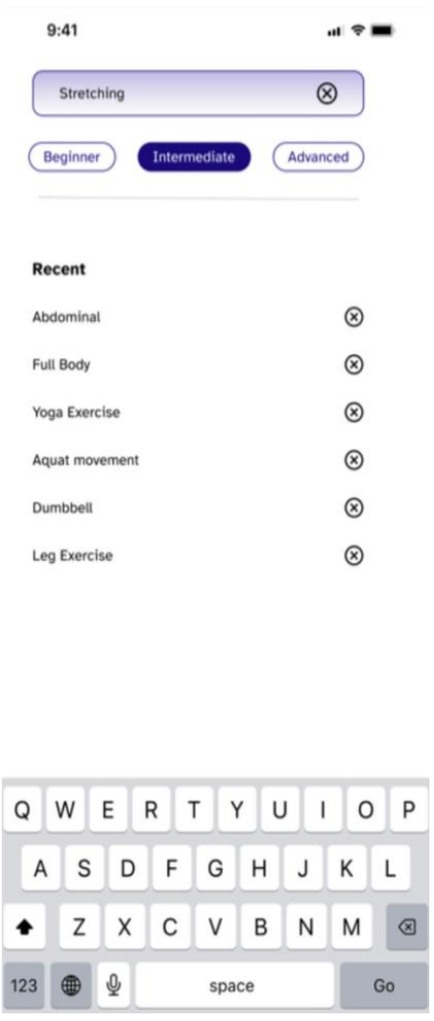

Workout Page



Congratulations Massage Page

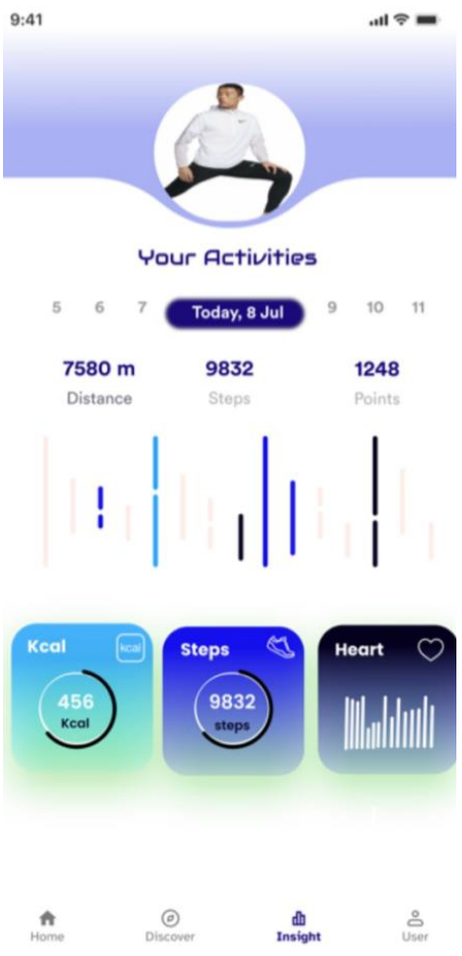


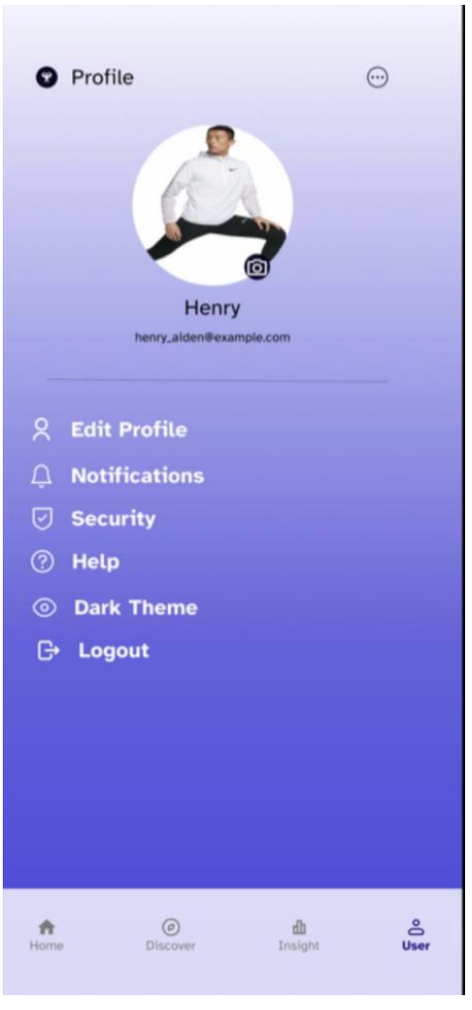

Discover Page










Insight Page

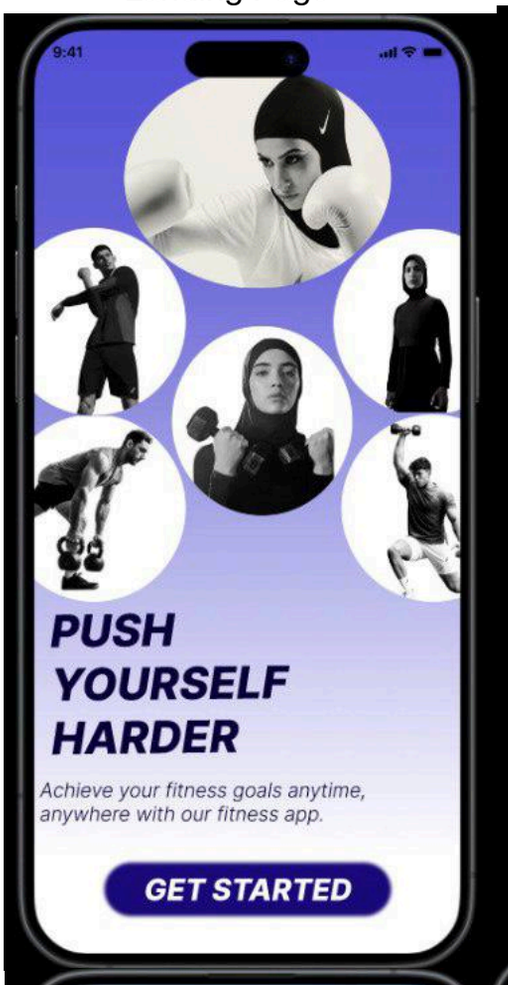
User Page

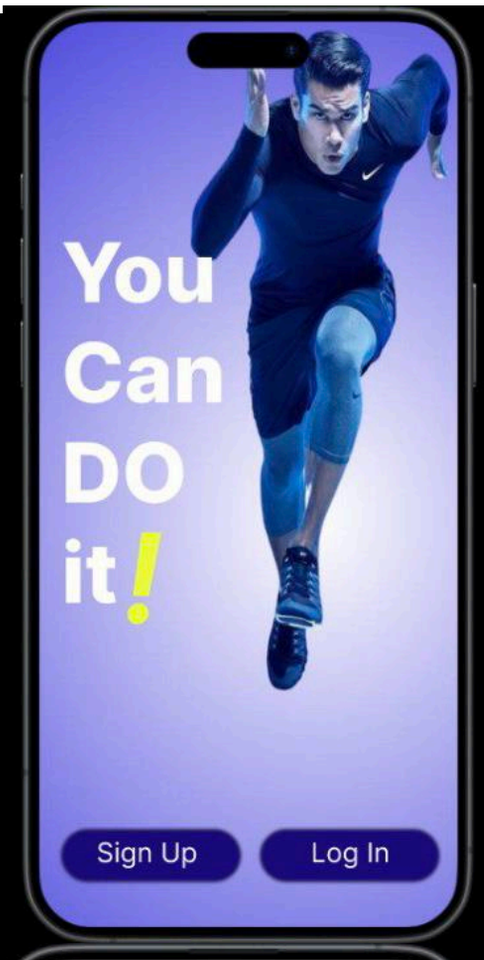
# Final Prototype

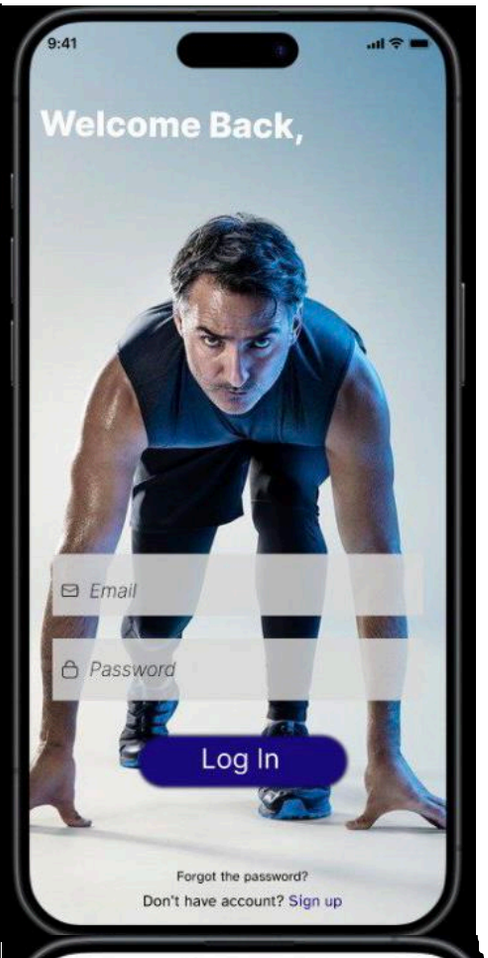
Landing Page

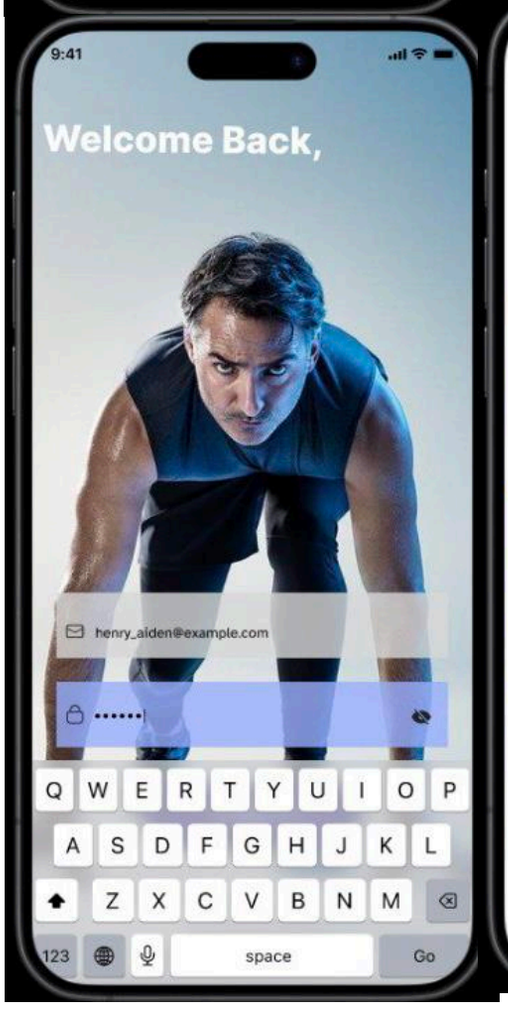
Sing Up - Log In Page

Log In Page

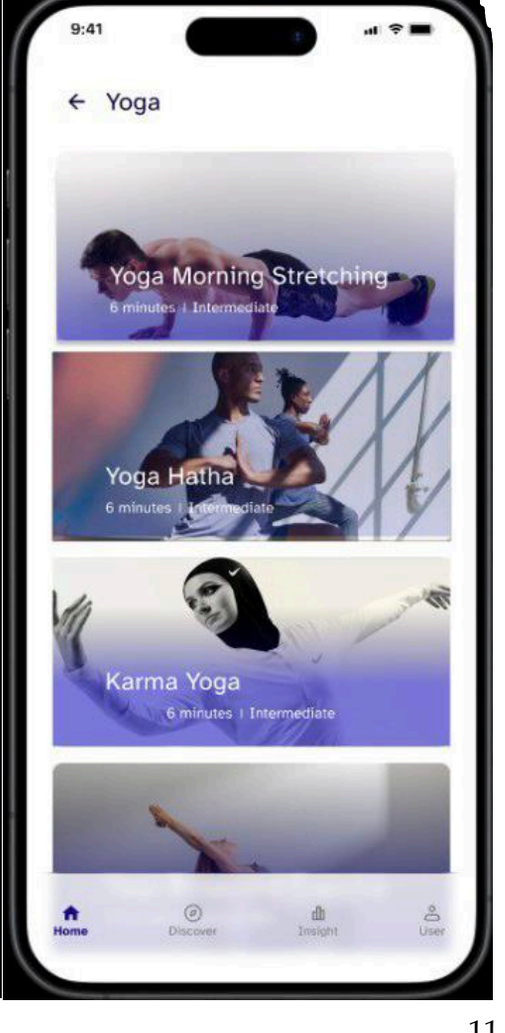




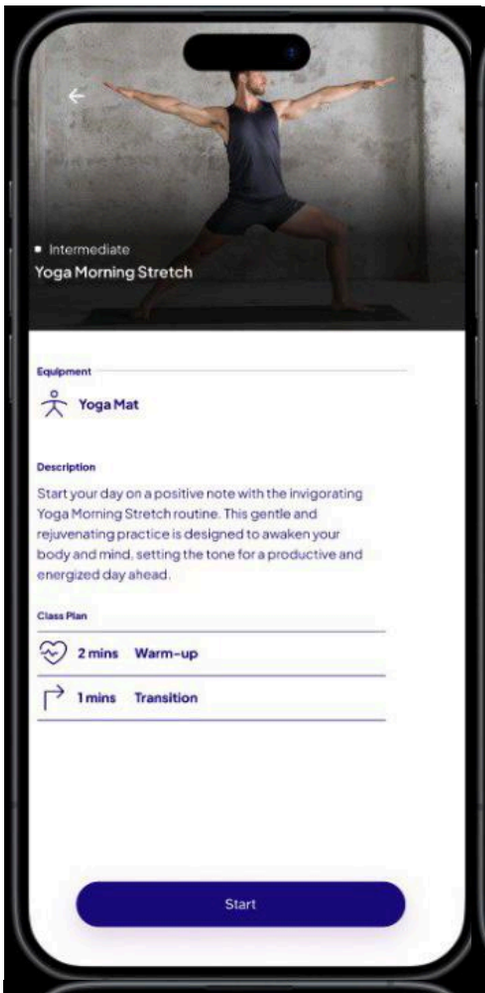



Log In Page

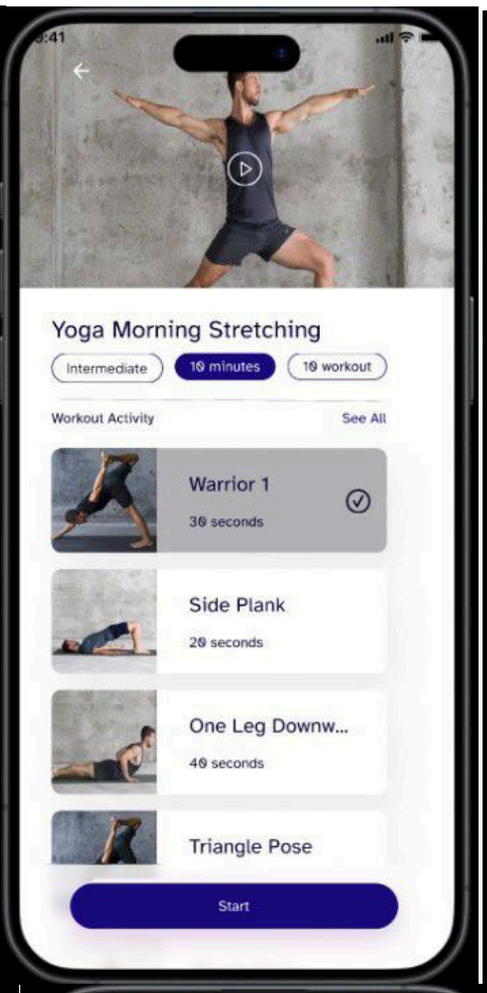
Home Page

Workout Categories Page

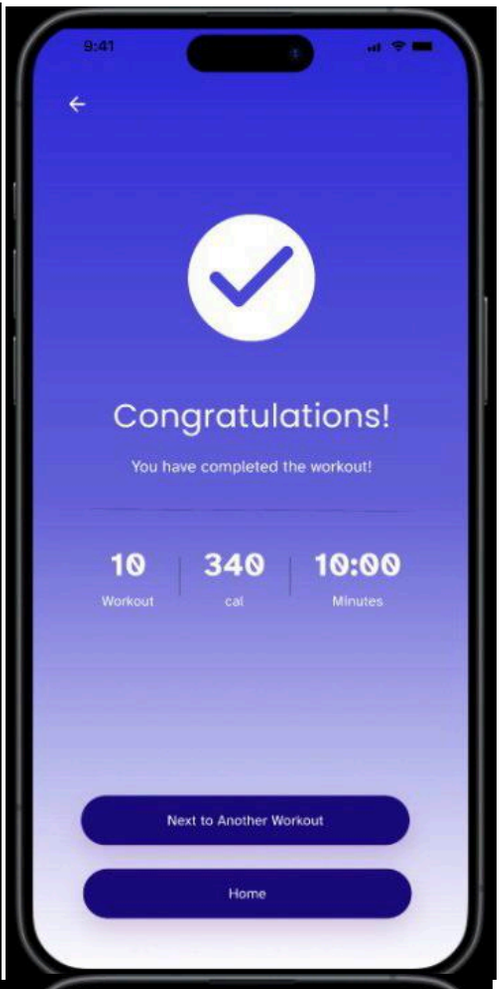
Workout Page



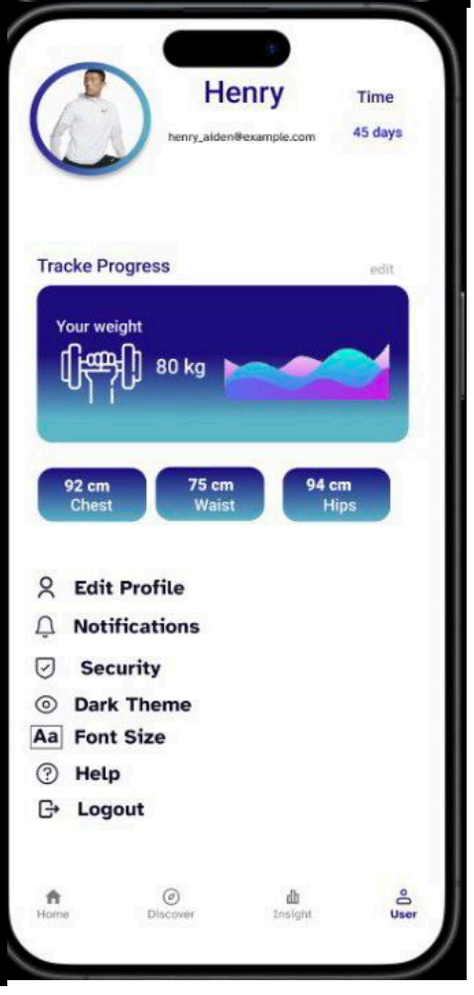

Workout Page




Congratulations Massage Page






Discover Page

Insight Page

User Page

## Wearable Interface


Tool: Figma.

Figma

# EVALUATION METHOD

The described evaluation method describes a structured approach to evaluating the usability, user experience, and functional of a prototype, from which valuable insights can be gained.

1. **Defining objectives:** Clearly defining the objectives of the test.
   Including usability and user experience goals.
   Usability objectives focus on the effectiveness, efficiency, and satisfaction of users while performing tasks using the exercise app prototype. User experience goals include a broader range of factors, such as overall satisfaction, engagement, emotional impact, and overall impression of using the app.

2. **Define the category of participants**: Identify a group of participants who represent the intended users of the exercise application. Search for individuals who are interested in fitness, are passionate about exercise, or those who use exercise apps regularly.

3. **Create scenarios:** Develop scenarios and tasks that participants will carry out using the prototype. For example, asking participants to find and follow a specific exercise routine, track their progress, or explore motivational features.

4. **Testing procedure**: Arrange individual testing sessions with participants. It begins by providing an introduction to the prototype and explaining the objectives of the test. Then ask participants to complete pre-defined tasks. They may be asked to think out loud and provide feedback about their experience.

5. **Determine the data collection method:**
   During testing sessions, you may: Observe and observe participants' interactions with the prototype carefully and make notes about their actions, comments, and any difficulties they encounter. Sessions can also be recorded for later analysis.
   Or after the testing sessions, by: distributing questionnaires.
   They ask for their opinions, for example, about exercise instructions, progress tracking, motivational features, user interface, and their overall satisfaction with using the app.

6. **Data analysis:** Review the data collected, including observation notes, audio/video recordings, questionnaire responses, and participant comments. Common issues, common points, areas for improvement, and suggestions to improve the user experience are looked for.

7. **Iterate and improve the prototype:** Based on the test results, the necessary modifications and improvements are made to the prototype. We will also address identified issues, improve clarity if necessary for example in exercise instructions, enhance progress tracking, incorporate user feedback to improve the user interface, and consider additional features that contribute to a positive user experience.

8. **Repeat testing:** Conduct additional testing sessions with the same participants to verify the effectiveness of the changes that have been implemented. Then iterate the prototype and constantly improve it based on user comments until the application achieves the goals of ease of use and the required user experience.

# CONCLUSION

In conclusion, the Workout Application successfully creates a user-friendly and visually appealing experience for users. The intuitive user interface design enhances engagement and provides a seamless journey. The application offers customizable workout programs and exercises, with a clean aesthetic and responsive layout for accessibility on various devices. The project achieves its objective of empowering users to personalize their fitness routines and enjoy a visually pleasing experience

Overall, the Application demonstrated the importance of user-centered design in creating a functional and engaging fitness application. The project team's dedication to understanding user needs, and adhering to design principles has resulted in a valuable tool that can positively impact the fitness journeys of its users.

# REFERENCES


- beyond human-computer interaction 4th edition
- https://dribbble.com/shots/popular/mobile