

Workout Planner

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Abstract- Regular Physical activity and exercise can help you stay healthy, energetic and independent as you get older. Exercise plays a vital role in preventing health diseases and stroke. The health benefits of doing regular Exercise have been shown in many studies. This application reviews the evidence of the benefits of exercise for all the body systems. Physical activity and exercise can reduce stress and anxiety, boost happy chemicals, improve self-confidence, increase the brain power, sharpen the memory and increase our muscles and bones strength. It also helps in preventing and reducing heart disease, obesity, blood sugar fluctuations, cardiovascular diseases and Cancer. One of the greatest challenges to lifestyle medicine is patient adherence. Lifestyle diseases inherently require lifetime prevention and treatment. Therefore, adherence to lifestyle medicine recommendations must also be long-term. Long-term adherence implies that a routine incorporating health recommendations has been developed. Instead of focusing on the immediacy of adherence in lifestyle changes, health care providers could consider helping patients develop a routine to slowly incorporate those changes. This perspective may enable greater long-term adherence to lifestyle change recommendations

Keywords- Daily workouts, Discover ,Food Counter , Reminder, Weight Gain , Weight Loss , Diet Plan .

I. INTRODUCTION

Exercise is any bodily activity that enhances or maintains physical fitness and overall health and wellness. It is performed for various reasons, to aid growth and improve strength, preventing aging, developing muscles and the cardiovascular system, honing athletic skills, weight loss or maintenance, improving health and also for enjoyment. Many individuals choose to exercise outdoors where they can congregate in groups, socialize, and enhance well-being.

In terms of health benefits, the amount of recommended exercise depends upon the goal, the type of exercise, and the age of the person. Even doing a small amount of exercise is healthier than doing none. Physical exercises are generally grouped into three types, depending on the overall effect they have on the human body

Aerobic exercise is any physical activity that uses large muscle groups and causes the body to use more oxygen than it would while resting. The goal of aerobic exercise is to increase cardiovascular endurance. Examples of aerobic exercise include running, cycling, swimming, and brisk walking, skipping rope, rowing, hiking, dancing, and playing tennis, continuous training, and long distance running.

Physical exercise can also include training that focuses on accuracy, agility, power, and speed.

Types of exercise can also be classified as dynamic or static. ‘Dynamic’ exercises such as steady running tend to produce a lowering of the diastolic blood pressure during exercise, due to the improved blood flow. Conversely, static exercise (such as weight-lifting) can cause the systolic pressure to rise significantly, albeit transiently, during the performance of the exercise.

Exercising looks different in every country, as do the motivations behind exercising. In some countries, people exercise primarily indoors, while in others, people primarily exercise outdoors. People may exercise for personal enjoyment, health and well-being, social interactions, competition or training, etc. These differences could potentially be attributed to a variety of reasons including geographic location and social tendencies.

Exercising is something that everyone wants to achieve but not all of us enjoy doing it. Hence, we have come up with Android Application domain named as “**Exercise Routine**” to make people aware about fitness. Java SE 15.0.2, GUI Application these are the languages using in the Application.

II. LITERATURE SURVEY

- 1) Roneel V Sharan, Workout Analysis Using Diversified Deep Latent Variable Model International Conference of the IEEE Engineering in Medicine & Biology Society (EMBC), 2155-2158, 2020

Exercising has various health benefits and it has become an integral part of the contemporary lifestyle. However, some workouts are complex and require a trainer to

demonstrate their steps. Thus, there are various workout video tutorials available online. Having access to these, people are able to independently learn to perform these workouts by imitating the poses of the trainer in the tutorial. However, people may injure themselves if not performing the workout steps accurately. Therefore, previous work suggested to provide visual feedback to users by detecting 2D skeletons of both the trainer and the learner, and then using the detected skeletons for pose accuracy estimation. Using 2D skeletons for comparison may be unreliable, due to the highly variable body shapes, which complicate their alignment and pose accuracy estimation. To address this challenge, we propose to estimate 3D rather than 2D skeletons and then measure the differences between the joint angles of the 3D skeletons. Leveraging recent advancements in deep latent variable models, we are able to estimate 3D skeletons from videos. Furthermore, a positive-definite kernel based on diversity-encouraging prior is introduced to provide more accurate pose estimation. Experimental results show the superiority of our proposed 3D pose estimation over the state-of-the-art baselines.

2) **E. Norman et al., "An Exercise and Education Program Improves Well-Being of New Mothers: A Randomized Controlled Trial", *Physical Therapy*, vol. 90, no. 3, pp. 348-355, 2010.**

Recent technological advances have created enormous opportunities for developing applications that support training from home - particularly for older adults, who often are socially more isolated, are physically less active, and have fewer chances to train in a gym. In this article, the authors review current fitness applications and their features alongside the design challenges and opportunities of fitness applications for trainees at home.

3) **AM Müller, S Khoo - *International Journal of Behavioral Nutrition and ...*, 2014 *Non-face-to-face physical activity interventions in older adults: a systematic review*- Springer**

Physical activity is effective in preventing chronic diseases, increasing quality of life and promoting general health in older adults, but older adults are not sufficiently active to gain those benefits. A novel and economically viable way to promote physical activity in older adults is through non-face-to-face interventions. These are conducted with reduced or no in-person interaction between intervention provider and program participants. The aim of this review was to summarize the scientific literature on non-face-to-face physical activity

III. STUDIES AND FINDINGS

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Outcome

- Save time.
- Reminder of exercise

IV. DISCUSSION

workout planner -

Why: when it comes to health and out work stress, we always tend to choose work... and this is how our health gets neglected... and now a days in this pandemic we have got an amazing opportunity to pay attention towards our health and this is the reason that we have come up with a workout planner application for , which will make easier for you to head towards a healthy body .

What's inside : We have included basic exercises of various parts of body like ; Abs, Chest, Arms, Leg ,Shoulder and back . We have also made it easy for you by separating it into 3 levels , like Beginners , Intermediate and Advanced

Beginners : . If you are just about to start with your workout then beginners stage is for you. It includes basic exercises for warm up. It will also help to increase heart rate so that the body gets used to , to the exercises.

Intermediate : Intermediate is nothing but extended version of beginner stage , Intermediate stage is for those who want to continue with their workout. There are exercises with extra time and more detailed planner with precise diet.

Advanced : Advance stage includes hardcore exercises and workout plans for professionals who are keen and regular towards workout. This being the final stage of workout planning , it includes time base exercises for your well-

maintained body and precise diet to keep your metabolism constant and healthy.

Structure of Application :

Log in page: if you are already “workout planner” users you must enter your log in details to use the application.

Registration page: who are new to the application they should click on. For this they must generate username and password to follow the further procedures so that they get registered.

Exercise types: beginners, intermediate and advance.

Option menu includes

- Profile: when you click on profile option it takes you to the registration page which you filled while registering yourself in this application. You can also reset or edit your form if you want.
- About: a brief information is provided of our project in the about option
- Diet: it includes diet plan of each day of the week. You can also select your food type such as veg or non-veg and diet plan will be provided according to your food type. Two are given to you to choose between “weight gain or weight loss”
- Discover: short time exercise, video links, references video link, challenges
- foot counter: to track your foot steps and log out.

Advantage –

1. It is free of cost.
2. It Can Increase Your Energy Levels
3. It Can Help Your Brain Health and Memory.

Disadvantage –

1. EXERCISE CAUSES INFLAMMATION
2. Wrong exercise causes join damage

V. CONCLUSION

Thus, we made a Workout Planner aplikation that can provide various Exercises and dite to people in need and who want to be fit in their busy schedule. User personalization: This feature refers to collecting user info like age, gender, weight, height, etc., Goal setting Push notifications: Like reminders, Reference video tutorials

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REFERENCES

[1] Roneel V Sharan, Workout Analysis Using Diversified Deep Latent Variable Model International Conference of the IEEE Engineering in Medicine & Biology Society (EMBC), 2155-2158, 2020

[2] E. Norman et al, "An Exercise and Education Program Improves Well-Being of New Mothers: A Randomized Controlled Trial", Physical Therapy, vol. 90, no. 3, pp. 348-355, 2010.

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