Project Part 1: Proposal

ActivePro Fitness App

Overview

The proposed idea is to develop ActivePro, a fitness app designed to serve as a personalized fitness coach. The app will track daily steps, allow users to log their calorie intake, and maintain fitness journals. Based on the collected data and daily activity tracking, ActivePro will provide users with customized workout plans and activity recommendations.

By leveraging integrated AI technology, users can receive real-time insights, recommendations, and in-depth fitness analysis. Additionally, the app will connect to social platforms, enabling users to share their progress with friends and family, and participate in challenges, making fitness more engaging and enjoyable.

Purpose Of The Platform

The purpose of ActivePro is to provide users with a user-friendly app that helps them improve their fitness, maintain a healthy lifestyle, and enhance overall well-being. The app offers a centralized platform where users can track all their physical activities and monitor key health metrics such as sleep patterns and calorie intake. With an integrated journal feature, users can log daily habits and set fitness goals, creating a holistic approach to personal health management. ActivePro simplifies the journey to a healthier lifestyle by making it easy to stay organized and focused on achieving fitness milestones.

Key Problem Or Gap The Platform Seeks To Address

Many fitness apps focus on just one aspect of fitness, like step counting, calorie tracking, or workout planning, rather than offering a complete solution for managing overall health. This forces users to switch between multiple apps, making it harder to keep track of their progress. Additionally, most apps don't provide personalized insights or adjust to the user's changing fitness needs over time.

ActivePro addresses this gap by offering an all-in-one platform that combines activity tracking, fitness journaling, and AI-driven personalized recommendations. It allows users to monitor multiple health parameters such as sleep, nutrition, and physical activity in a single app.

Tools And Technologies

To develop ActivePro with its wide range of features, several tools and technologies will be utilized:

- UX/UI Design: For the high-fidelity prototype, Figma will be used to create detailed user interfaces and user experiences that closely resemble the final product.
- Cross-Platform Development: The actual app will be built using the React Native framework, ensuring seamless functionality on both iOS and Android platforms.
- Artificial Intelligence (AI): The PyTorch machine learning library will be employed to power AI-driven features like personalized workout recommendations and activity insights.
- **Health Tracking:** The open-source Google Fit API will be integrated to allow tracking of various health metrics such as steps, calories, and heart rate.

Target Audience

ActivePro is designed for individuals of all age groups, from fitness beginners to seasoned athletes. It caters especially to professionals who spend long hours sitting, offering features that encourage them to stay active throughout the day. The app includes notifications to prompt users to stand up or engage in short movements when they've been sedentary for too long. By providing personalized support and motivation, ActivePro helps users of all fitness levels incorporate healthy habits into their daily routines.

Brief Literature Review

- MyFitnessPal: is a widely used fitness app, but one of its key limitations is the inability to function in offline mode preventing users from logging data when they lack internet access [1]. In situations where mobile signals are weak or unavailable, this can be inconvenient. ActivePro addresses this issue by allowing users to record their data offline, automatically syncing it once a stable internet connection is reestablished, ensuring uninterrupted tracking and a seamless user experience.
- Nike Training Club: is a popular free fitness app, offering world-class training tips and workout sessions. However, its focus is primarily on fitness training, and it lacks features like nutrition tracking and personalized recommendations based on user data [2]. ActivePro addresses these gaps by offering both training tips and calorie tracking. With integrated Artificial Intelligence, users receive personalized training and nutrition advice as they progress, along with a comprehensive tracking system for nutrition and health metrics.
- Centr Fitness App: is another popular platform that allows users to track both workouts and nutrition. However, its major drawback is the absence of free customized training plans and nutrition guidance[3]. ActivePro, on the other hand, offers all its interactive and personalized features at no cost, giving users a fully customized fitness and nutrition experience.

Tools & Skills

- Research Methods: Strong skills in both qualitative and quantitative research, enhancing the design and development process by providing valuable user insights and data-driven decision-making.
- User Interface (UI) Design: Expertise in designing user-friendly, visually appealing interfaces for Windows-based applications, as well as web and mobile platforms.
- **Programming:** Proficiency in various programming languages, including C#, C++, Python, and JavaScript.

References Cited

- [1] C. Bearden, "Builtlean myfitnesspal review: Pros cons of top fitness app," https://www.builtlean.com/myfitnesspal-review/, 2022.
- [2] M. Dustin, "Nike training club review (2024): Impressive functionality with plenty of workouts... for free," https://www.garagegymreviews.com/nike-training-club-review, 2024.
- [3] C. Wilkes, "Centr review (2024): How good is the fitness app created by thor?" https://www.garagegymreviews.com/centr-review, 2024.