

**GYM BUDDY – A GUIDENCE PORTAL TO PROVIDE  
THE MOST APPROPRIATE AND CUSTOMIZED  
FITNESS PROGRAM PER CLIENT REQUIREMENT**

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## **Abstract**

Regular fitness and wellness are most important needs for a healthy life. Due to unhealthy lifestyles people follow, they suffer from various illnesses and disabilities. Therefore, in order to be healthier and more productive in daily routines, regular exercise has become a part of every one's life. So, most of the people regularly go to a gymnasium to maintain and improve their physical health as well as do workouts at home.

Even though there are many workout apps available, most of them are not safe to use and not providing the best effective workout plans. It is important to move away from irrelevant applications with inappropriate features and move on to a customized workout application in order to help the client to plan and execute their personalized fitness goals in a proper way.

The project aim is to explore and analyse the problems faced by the client and the gym instructor throughout the fitness workout process, and design, develop and evaluate an android application which will reduce the barriers of the existing process of gymnasiums and workout applications, and bridge the gap between the gym instructor and the client in order to provide a more customized and appropriate fitness program for the client.

The research findings of the identified problem were further validated through interviews conducted with gym instructors and questionnaire shared among gym goers. Considering the identified factors, requirement modelling was done, and functional and non-functional requirements were categorized.

Then the mobile application "Gym Buddy" was designed with the execution under project management and software development approaches and methodologies. Once the solution is successfully implemented, functional evaluation, expert evaluation and self-evaluation were conducted. The experts in fitness industry have evaluated the implemented prototype and provided feedback on future enhancements and commercial use.

**Keywords:** Fitness and wellness, Customizing workouts, Customizing meal plans, Personalized workout programs