



Technology and Information Systems (SECP 1513)

Design Thinking

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Introduction:

Welcome to our report on the transformative journey of applying design thinking principles to the creation of a gym consistency app. Design thinking, with its emphasis on empathy and creative problem-solving, has been our guiding force throughout this project.

This report unfolds the story of our venture, going beyond traditional software design to explore the dynamic interplay of user experiences within the realm of fitness routines. We'll delve into the stages of understanding, defining, ideating, prototyping, and testing, showcasing how design thinking shapes not just a digital solution but an experience that resonates with users.

Join us as we share the evolution of our ideas, the collaborative efforts of our team, and the insights gleaned from user interviews. This narrative isn't just about an app; it's a testament to the impactful role of design thinking in redefining our approach to problem-solving in the realm of software design.

Design Thinking Process for Gym Consistency App Improvement

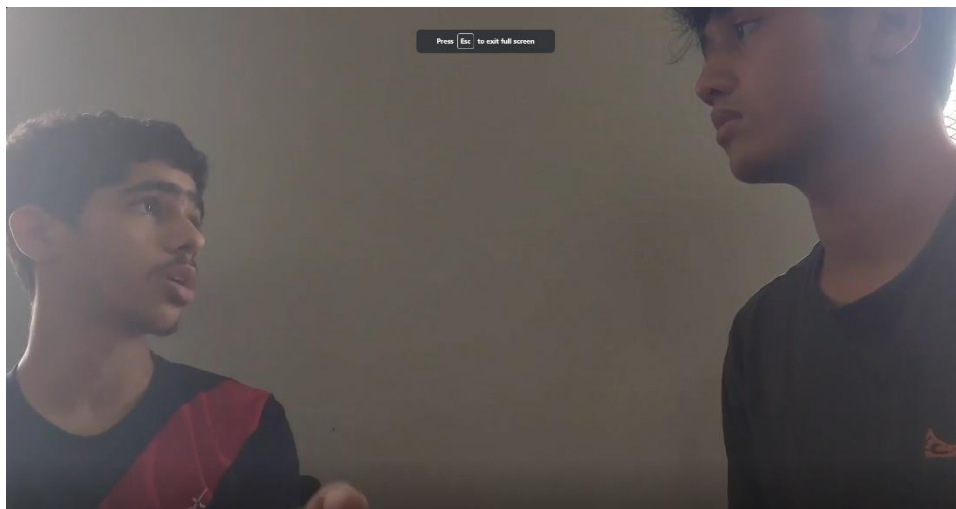
1. Empathize:

Step:

We initiated our design thinking process by conducting thorough user interviews and surveys to gain insights into the challenges faced by our users. The primary objective was to understand their needs and identify pain points associated with gym consistency.

Evidence:

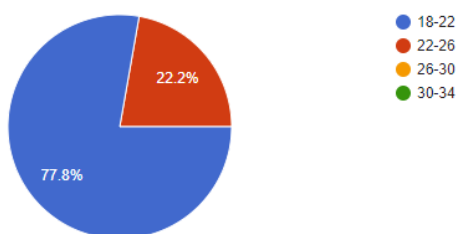




Age

9 responses

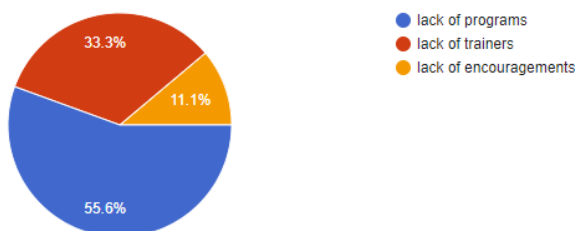
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Problems you are facing for the gym?

9 responses

 Copy



What do you want to be included?

9 responses

Suggestions of what exercises to do

include more programs, and better sign in form

trainers, tailored program

More encouragement

i want to have a trainer that can encourage and motivate me so i can do better

more programs

a trainer to help me fix my form in the gym

need a diet program so i can lose weight

weight program so i can track my PR progression

Comments

3 responses

Also the gym has no air conditioning

none, thank you

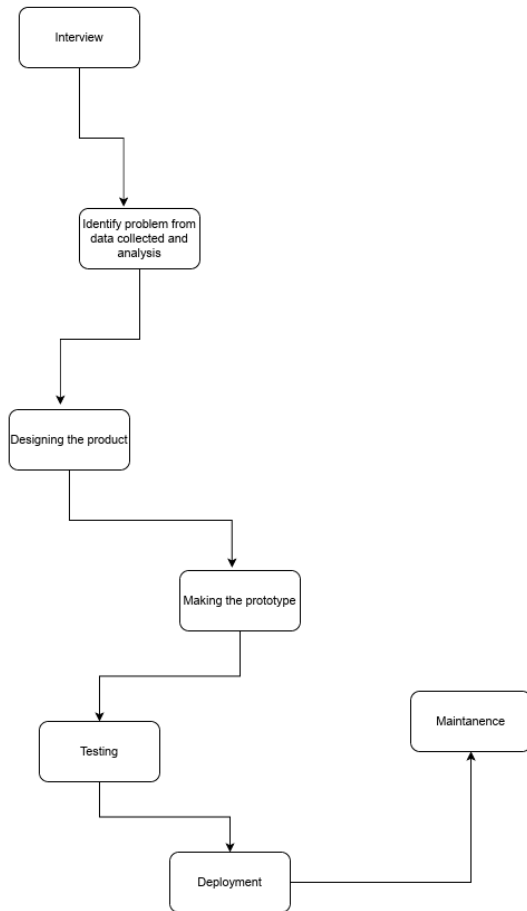
Need more programs

2. Define:

Step:

Based on the insights gathered from interviews, we refined our problem statement, updated the target audience, and adjusted our goals. Our persona was also updated to reflect any changes in user preferences or expectations.

Evidence:



3. Ideate:

Step:

During brainstorming sessions, the team collaboratively generated creative solutions to address the problems identified during the interviews. Ideas were prioritized based on their potential to alleviate user pain points and improve the overall gym experience.

Evidence:

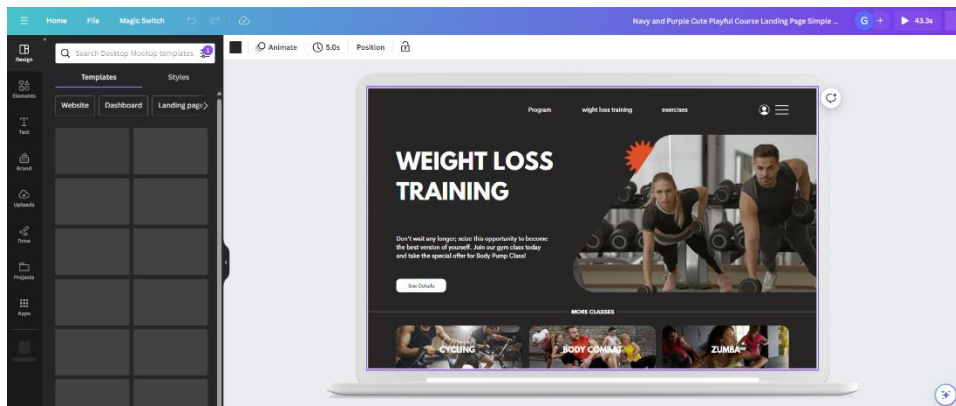


4. Prototype:

Step:

Following the ideation phase, we transitioned to creating low-fidelity prototypes that embodied the proposed solutions. These prototypes served as tangible representations of the improvements we envisioned for the app.

Evidence:



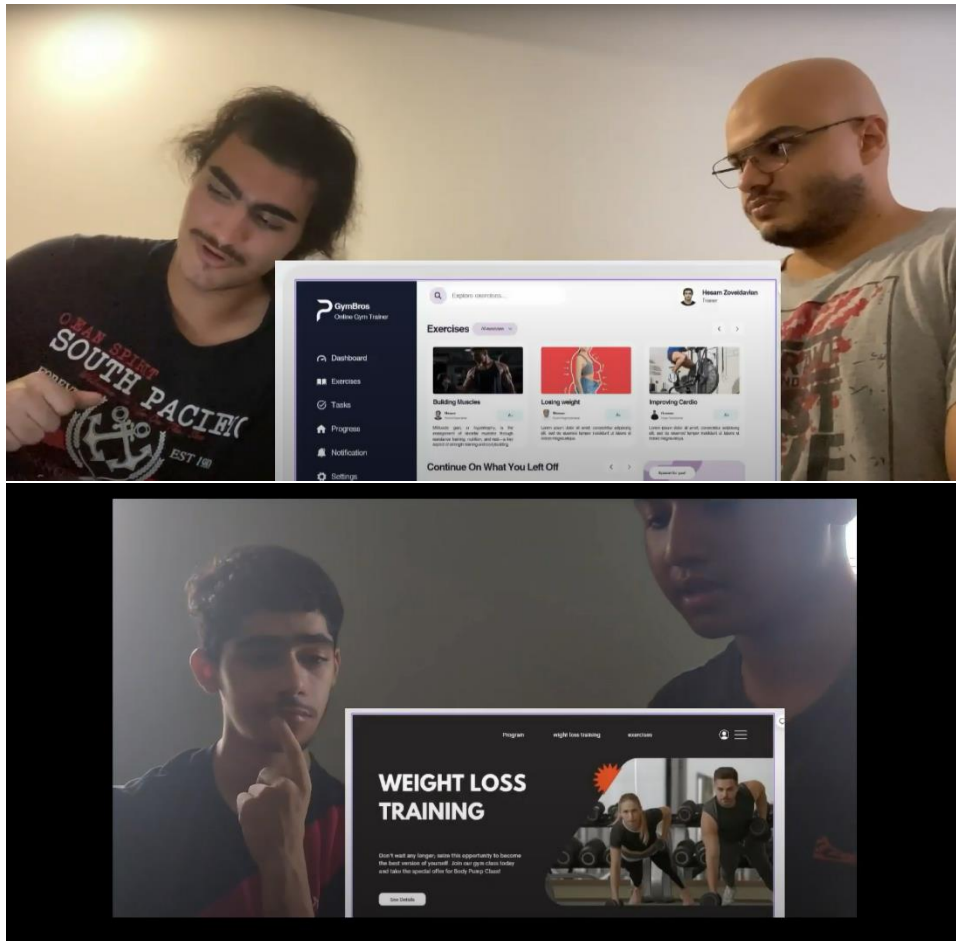
5. Test:

Step:

Conducting user testing sessions, we sought feedback on the prototypes to evaluate how well the proposed solutions addressed the issues identified in the initial interviews. Iterative design changes were implemented based on the valuable insights gained during testing.

Evidence:

- [Insert link or reference to video recordings of user testing sessions]



Gym Consistency App: Problem-Solution Description

- **Problem 1:** Difficulty in Consistency and Progress Tracking

Problem: Users struggled to maintain consistency in their gym routines and faced challenges in tracking their progress over time.

Solution: Implemented a user-friendly interface with a robust progress tracking system. Users can log workouts, view statistics, and receive personalized recommendations aligned with their fitness goals.

Team Working: Collaboration involved brainstorming sessions, engaging fitness experts for accuracy, and continuous feedback to ensure seamless integration.

- **Problem 2:** Ambiguity in Exercise Selection for Personal Goals

Problem: Users lacked clarity in choosing exercises tailored to their individual fitness goals, especially when working out with others.

Solution: Introduced an interactive Exercise Page with hands-on instructions and video demonstrations. A Trainer Choosing Page allows users to select a fitness professional aligned with their preferences.

Team Working: Close collaboration with trainers and seamless integration of video functionalities ensured a visually appealing and informative exercise guide.

- **Problem 3:** Lack of Motivation and Guidance

Problem: Users experienced a lack of motivation and insufficient guidance throughout their fitness journey.

Solution: Implemented a Notification System offering personalized reminders, encouraging messages, and workout suggestions based on goals and schedules.

Team Working: Collaboration involved crafting visually appealing notifications and seamless integration to optimize effectiveness based on user preferences.

By addressing these problems through collaborative efforts, the app now provides a comprehensive solution, fostering an engaged and supportive fitness community.

Questions asked during interviews.

1. **Are there any specific problems you faced in the gym that need improvement?**

- **Reasoning:** This question aims to directly gather user insights and identify pain points or challenges users may have encountered during their gym experiences. By pinpointing specific issues, the development team gains valuable information to tailor the app's features to address users' real-world concerns.

2. **Are you in need of assistance that can track your gym routine and schedule?**

- **Reasoning:** This question seeks to understand the user's need for a comprehensive gym routine and schedule tracking feature. It is essential to determine if users value and would benefit from assistance in planning and monitoring their workouts. This insight guides the development team in prioritizing features that align with user needs and expectations.

3. **As a software developer, what can you do to improve the QR code problem?**

- **Reasoning:** This question is directed towards software developers to encourage them to think critically about potential solutions to a specific issue, in this case, the QR code problem. By soliciting input from developers, it promotes a collaborative problem-solving approach within the team. This question encourages developers to make a better option for gym users, so they do not have to scan QR every single time they go to the gym.

Feedback Question:

1. **Are there any suggestions or comments on the prototype?**

- **Reasoning:** This feedback question is designed to gather input on the prototype's design, functionality, and overall user experience. By inviting users to provide suggestions or comments, the development team gains valuable insights into user preferences and areas that may require improvement. This feedback is crucial for refining the prototype iteratively and ensuring that the final app aligns closely with user expectations and preferences.

Individual Reflection:

Abrar:

This project taught me the value of simplicity and user-friendly design, especially in customizing diets. Collaborating with users showed us how important tailored features are. We focused on developing workout plans and simplifying registration for better accessibility. These insights will guide us as we refine the website to ensure smooth user interactions and improved workout and diet planning.

Developing a website that suggests exercises based on user input has been a valuable project that reinforced several key principles in software development and user experience. Furthermore, the project's iterative nature has highlighted the intrinsic value of ongoing evaluation and enhancement, emphasizing the necessity of an adaptive development framework that remains attuned to user feedback and emerging industry standards. This project provided me with practical insights into the intersection of software development, user experience, and health and fitness. It reinforced the importance of user-centric design, algorithmic considerations, and continuous improvement in creating effective and impactful digital solutions.

Hussein:

This project has been crucial in emphasizing the need for simplicity and user-friendly design, especially when it comes to improving the user experience while creating customized diet. Working together with possible users highlighted how flexible the design process is and how important customized features are. Especially, the development of workout plans was prioritized, along with a strong emphasis on streamlining the registration and login procedures to improve accessibility. These observations will continue to inform improvements as the project moves toward higher-fidelity prototypes, ultimately forming a website that guarantees smooth user interactions while also improving the planning of workouts and diets.

Marwan:

Working on this real project has reshaped my understanding of the design process, providing invaluable insights into creating solutions that genuinely address user needs. Conducting interviews with individuals facing gym-related challenges allowed me to empathize with users, going beyond theoretical design principles to connect with their frustrations and motivations.

Using empathy as a guiding principle not only influenced problem definition but also sparked creative solutions during ideation. The feedback from users emphasized the importance of tailoring technology to human experiences, grounding design thinking in real-world context.

Being part of a collaborative team reinforced the iterative nature of design, highlighting the significance of adaptability and resilience in tackling complex challenges. This experience has been a journey of personal and professional growth, emphasizing that successful design is not just about functionality but the positive impact it has on users' lives.

Hesam:

Working on this project taught me a lot about making things simple and user-friendly. We focused on understanding what users really need and want by talking to them and getting their feedback. This helped us make a website that suggests the right exercises and diet plans for each person. I learned the importance of making things easy to use, like making sure people can easily sign up and log in. We also worked on making the website flexible so it can change based on what users tell us they like or don't like. The project showed me how important it is to work together as a team and keep improving our website based on real feedback from users. It was great to see how our work can help people in their health and fitness journeys.

Task for each team member:

MARWAN SAMEH RAAFAT ELHENNAWY	<ul style="list-style-type: none">• Task distribution• Check listing the requirements.• Report preparation.
SMH ABRAR AL RASHID	<ul style="list-style-type: none">• Coming up with the prototype• Overseeing the process• Directing the team
HUSSEIN NAZIF AR RIFAI	<ul style="list-style-type: none">• Interviewing• Identifying the problem• Video editing
HESAM ZOVEIDAVIAN POOR	<ul style="list-style-type: none">• Interviewing• Prototype demonstration• Identifying the problem

Conclusion:

In conclusion, our journey through the design thinking process to create the gym consistency app has been both enlightening and transformative. Design thinking, with its core principles of empathy, collaboration, and iterative problem-solving, has not only shaped our approach to software design but has also redefined how we perceive and address user needs.

The project's success lies not just in the creation of a functional app but in the profound understanding gained from user interviews. Through empathetic engagement, we uncovered nuanced challenges faced by individuals in their fitness journeys, informing our design decisions and fostering a user-centric ethos.

The collaborative efforts of our team, coupled with the iterative nature of design thinking, have resulted in a solution that goes beyond meeting expectations. The gym consistency app is a testament to the power of holistic problem-solving, acknowledging the human aspects of technology.

As we reflect on this design thinking endeavor, we recognize that our journey is not isolated from this project alone. It serves as a foundation for future endeavors, highlighting the importance of user empathy, continuous collaboration, and adaptability in the ever-evolving landscape of software design.

In essence, this project underscores the profound impact of design thinking, not only as a methodology but as a mindset that has become ingrained in our approach to crafting meaningful solutions for real-world challenges. The gym consistency app stands as a testament to the effectiveness of design thinking in creating solutions that resonate with the needs and aspirations of the end-users.

Video link: <https://youtu.be/wmQs5UVUYUo>