

Interação Pessoa-Máquina 2025/2026

Forma

Stage 1: Project proposal



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Problem Description

In today's increasingly fast-paced world, sustaining a healthy balance between fitness, nutrition, proper rest and every other aspect of life has become considerably challenging. While there are many solutions available to help people create healthy habits in their lives, few offer a combination of all these areas in an intuitive and complete way.

To outline the primary user needs, several recurring challenges have been identified in existing health and fitness applications:

- Users find it hard to track both training and recovery (e.g., sleep, fatigue) in one place;
- Beginners frequently face confusion about which exercises to do, how to perform them correctly, or how to adapt routines to their personal goals and time constraints;
- Advanced users often want to analyze performance metrics (e.g., reps, intensity, heart rate);
- Existing apps often overwhelm users with too much information or require advanced knowledge of fitness concepts;
- Users struggle to change their diets when seeking healthier lifestyles, often feeling overwhelmed and lost when confronted with all the different possibilities.

These problems can result in a lack of motivation and limit progress. A well designed interface can fix most of these issues, leading to a more successful approach to fitness.

Project Goal

The main goal of the project is to design an intuitive and elaborate interface that helps users plan and analyze their lifestyle, whether they are advanced athletes or just getting started on their fitness journey.

Possible solution to the problem:

- A dashboard where users can view their daily progress across training, recovery, and nutrition at a glance;
- A workout planner with exercises based on goals, and body condition, with short visual or textual explanations to ensure correct execution;
- A recovery tracker that allows users to log sleep quality, fatigue, and rest days, to better balance effort and recovery;
- Nutrition assistance, such as daily meal suggestions or simplified healthy recipes.

Target Users

The target user population consists of individuals who are either already physically active or are trying to adopt a more active lifestyle. This includes beginners seeking guidance on how to start training safely and effectively, as well as more experienced users who wish to monitor and optimize their performance.

Competition

Several fitness applications partially address the needs of users seeking a healthier lifestyle.

For example, **MyFitnessPal** offers excellent tools for tracking nutrition and calories but provides limited integration with training and recovery data.

Strava, on the other hand, focuses heavily on performance tracking for endurance sports but lacks guidance for beginners and does not address nutrition or recovery.

Fitbod helps users create personalized workout plans but can overwhelm beginners with data and offers little support for dietary habits.

The proposed project aims to combine the strengths of these apps while providing a more balanced, intuitive, and integrated approach to fitness, recovery, and nutrition.

A comparison of the different features offered by each application is presented in the table below.

Feature / App	Proposed App	MyFitnessPal	Strava	Fitbod
Integrated tracking of training and recovery	V	×	×	imited recovery tracking
Personalized workout guidance.	V	×	×	✓
Advanced performance metrics.	V	hasic stats only	V	V
Nutrition and diet tracking	V	V	×	×
Adaptation to personal goals.	V	nainly calorie goals	×	V
Heart rate monitoring	V	×	V	requires manual input
User-friendly interface	V	×	⚠data- heavy	dense analytics
All In One (training, recovery, nutrition)	V	×	×	×