Original Research Article

Muscle Town the Health Fitness prevention of disease: Using a Mobile App to Improve Fitness and Health

ABSTRACT

In the present era, people are suffering from various diseases the main reason is that make everything easier for us like doing our jobs and travel it has become very easy now a days. Because everything is so easy people have stopped doing hard work which is why they are gaining weight and because of the weight gain, they are getting dangerous diseases like heart disease, blood pressure. The only way to avoid them is to exercise and take care of your diet. Smartphone and smartwatch app developers try to focus on providing easy to understand and easy to navigate user interfaces to get you started quickly. How do you begin using a health or fitness app? The process is simple. By adding health information like your BMI calculator calories counter, age, gender, weight, and inquiries about your various health goals and communicate with chatbot, you can set up a profile relatively quick and painless that matches your needs after you've downloaded one. The growth of the mobile app market and the fitness market led to some interesting projects combining both areas to be developed over the last decade.

Keywords: diagnosis, Treatment, or prevention of disease, Health monitoring; Fitness, BMI calculator, calories counter, chatbot, workout outputs

1. INTRODUCTION

Various fields of study have explored the many facets of fat, including how people perceive it and what they can do about it. Studies have shown how obesity became a public health issue in the 19th century and beyond. [1]. It is becoming more difficult for the old fitness paradigm to keep up with society's evolving demands for knowledge. Due to the worldwide COVID-19 pandemic in 2020, practically every nation will have challenges with a lack of medical and healthcare resources. People are increasingly conscious of the need of living a healthy lifestyle and getting physical activity into their daily routines. Fitness apps are the most popular sort of mobile health applications (mHealth apps) and may help users monitor their dietary intake, participate in physical activities, and encourage a healthy lifestyle. As a result, the commercial mobile app industry is progressively being taken over by these applications. [3] Fitness monitoring apps have shown to be useful in helping individuals reach required physical activity levels. Despite this, these applications have a significant attrition rate. There is a clear need to get to know the specific reasons why people are using these apps in depth. What we consume has an enormous impact on our well-being. When it comes to minimizing the risk of chronic illnesses, such as coronary artery disease and type-2 diabetes, maintaining a good eating pattern is essential. Portion management and eating a healthy, balanced diet are two of the most common ways to lose weight. Despite this, it is difficult for individuals to establish and maintain good eating habits because of a lack of desire, poor self-regulation, and personal biases. It's becoming increasingly clear that preventing unhealthy lifestyles in the general population, from childhood to adulthood, can have enormous benefits in reducing the incidence of risk

conditions like obesity, which leads to chronic diseases (e.g., diabetes) that represent a significant burden on the healthcare system worldwide. [5] [6]. Physical activity, particularly in the form of scheduled workouts, has been related to beneficial results in social and mental well-being, as well as improved physical function. Many individuals (particularly those with physical and cognitive disabilities, or those who have just given birth) may find it difficult or impossible to exercise on a regular basis, especially at a gym or outdoors. In this article, we examine how technology may (and does) make it easier for individuals to train from the comfort of their own homes, how it can inspire them to become active and stay active, and how it can help them achieve their fitness goals (such as better strength and balance). Since home training for older folks may be the most convenient (and in some cases the only choice), we evaluate studies and apps based on their applicability for this particular group of people. For older persons, we also highlight the limits and research gaps in home training options based on existing technology and studies.

Everything has a smartphone app in today's digital age. Because to smartphones, our daily routines have undergone radical transformations. When it comes to obesity in children and other health issues, mobile phones are often criticized. However, not all the apps on your phone are intended to harm your health. [7] Use this app to keep track of your daily calorie intake. As if you'd had a complete egg or two slices of bran bread and a single cup of coffee for breakfast. Calories, fat, protein, and carbohydrate intake for a breakfast may be calculated by combining pre-defined calorie totals. A similar experiment may be carried out at lunch or dinner to illustrate how much food you eat during the day in terms of calories, fat, protein, and carbohydrates. It might assist you figure out whether you're in a deficit or excess of calories. When it comes to figuring out what your body requires in terms of nutrition, Chabot will be your best bet.

There has been an explosion of health information available to consumers with the widespread adoption of smartphones over the last decade. [8] You may learn a lot about the food you eat with the help of this app. You can learn a lot about our local cuisine and nutrition using this app, which is one of its finest aspects.

More than two-thirds of individuals fail to reach the World Health Organization's (WHO) recommended levels of physical exercise. As a result, the global obesity rate has risen; Nauru is the nation with the highest rate, with 61% of adults classified as overweight or obese (Central Intelligence Agency 2016). According to the World Health Organization (WHO), 36.2% of Americans are obese, which places the United States at number twelve. Using mobile health (i.e., mHealth) technology to reward people to engage in more physical activity might be a technique to increase physical activity. Mobile fitness applications have demonstrated good outcomes in research into mHealth technology, which encourages users to exercise.

The features are integrating like customized workouts, social media platform, calorie counter, and more, you can make your app stand apart in the crowd. Moreover, these features will also help your app users to keep track of their fitness and attain their fitness goals.

The beneficial effects of regular exercise for the promotion of health and cure of diseases have been clearly shown. In this paper, we would like to postulate the idea that exercise can be considered as a drug. Exercise causes a myriad of beneficial effects for health, including the promotion of health and lifespan. [42]

Even though Health applications for fitness and diets have a high success rate and are widely available, retention rates for these apps are poor. That is, individuals are ready to begin utilizing them, but they don't stick with it for long. So, how can we keep individuals from abandoning mHealth when the novelty of early adoption wears off? For this inquiry, we analyzed data from a popular fitness app (Body Space), which includes user replies to questions on how they first discovered the app and why they continue to use it. We look at what inspires fitness app users to begin and pursue their fitness objectives using Self-Determination Theory as a conceptual framework and a continual comparative qualitative study of user data. For fitness tracker apps, this research will give information on the motivations of these users and identify viable design methods. Before providing the specifics of our findings and their implications for utilizing technology to support fitness goals, we examine the literature on fitness applications and intrinsic motivation.

2. LITERATUREREVIEW

As a generic phrase, "fitness" has a variety of different meanings. It may denote anything from a state of excellent health and vigour to the regular practise of physical exercise to achieve or maintain a healthy body composition. [13]. There has been a significant surge in academic

and medical interest in Health-Related Physical Fitness (HRPF) since the 1980s. People's ability to execute physical activities, their energy level to accomplish everyday duties, and their ability to lower the risk of illnesses associated with sedentary lifestyles are all considered to be aspects of fitness. Using mobile devices to transmit the message that students may access educational resources at any time and from any location was an excellent idea, since it gave instructors the chance to come up with new teaching strategies. [14]

Personal Fit is an intelligent and adaptable prototype that enables gym customers to monitor and change their training regimens dynamically and personally, with the goal of achieving better outcomes. [9] Research on the usage of current health and fitness applications have been rare. Moreover, the studies that have looked at apps failed to examine the independent purchase and use of apps as well. The old fitness paradigm is no longer able to supply society's growing need for knowledge due to the fast growth of the mobile Internet. [10]. Mobile Internet technology is used in this research to create a new form of eco-friendly intelligent fitness system. Mobile Internet technology Users' fitness data may be collected and uploaded to the cloud server by the system. Data sharing may also be accomplished using the mobile app, which allows users to see their workout stats and standings at any time. For health educators, there is a potential to use free or low-cost health and fitness applications in programming because of their widespread appeal.

Thousands of fitness apps (apps) are accessible for free or at a cheap cost because of the popularity of mobile devices and the ongoing desire for fitness. Users may utilise apps to measure their activity, find new workouts, and post their results on social media. [11] Healthier citizens strengthen the nation's foundation. There is overwhelming evidence that a healthy lifestyle, including regular exercise, a nutritious diet, and regular doctor's appointments, will help you live longer. According to the results from an examination of about 20,000 persons. [12]

Because things like going to work and travelling have gotten so convenient, more and more individuals are becoming ill now than ever before. People are gaining weight because they aren't exerting themselves as much as they used to, and this weight increase is leading to severe ailments like heart disease and high blood pressure. Many individuals use health and fitness applications in hopes of having access to real-time fitness and healthcare data at their fingertips. Calorie counters, medical solutions, vitamin and mineral reminders, and general activity tracking are just a few of the benefits that the correct fitness applications can provide. Changes in a person's diet and exercise habits might result from using a fitness app. Despite the limitations of conventional health monitoring methods, electronic technologies overcome them and heralded the arrival of fitness tracking gadgets. An app that keeps track of your body's calories and how much weight you lose, or gain is the icing on the cake. Calorie consumption may be tracked with such an app even while you're eating. You'll be able to monitor every aspect of your workout routine. You'll also learn how important it is to work out your body (like a low impact, 7-minute workout). Many individuals use these tracker applications to give themselves a boost in their fitness and health goals. Google Fit is a great example of how to use this technology. They don't lose focus on their aim because results take time to appear; instead, they get quick feedback. What matters is knowing you'll be rewarded for your efforts.

In the United States, people are growing more concerned about their health than ever before. IHRSA (International Health, Racquet and Sports club Association) (2004) estimates that in 2001, more than 50 million Americans engaged in sport or fitness activity (Profiles of Success). Attendance at health clubs climbed by more than 200 percent between 1987 and 2003, with the average number of visits per member increasing from 72 to 90. (IHRSA).

Nearly 100% of steroid users experience subjective side effects suggesting that concern over health risks does not influence the patterns of drug use. [43]

Membership in health and fitness clubs has increased because of Americans' increasing health awareness. [17] Sports performance and/or psychosocial development has been the primary focus of research on the Sport Education (SE) paradigm to far. Pupils who participated in SE and standard multiactivity (MA) units were compared for their health-related fitness advantages in this research. Pupils in middle school were given 10-lesson SE and MA units by two preservice teachers (PTs) as part of a preservice teaching experience in the classroom [18] To gather data on individual applications, researchers in this area are now scanning app stores or manually downloading each programme on smartphones or tablets one at a time to find out as much as they can about each one. Commutate and colleagues manually

installed 488 diabetes-related applications to conduct a feature comparison study. [19]

We combined study level death outcomes from exercise and drug trials using random effects network meta-analysis. [44]

Reports on the user's subjective satisfaction with an application's interface components are known as "user satisfaction." [20] The research has had several difficulties. Academic materials in HRS were first and foremost a stumbling block. [21] Rapid app updates that deliver real-time news and updates may be very beneficial in the infectious illness profession. The 'HealthMap' database is used by 'Outbreaks near Me,' an application created by Boston Children's Hospital in the United States, to keep track of worldwide infectious disease outbreaks. [22] The Cochrane Collaboration's systematic reviews need an awareness of the current literature and its gaps, as well as a methodology that explores a research issue and creates and uses a framework for examining a question based on the literature. [23] As far as we're aware, there isn't a standard way to find mobile health apps. To find health-related applications for the iPhone and Android, we accessed the iTunes store and the Android marketplace on January 27th, 2013. [24] To find empirical research regarding online health consultations, we did a systematic literature review in four digital libraries: Scopus, Association for Computing Machinery (ACM), PubMed, and Web of Science. The database search returned 2518 papers; after applying the inclusion and exclusion criteria, 45 articles were included in the final review. A qualitative interview technique was utilised to investigate the experiences of established health and fitness app users. Semi-structured one-on-one interviews were used to encourage individuals to freely discuss their health and exercise habits. A convenience sample of young adult college students offered comments on the substance and wording of the interview questions, which were then used to develop the actual interview questions themselves.

The prior research papers of the authors are shown in Tab.1 as well as the advantages/findings of those previous research articles.

Table 1. Overview of papers that mine text for insight into author's moods and health fitness.

Author	Article ID/DOI	Database	Title	Findings/Advantages
Corbin, Charles B., Pangrazi, Robert P, Franks &B. Don	ED 470 696	ERIC	Health, Fitness, and Physical Activity	A set of attributes that people have or achieve relating to their ability to perform physical activity
Ching-Hsue Cheng &Chung-Hsi Chen	8960968	Hindawi	Developing a Mobile APP-Supported Learning System for Evaluating Health-Related Physical Fitness Achievements of Students	In the field of HRPF, many psychological theories are utilized to improve students' motivation for HRPF achievements, and the self-efficacy theory is one among them.
Tiago Oliveira, Diogo Leite &Goreti Marreiros	10.1145/2948992.2949014	ACM Digital Library	Fitness App with intelligent plan generator	The growth of the mobile app market and the fitness market led to some interesting projects combining both areas to be developed over the last decade.
Mary Gowin, Marshall Cheney, Shannon Gwin &Taylor Franklin Wann	10.1080/19325037.2015.1044140	Taylor & Francis Online	Health and Fitness App Use in College Students	Formative research was conducted to describe how college students in the southwestern United States use health/fitness apps to change behavior.
Lynn Katherine Herrmann & Jinsook Kim	PMC5344171	By Pubmed	a theory-based examination of mobile fitness app usage over 5 months	This study examined the long-term adherence of fitness app use and effectiveness of fitness app use on TPB constructs and perceived fitness.
Amit Arora	-	NDSU Repository	A collaborative platform for bodybuilding and nutrition	the Big Body tool in the form of an e-commerce website can a help a person interested in bodybuilding in choosing the right kind of body building products, take the experts opinion, and access valuable articles/blogs that would help them move in the right direction.
Aparna	-	Mobile app daily	How Health and Fitness Apps Impact Your Habits in 2021	Health is Wealth
Adewole Adewumi, Godwin Olatunde, Sanjay Misra, Rytis Maskeliūnas, Robertas Damaševičius	10.1007/978-3-319-74980-8_3	Springer Link	Developing a Calorie Counter Fitness App for Smartphones	The initial results show that the app can gain traction in terms of its adoption given the fact that it is cheaper to download the app than buy a new smart watch for the same purpose.
Eddie T. C. Lam, James J. Zhang &Barbara E. Jensen	10.1207/s15327841mpee0902_2	Taylor & Francis Online	An Instrument for Evaluating Service Quality of Health-Fitness Clubs	To frequently assess service quality of health–fitness clubs, an effective instrument to obtain valid data is essential.

3. METHODOLOGY

Qualitative and quantitative methodologies were employed in the study of the interface's limitations and the subsequent reorganization. [25] As a result, social variables in diet forums are important for better understanding diet mechanisms. [27] A successful fitness app is one that is often used, highly appreciated, and highly recommended by its users. [28] When it comes to gender differences, males are more focused on being self-sufficient, whilst females are more focused on being inclusive and interdependent. [29] The LMS, e-mail, SurveyMonkey, and Microsoft Excel spreadsheet programmers were also used. [30]

Fig.1 depicts the process, which we also refer to as a Case Diagram.

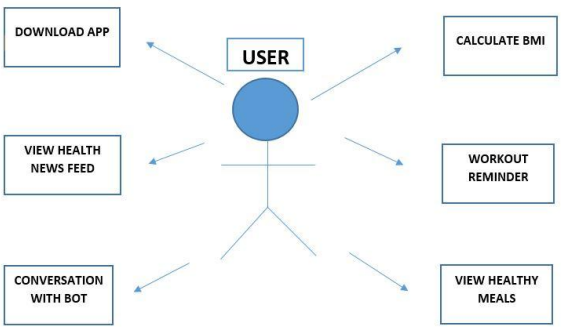


Fig.1 UML Diagram

3.1 Login

System Muscle Town checks to see whether a user's device is compatible with Android, and if it is then presents them with a registration page. After registering, they are then greeted with a welcome message and escorted to the application.
The Login interface of the MT is seen in Fig.2.

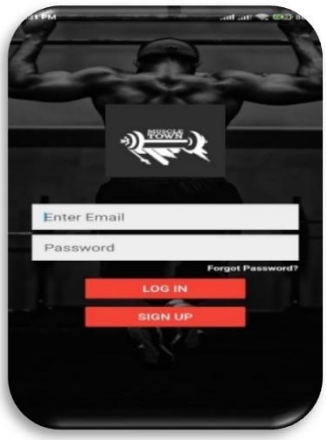


Fig.2 Login in the MT (Muscle Town)

3.2 Register (Sign up)

If a user hasn't already signed up for the app, the first thing they should do is click the sign-up button, enter their information, and the system will check their input before displaying the user's interface.

3.3 View Profile

After completing the necessary procedures to sign up or log in, a user profile will be shown.

3.4 Update Profile

After completing the necessary procedures to sign up or log in, the user will have access to and be able to edit his or her personal information, including his or her name, age, weight, and height. The system analyses the information that has been entered by the user.

3.5 Select status

When a user picks the circumstance he wants, he analyses the information available. For example, if someone has a condition, the app will provide a food plan, calories to eat each day, and physical activity like walking

3.6 Diseases

Your body may be affected by diseases. Sick people are different from healthy people. A sick person has just as much trouble exercising as a healthy one. Consequently, this app will advise meals, water consumption, and exercise regimens based on your current state of health and any existing medical conditions you may

be dealing with at the time.

3.7 Age Factors

As a person ages, the human body undergoes a series of changes, making it impossible for individuals of all ages to engage in the same physical activity. This software includes a variety of workouts and meals for individuals of various ages.

3.8 View healthy meals

Depending on your health problems, you may ask the bot what healthy meals it recommends for you.

3.9 Recommended exercise

This app also has an exercise area, and it recommends certain exercises based on a patient's age and medical problems.

3.10 Ask the user

The number of calories you've gained or lost will be calculated at the end of the day after you've eaten and given the app your input.

3.11 Conversation with bot

With the help of a bot, you may ask questions. In a matter of seconds, a bot will respond to your query, and because it was programmed by experts, you can be certain that the data it provides will be accurate.

3.12 Implementation Phase

You will be unable to progress until you create an account. Figure 2 illustrates this. There is no charge for registering. The human body undergoes modifications as one gets older. People of all ages can't undertake the same workout at the same time. Depending on the user's specific medical condition, the app will recommend a food plan, calorie intake, and physical activity, such as walking. User history/records/chatbots may be accessed and seen after a user has successfully logged into the programmed. That way, he or she can get answers to their questions and keep track of his or her caloric intake. An estimated 19 million "connected wearables" (as opposed to 5.9 million in 2013) were bought in 2014, a significant rise over the previous year, and are expected to continue to grow in popularity through 2019. Numerous variables are tracked by fitness trackers and wearable apps such as quality and quantity of movement, sleep patterns, steps taken, heart rate and rate of heart rate variability (HRV), oxygen saturation (SVRV), and even meditation and mood levels (BDI) [31].

3.13 View healthy meals

To provide stakeholders with information about the quality of the software product or service under test, software testing entails investigating. As a result, software testing may help the organization grasp and understand the risks associated with software adoption. Among the procedures used to detect software flaws and ensure that a product is ready for use is the practice of running a programmer or application. One or more attributes are evaluated during software testing by executing a software component or system component. A component or system's testability may be gauged by looking at these features.

In this Fig.3, the figure shows the actual interface of MT, where user can perform the task.

Fig.3 Homepage of the MT (Muscle Town)

3.14 Evaluation Phase

It follows the design process to reach at the result, the main features of the project MT.

Chat Bot: Your nutrition and diet inquiries will be answered by a chatbot. People of various ages will be able to follow the same food regimen. In terms of protein and calories, how

many calories are in an egg? It will provide all the necessary information. Your age is considered when calculating the amount of high and low values to give you a personalized blood pressure reading. Similarly, the number of persons whose blood sugar levels are within the normal range may be used to determine the age range. Similarly, if you have a high or low sugar level, you will be warned or alerted. Everything about your health and food might be inquired about. We're able to locate, share, and experience things with our devices and other people like never before thanks to the present age of connectedness and technological advancement. Siri and Google Now have made it commonplace for people to communicate with robots that are supposed to seem human. The advent of conversational interfaces has been a significant development in recent years. It's natural to anticipate chatbots to become cleverer and more sophisticated as this technology advances. AI-powered technology will eventually be able to simulate interaction with virtual assistants that are more and more lifelike [32].

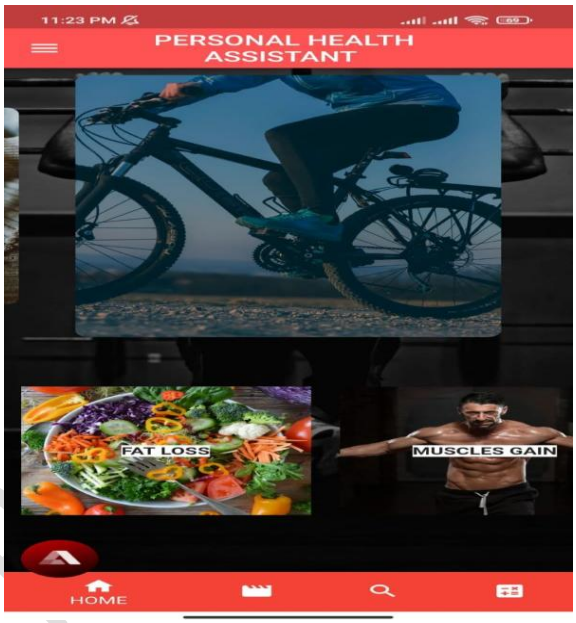
Even though chatbots are built by people, they aren't flawless. After the first message, Bot Analytics found that roughly 40% of users abandoned a conversation with a bot, and another 25% left after the second message. In this essay, we examine the use of chatbots in the advice of meals and the promotion of healthy lifestyles. Our goal is to emphasize the behavioral, theoretical, technological, architectural, and even logical-flow issues connected with establishing a viable conversational interface systems [33].

In this Fig.4, the user is conversations with chatbot for their healthy meal and healthy diet for best results.

Fig.4 Chatbot of MT (Muscle Town)

Personal Health Assistant

A personal assistant for health (PA) is an advance feature which is added to provide personal and domestic everyday support needed to help people to lead an independent personal and social life at home and guide about the personal diet.



BMI Calculator: If you are concerned about your weight, you may use BMI as an estimate, but it is not a diagnostic tool. A high BMI puts a person at danger. [34] To get your BMI Index, you may also use this page. According to your data, BMI INDEX will determine whether you fall under the "overweight," "underweight," or "normal weight" heading. As a result, managing your weight should be a breeze for you. To estimate the amount of fat in a person's body, the BMI (Body Mass Index) is used. A person's BMI is dependent on their height and weight, which are two separate factors. Even though the BMI does not provide a perfect assessment of total body fat, several studies have shown a correlation between BMI and total body fat, as have methods such as dual energy x-ray absorptiometry and underwater weighing. Adults may use the BMI app to determine their BMI (National Heart, Lung and Blood Institute, n.d.; Splend Apps, n.d.). In this invention, all pupils had cellphones, which they utilized. The educational innovation engaged 91 pupils, 93 percent of whom were female and 7 percent of whom were male. A majority (47%) of pupils identified themselves as African-American, while 43% identified themselves as White, with

the remainder identifying as American Indian (1%), Asian (2%), Hispanic (1%) or of another race (2%) or as multiracial (4 percent). It's (Tracy & Claire, 2016)) In comparison to other methods of determining body fat, BMI is extensively utilized because of its low cost and simplicity of assessing health risks associated with obesity [35]. In this Fig.5, the figure is showing the BMI Calculator for calculating the BMI (Body Mass Index) of the user.

BMI Formulas

Metric units: BMI = weight (kg) ÷ height2 (m)
US units: BMI = (weight (lb) ÷ height2 (in)) * 703

Fig.5 BMI Calculator of MT (Muscle Town)

Scheduling: This software allows you to customize your wake-up and bedtimes, as well as your workout schedule. This app serves as a daily schedule reminder, including a morning alarm, a drink reminder, and a sleep reminder.

In the Fig.6, it's shows that the user is scheduling notification reminder for their workout and meal.

Fig.6 Schedule Reminder

Workout outputs: Structural equation modelling (SEM) was used to validate the model developed for this study. With SEM we were able to model correlations between several predictors and criterion variables that are based on unobservable latent variables. You may also keep track of your exercise progress with the aid of this app. For example, after 30 minutes of walking, if you stop the pedometer's functions, it will compute how many calories you've burned. After 15 minutes of riding, the meter will show you how many calories you have burned.

The more you exercise, the more health benefits you get. But researchers around the world are trying to determine whether there is an optimal dose of aerobic exercise. For example, is it possible to overdo it? And is it important to do something that gets the heart racing or can a gentle stroll be as beneficial?

GYM Workout Day reminder: This application reminds you at the time of your gym "It's your gym time", and also will tell you what your exercise is today for Example Friday "Today is your Leg Day".

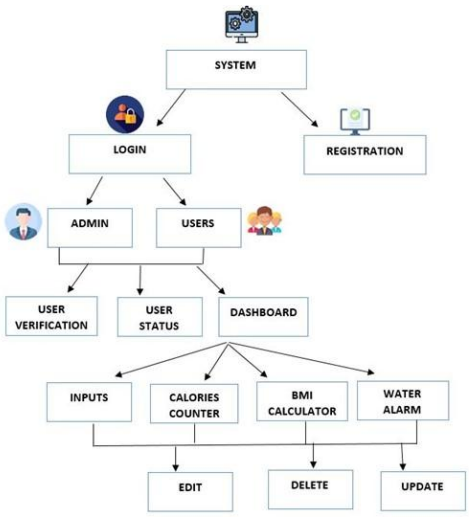


Fig.7 Block Diagram of MT (Muscle Town)

In this Fig.7, this block diagram showing the complete structure of the Muscle Town.

4. RESULTS AND DISCUSSION

93% of physicians feel that health-related applications may improve your health in some way. 93% of doctors believe this. The fact that fitness and health applications can be so motivating is without a doubt one of their finest advantages. Users 1 and 3 were unable to participate in the third session of this research because of a technical problem with the app. When they began the first task, the software didn't reply, so they gave up after numerous tries. In the end, the app's usability was successfully tested and assessed as adequate. [37] It's common for applications to include online communities, virtual challenges and push alerts that encourage users to "Keep it up!" and "You're doing fantastic!" For certain applications, you may also earn badges for meeting your objectives.

Exercise, physical activity, dietary programming, or any other fitness subject may be taught and shown to the user via a fitness app; this is its primary function. There are several fitness applications that can be downloaded from the web. It's possible to calculate calories with some, while others are intended to keep track of exercises or gather data from walks, bike rides, and runs. A personal trainer or nutritionist may be contacted via several fitness apps to address any questions or concerns a user may have about a particular session or working out in general. Some fitness applications also give a coordinated succession of songs, each with the same rhythm, for activities such as jogging and fitness classes, such as Zumba.

One of the most popular features of various fitness applications is the availability of real-time personal trainers. Streaming these trainers around the app is a big perk of the fitness app. For many individuals, the combination of responsibility and a personal touch makes this kind of engagement ideal. As a result, individuals are more likely to enroll in online programmers. As a result, they're more likely to open about their food and exercise routines to an outsider. Because so many individuals are present, the trainer can build a network.

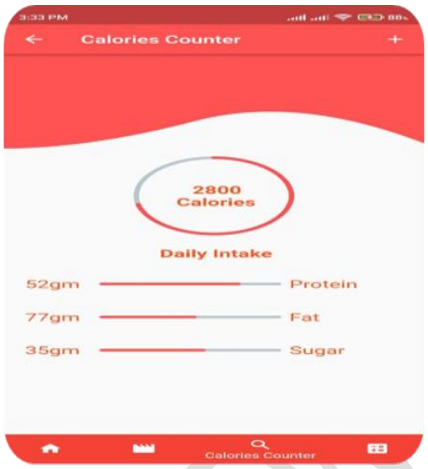


Fig.8 shows the user's calorie-burning outcomes by displaying the user's protein, fat, and sugar levels.

This software is simple to use, and you may access it from anywhere with your mobile device. There is no need to switch between separate applications to do simple tasks since you can access all the necessary resources inside this one app. This software does not need an internet connection after installation, so you may use its features like Chatbot for information retrieval and meal measurement, among others. This programmed also saves your previous records, so you can look back on them and evaluate your progress.

5. CONCLUSION

You may get a detailed diet plan from this app. Like a result, it may be possible that the extremely active women (as the ones we recruited in our research) may have scored high on masculinity and so were comparable to males when it came to their desire for competition. Using this app at the end of the day will show you how much nourishment you consumed throughout the day. What nourishment your body needs changes with age, so it's easy to make an educated judgement about how much nutrition it's receiving throughout the course of the day. Even through medical gadgets and applications unquestionably aid HCPs, they are presently being utilized without a full grasp of the dangers and benefits that go along with them. You'll also be reminded by this app to drink as much water as your body needs each day, based on your age. A healthy and active existence requires at least twelve glasses of water a day, and this app allows you to customize your intake to fit

your schedule, such as wake-up and bedtimes and gym visits. Use this app to keep track of your daily routine. You may also discover your BMI INDEX with this app. According to your data, BMI INDEX will determine whether you fall under the "overweight," "underweight," or "normal weight" heading. On top of that, it contains a CHAT BOT that will answer your nutrition-related inquiries. Not only that, but if you have diabetes, it will tell you how much sugar and fat you may consume each day, and if you have high cholesterol, it will tell you how much walking you should do each day. At the conclusion of the day, this programmed provides you with a summary of your day's work performance. They won't work unless individuals incorporate them into their daily routines. This isn't simply a fad that people can keep up with whenever they want. These health-related applications are designed to assist users. Contact tracking applications that adhere strictly to data privacy regulations tend to serve the needs of the public health community only partially. A lower degree of data privacy protection allows for more data to be collected using digital technologies. [40] If people know how to properly use these applications, they have the potential to significantly improve their quality of life. Lying about how many calories you eat or failing to keep track of your workouts does nothing except harm you. To cultivate positive habits, include them into your daily routine. By tracking calories taken and expended, regulating water balance, and promoting good eating habits, these applications help users maintain a healthy weight. They may also be used to keep track of how much coffee one consumes, as well as their body fat percentage and weight.

Users' behaviors, awareness, self-education on nutrition and PA, and social life were changed by the usage of diet and PA apps. The use of apps made it easier to eat healthily and get more exercise, and it also made it easier to keep up with good habits. However, several of the applications (e.g., nutrition apps) took a long time to utilize. Rather than relying on self-reported perceptions of food intake and PA changes, future research might employ app tracking data to evaluate actual changes [41].

CONSENT

As per international standard or university standard, Participants' written consent has been collected and preserved by the author(s).

ETHICAL APPROVAL

It is not applicable.

COMPETING INTERESTS DISCLAIMER:

Authors have declared that no competing interests exist. The products used for this research are commonly and predominantly use products in our area of research and country. There is absolutely no conflict of interest between the authors and producers of the products because we do not intend to use these products as an avenue for any litigation but for the advancement of knowledge. Also, the research was not funded by the producing company rather it was funded by personal efforts of the authors.

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