Fit-Finity

(The Path to a Healthy Lifestyle Begins....)

An Engineering Project in Community Service

Phase - I Report

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in partial fulfillment of the requirements for the degree of

Bachelor of Engineering and Technology



VIT Bhopal University

Bhopal Madhya Pradesh

December 2022



Bonafide Certificate

Certified that this project report titled "Fit-Finity" is the bonafide work of "20BCE10374 Akshatt Chhabra , 20BCE11076 Madhav Mishra , 20BCE11082 Harshit Dwivedi , 20MIP10020 Ujjwal Srivastava , 20MIP10028 Anannya Manojawas , 20MIP10035 Ishika Shrivastava , 20BAI10194 Shrey Khanduja , 20BCY10005 Avinash Roy " who carried out the project work under my supervision.

This project	report (Pha	se I) is su	ibmitted	for the	Project	Viva-Voce	examination
held on							

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1. INTRODUCTION (1 page)-

As we all are known to a well said quote "<u>The First Wealth Is Health</u>". Living in a society where stress at work and a lack of attention to one's own health make lifestyle and personal health the most overlooked issues is a reality for all of us.

Personalized recommended exercises can be a valuable tool for individuals who are looking to improve their physical fitness and overall health. These recommendations are tailored to an individual's specific needs and goals, and can help to ensure that their exercise routine is both effective and efficient.

Many people are using technology to measure and enhance their well-being as the value of keeping good health becomes more and more obvious. One way to achieve this is by using a health app, which can offer a number of functions like providing specialized recommendations for fitness routines, tracking and advising on diet and nutrition, and making suggestions for enhancing health.

We are here with a platform where recommended exercises are designed to fit the specific needs and goals of each individual, taking into account factors such as age, fitness level, and any health conditions or injuries. This ensures that the exercises are safe and effective for the individual.

Fit-Finity can be a valuable tool for individuals looking to improve their fitness and achieve their health goals. When individuals see progress and results from their exercise routine, this will encourage them to continue working towards their goals.

1.1 Motivation

Developing a platform that targets Physical Wellbeing is no small feat. It requires a significant investment of time, money, and resources, and can be a complex and challenging process. What prompted us to take on this work are the following points?

- The desire to assist others is a significant motivator. Our feeling of purpose and desire to have a positive influence on people's lives motivate us. We believe that our app has the power to significantly improve people's health and wellbeing.
- Individuals today are not able to take care of their physical well-being, which is one of the reasons why, irrespective of age, people are dealing with several medical complications.
- During this covid pandemic, people have realized the importance of having a good and strong immunity. So this motivated us to build a platform so that we can help people enhance their immunity.
- This digital transition in the last couple of years has made people very anxious about leaving their homes and they expect everything at their place.

1.2 Objective

The main objective of developing a health centric platform is to provide users with tools and resources to track and improve their health and well-being.

• Promote Healthy Lifestyle:

To inspire people to lead healthy lives by getting them moving.

- Personalized recommendation on workouts for improving physical fitness: Fit-Finity gives personalized recommendations to users based on their medical complications.
- Diet and nutrition:

To provide a generalized Balance Diet so that they can improve their dietary habits by giving nutritional knowledge on a regular basis.

- Providing health and wellness information:
 Fit-Finity offers a range of resources and information to help users learn more about their health and how to improve it via articles, videos, and other beneficiary materials.
- Remotely Accessible: Fit-Finity was created specifically to ensure users accessibility and participation in physical activity at any place.

2. Existing Work / Literature Review (1-2 Pages)

During our research we found several platforms/applications that were based on Health and Fitness. Some of the platforms are as follows:

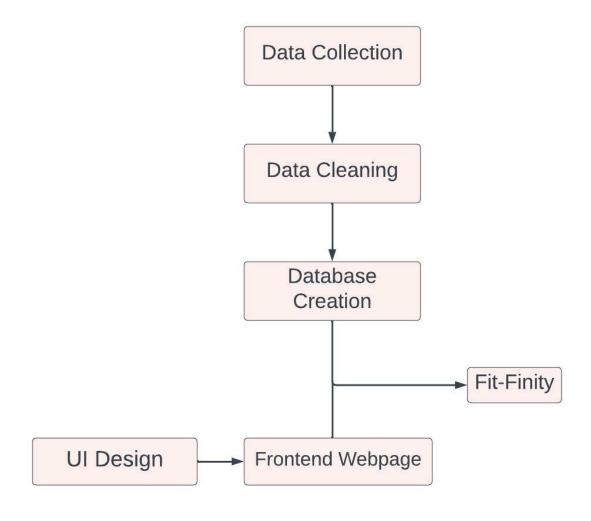
- Workout trainer: Works as a personal trainer and provides guidance to do specific exercises, training sessions and recording.
- Strava: Strava's activity tracking provides key statistics, such as speed, pace, distance, elevation gained, and calories burned during and after exercise.
- **JEFIT**: JEFIT enables you to track your workout routines and your rest time, and log and graph all body measurements as you progress
- **J&J**: Centered around research on high-intensity interval training (HIIT) and circuit training, which shows that short bursts of hard exercise with short recoveries can improve aerobic fitness quickly.

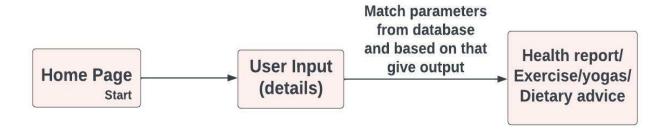
Limitations of the following platforms:

- 1. These apps were all primarily focused on physical activities that are necessary for either weight loss or muscle gain.
- 2. These applications don't contain what dietary habits we should follow in order to lead a healthy life or information about foods which we should eat in order to prevent medical complications.

3. Topic of the work (1-2 Pages)

a) System Design / Architecture





b)Modules

Data Collection

After brainstorming we identified all the necessary parameters required for a Health and Fitness based project.

To gather real time data we created an online form to circulate in our surroundings. As of right now, we have between 150 and 200 responses, and we're still counting.

A Database Cleaning and creation

For building our database we have categorized the collected data into following segments;

Age, Activity Lifestyle, Medical Complications, Recommended Exercises/Yoga Poses and dietary habits.

***** Frontend

UI designing of our platform.

c) Working Principles / Methodology

- User Input: All the necessary and required information about the user.
- After analyzing the input data, the platform will create a dashboard with all the recommendations of exercises and yoga poses to prevent the medical complications from rising along with nutritional information and dietary advice.

d) Expected Results

Personalized Exercises/Yoga Poses recommendations. Dietary advice.

4. CONCLUSION (Only for the phase – I work Completed) (1 Page)

We all are living in a world, where both lifestyle and health of people are the most neglected factors taken into consideration the work stress and lack of focus to one's own health. So, at this point, our app FitFinity comes to the aid by providing people a sigh of relief by lending them a hand to take care of their health and keeping a check on their body. One of the most popular and organic way is yoga.

The most significant plus point of yoga is that it does not have any side effects. Considered as the logical solution to fitness, yoga helps curb your stress levels, clear your head, and strengthen your muscles. It offers a complete workout, not just for the body but also for the mind and soul. It promotes inner peace by striking a harmony between the physical, emotional, and spiritual wellbeing of a person. Owing to its multitudinous physical and psychological benefits, yoga has become a popular wellbeing routine. One needs an able yoga teacher to identify the cause of suffering and decide postures and pranayamas. In the absence of such a teacher, the Internet is where one searches for information. However, Internet is like a treasure chest full of information and picking specific information becomes a tedious task for a person.

So, the users can follow a number of specific yoga poses being recommended by our app, which would generally be considering the health problems mentioned by the user. With a regular routine of our recommended yoga practice, one can better both their health and their lifestyle too.

First steps to be followed in a project is data collection and database crearion. As far as Phase-1 of EPICS is concerned, our first step was collecting the data. So, we have tried to collect real time data for our platform which is done by circulating google forms to be filled. Using the collected data, we have tried to build a database consisting of health problems faced by the common people. Thus, by storing the collected data in a structured database, we have successfully completed the Phase-I of EPICS project.

5. Reference: (1 Page)

- 1. https://forms.gle/SoW4jcrrEDqVX81s7
- 2. www.ncbi.nlm.nih.gov
- 3. https://www.andiappanyoga.com/yoga-therapy-various-diseases/