

Pro Body Tracker

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Abstract - There are thousands of eligible smartphone apps ("apps") available for free and purchased, but there is uncertainty as to whether these apps help people find and maintain personal fitness. Decreased use of technology is also a problem among research subjects in health technologies. App usage and efficiency appear to be linked to exercise (attitude) and the apparent difficulty of exercising using apps (visual control behavior). Exercise and exercise using apps are not affected by peer pressure (typical topic). The purpose of the exercise using these apps has decreased (behavioral goal). Those who use the apps may have a positive attitude about the apps. Usage and apparent difficulty in particular should be considered for future application development. The practicality of the app and its ease of use can be simplified by using health behavioral theories to guide progress.

Key Words: BMI, fitness apps, body dysmorphia, exercise, health, workout.

1. INTRODUCTION

Pro body Tracker is an android application made for user to keep track of their body growth and to fight against body dysmorphia, this will help them to have a healthy mental and physical lifestyle. Motivation for developing an application like this is to counter body dysmorphia, many people who start their fitness journey tend to suffer with this mental health disorder and do not know how to counter it. The application will help the users to fight against body dysmorphia and have a better mental health.

The base concept is to build an android platform for both beginners and experienced fitness enthusiasts. This application will provide users with the option to create flexible fitness routines, measure body growth and inspire the people to deal against body dysmorphia. There are no apps which deals or informs their user base about body dysmorphia and also help them with body growth. Our app will provide these features and will stand out uniquely amongst other apps in market.

2. LITERATURE SURVEY

2.1 Market Overview

Physical fitness apps represent 5.18% of the total market capitalization [8], used daily by 35% and 40% of the weekly

[15]. In recent years, McKay, Wright, Shill, Stephens, and Uccellini [9] have reported an increase in fitness programs, including step-counting apps or promoting fitness programs in fitness centers, diet control programs and calorie diets or reducing habits. negative ones like smoking or drinking alcohol and improving mental health. [10] indicates that it is possible to retrieve user information, including email, password, location, eating habits, find profile pictures, and determine the time zone associated with the user's location in mobile applications.

2.2 User Behaviour Analysis

A German study on the use of Fitness Apps, showed that the reasons for using them were to achieve fitness goals and enjoy being able to share the results obtained with contacts [1], in order for the gamification to be effective direct relationships with their use. Another factor to consider for consumers is that if they find the App boring and requires tedious processes at first, adversely affecting their intention to use the App when they consider themselves to be complex [4]. On the other hand, Wang Egelandstad, Amdam, Almlie and Oostindjer [2] points out that time and effort may be detrimental to users' ability to use health applications, thus arguing why PEOU could have a greater impact on new ITU technologies than PEU. A quality study of Tang, Abraham, Stamp and Greaves [3] has shown that the appearance and structure of a weight loss app can greatly influence the decision to use such technology. Sports providers should do better market research to better understand what fans want or expect in order to meet their expectations. Prepare Your Paper Before Styling

2.3 Search and inclusion strategy

For our methodology of systematic review, we defined the selection criteria requirements to include or exclude the identified mobile applications as well as the search strategy. Following the selection of mobile applications, we provide data extraction and consequently analyse and discuss the results.

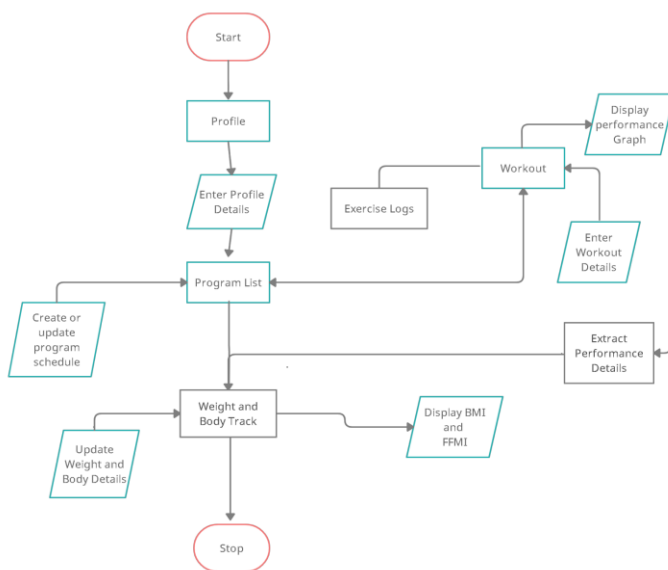
Mobile applications related to physical activity were included in this review if they fulfilled the following criteria:

- the mobile applications focused on the workout, fitness, gym, physical activity, or daily plan component
- downloading was free

- registration was free
- it had at least 1000 downloads reported in Google Play Store
- it had at least 4.0 stars in terms of users' assessment
- it was updated between 2017 and 2020; and it was available in English.

2.4 Design

Following the mobile applications categorized as "Health and fitness", Gym Workout Planner [4], Gym Fitness and Workout [5] and Strong were the only mobile applications that used the inertial sensors integrated in the mobile device. Calculation of BMI was done in Fitness Pro Workout Application [6], and GymGuide Fitness Exercicios had a screen to register weight and height and after it presented the BMI to the user. In GymGuide Fitness Exercicios [7] it provided the calculation of maximum weight and maximum repetitions for each exercise. Both of them had a list of exercises with video or image and also several types of exercises.



A program schedule must be created in the programs list tab, which will plan out different types of exercise routines over the specified amount of time. Based on the programs planned the app will notify the user regarding the current scheduled workout to be done. It will prompt the user if he wants to skip that particular exercise or continue with it.

After making a planner on the current scheduled time, the app will record the current workouts progress with details of each set and reps of an exercise done and a stop watch function to record the time interval and the rest time between each exercise. Each exercise can have a photo or small GIF indicating and helping to display the exercise visually. The app will ask record of weight before and after and take in order the exercise time for each session.

The weight and body muscles information are tracked after every session. A graph is displayed, first for the weight changes and for each muscle separately as well to show visual representation. Data from this graph is then also used for calculating Body mass index and Fat free mass index which are great indicators on professional fitness molding. These indicators will let the app show the user an alternative approach to the current program initiated.

3. ADVANTAGES

- Easy to access.
- Personalization for users.
- Cost effective as tools used to create android apps are open source.

4. LIMITATIONS

- Compatibility issues with Android OS outside 6-10.
- User input maybe inaccurate which may lead to false suggestions.
- Requires daily interaction with the app.

CONCLUSIONS

Physical and mental health are two important states to be maintained by a person to lead a happy and peaceful life. With the help of this app a better solution can be found for a person to maintain their health. It will also help them achieve their goals by providing optimized programs made according to their needs. Moreover, a general awareness will be spread regarding mental illness such as Body Dysmorphia in the fitness community.

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