

Yog-fit

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Abstract - While researching for the project "Yog-fit" we find out that there are multiple obstacles in the features of our project. We can't fetch the data from few smartwatches of user and also third-party fetching is not allowed in few brands of smartwatches. For development of our project first we understood user requirements and according to our collected research we have analysed the data and based on analysed data we will build our project. Still our project will achieve great results. We will be still be able to track user exercises and yoga. Users can still compete with each other. Awareness about yoga and fitness exercises are our key result. In conclusion our project will help everyone to keep them fit and help them for being healthy. Our project will be useful for the people who wants to live a healthy life. Our ranking and streak features will keep user stick to the routine exercise/yoga. At the end user is the one being beneficial in physical health/form and being fit. Yoga will also help user to keep their mental health in good state.

Key Words: Yog-fit, track, exercise, yoga, fitness, healthiness

1.INTRODUCTION

The main reason we went for this investigation on fitness and yoga is because recently people are not focusing on their health and also lack in knowledge of exercise and yoga. While researching we found out that people don't have motivation or objective of being fit. Even if they are exercising, they don't have proper guidance for exercise and yoga. Fitness is the main reason behind a good healthy person. If they are not fit, they are most likely to be vulnerable to disease and health issues which is the most leading cause for death. This project will not only make them do exercise but it will keep them consistent and regular positive growth in their physical state.

1.1 Overview of Our Project

Yog-fit app will provide the articles about the exercise and yoga where people will get knowledge about the yoga and exercise in the brief. It will also track how they are performing Exercise/yoga tracking data. User will be able to select the levels of exercise and yoga according to users' choice. User will also be able to compete with the friends and local users. Our tracking feature will give you accurate readings and point out mistakes you do while doing exercise/yoga. It will also calculate how many calories you burn although it won't be accurate as we won't be able to track user's heart rate, BP, etc. as smartwatch don't allow third party data transfer.

2. REVIEW OF LITERATURE

2.1. Study Of Existing System

We have researched on multiple apps/websites. Websites we have researched on only provide information and step by step procedures of yoga and exercise they do not provide that much information on why should you do this exercise/yoga and is this okay to perform for your body because multiple exercise/yoga requires specific age or height or not having heart disease. Which makes user doubtful to follow instructions. What if it doesn't suite their body. There are few exercise/fitness apps from mobile manufactures itself. But they are brand specific so features like competing with friend is not famous because chances of your friend having smartphone from same brand are very low.

2.2 Finding from Literature Review

In your conclusion, we have picked underrated features which will help users to assist to keep them fit by performing exercise and yoga while tracking them on how they are performing. Also providing them procedures and recommendation on exercise and yoga. User will be able to select his convenient level to start exercise/yoga. We will also provide templates to reduce excessive weight, to increase height, to gain muscles etc. All these exercise/yoga templates will help user to select his/her template to start working out.

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3. PROPOSED SYSTEM/PROBLEM DEFINITION

3.1 Problem Statement - App can boost fitness activities and assist in keeping fit.

We are developing a fitness app that can help people for workouts and yoga. The main reason for selecting this problem statement is that in day-to-day life people are ignoring their health. Their lifestyle needs this improvement so our project is targeted towards them.

3.2 Project Scope

- 1. Fitness freaks.
- 2. Exercise/Yoga field.

3.3 Key High-Level Goals and Problems

3.3.1 Goals

- 1. Teaching exercise/yoga to people.
- 2. Keeping people fit with competitive

features.

3.3.2 Problems

1. Tracking user's health.

4. OBJECTIVE OF PROPOSED SYSTEM

1.To teach users yoga and exercise.

- 2.To track users' performance through new technology.
- 3.To keep user motivated through competitive ranking and streaks.
- 4.To keep users healthy.

5. METHODOLOGY

We are using literature review method/technique for research. There are multiple apps in this field so it is important to look where these apps are lacking. We personally used few fitness apps then point out it's good's and bad's and where we can implement key features and what are the mistakes we should not repeat. Methodology will determine the direction of development we are going with. We think in this field better resources/information about exercise/yoga and better tracking so user will be satisfied with accuracy of his exercise and he/she will be motivated to continue every day.

5.1 System Architecture/Flow/ER/DFD Diagram



Fig 5.1.1 Use Case Diagram

5.2 Modules of Software System

Login

This module consists the login structure and information. There are 2 types of log in Sign in & Sign up. We will take username, password, email, mobile no. etc. as user data.

- Exercise & Yoga info/procedure This module is the main module of our app. All information about exercise/yoga will be presented here. Also, the exercise templates explained before will be here so this is most important core of our project.
 - Exercise & Yoga Tracker This module will consist the tracking mechanism for each and every exercise/yoga. This module will use camera as input to track body movements. The biggest issue in this module will be performance because tracking is pretty heavy task for user's processor/graphics unit.
- Friend System This module is dependent on login info of users. Every user account will be able to interconnect and see the comparison of him/her with his/her added friend on platform.
- Ranking System

This module will compare all user accounts on the basis of locality of user. Ranking will be fair and parameters for ranking will be your consistency, time spent doing exercise/yoga, etc.

• Streak System This module means for how many days continuously/regularly. This will help user to get better rank and because you have to be consistent better health is obtained from that consistency.



6. REQUIREMENTS

- 6.1 Software Requirement
- 6.1.1 Frontend
 - React Native
 - JavaScript
- 6.1.2 Backend
 - Python
 - Express.js & Node.js
 - Database MongoDB
- 6.2 Hardware Requirement
- 6.2.1 Hardware Specification for User
 - Android 6 or higher
 - Ios 12.4 or higher
 - 6 GB Ram
 - Quad core processor with 2.4 Ghz frequency

7. APPLICATION OF PROPOSED SYSTEM

- 1) To teach users yoga and exercise.
- 2) Exercise/Yoga tracking.
- 3) Motivation for Exercise/Yoga.
- 4) Healthy lifestyle for user.

8. ADVANTAGES & DISADVANTAGES

8.1 Advantages

- Users will able to learn exercises/yoga.
- Users will be able track his exercise/yoga.
- Users will be consistent with exercise/yoga.
- Users will have healthy lifestyle.

8.2 Disadvantages

- We can't provide/track user's health for better experience.
- Mobile battery and CPU usage will be high while tracking.

9. CONCLUSIONS

We have combined exercise and yoga for better fitness preference to user. Our project will help you learn new exercise and yoga with tracking so users can see what they are doing wrong. Plus, the templates we provide for exercise and yoga and the difficulty level. Streaks and ranking with friends are the competitive features. At the end user will be benefited a lot and have a healthy lifestyle.

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For this project we have referred multiple blogs and websites mentioned below. Without them the project wouldn't be possible I thank them for making it public.

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