RESEARCH ARTICLE   OPEN ACCESS

Vazyata Fitness and Socializing Application

Keerti Patil, Dr.Chandrakala B M
Department of ISE, Dayananda Sagar College of Engineering, VTU, Bengaluru, Karnataka, India

ABSTRACT
Now-a-days the Healthcare Environment has become technology oriented. Humans are facing a problem of unexpected death which is because of lack of medical care to patient at right time. So we are developing project to avoid such problems. Vazyata is a fitness application built using the above technologies Sublime text or Atom can be used as a platform to develop and MySQL/Cloud Storage can be used to store the data that are provided by the client at the time registration and also to note the payment details of the client .Similarly, by using android application as platform we can create a mobile application, while creating the mobile application it's the replica of web application contains the similar format and also while dealing with mobile application priority must be given to the resolution .Application also helps us to know the water intake calorie burn and also contains the blog that lets us know the transformation journey and also contains the trainers list along with their profile while logging in/sign up a detailed information must be provided and also regarding the body conditions.

I. INTRODUCTION

The rise in the fitness awareness has drastically increased in the market value of the fitness industry. The estimated revenue in the Fitness segment in India amounts to US$1,786m in 2020.It's are now need fitness fact that, in order to lose weight, people need to focus on their diet, and not just on exercise. Although exercising alone can provide numerous benefits. Maintaining, losing or gaining weight is tied a calorie deficit diet, which can be achieved through increased physical activity or by consuming the right amount of food to shed some pounds. In fact, sedentary lifestyle statistics and data shows that low-calories diet while being physically increased physical activity or by consuming the right amount of food to shed some pounds. In fact, sedentary lifestyle statistics and data shows that low-calories diet while being physically inactive won't make one gain weight. To plan the right calorie deficit diet and to follow certain type of exercise and its routines, nutritionists and fitness trainers play an important role. Hence Vazyata has provide sits user to tracker their daily calorie consumption based on food, the calories burnt during certain exercises such that they're shared with the nutritionist and trainer of their choice who would help them to attain their goal.

II. EXISTINGSYSTEM

In this age of technology, it wouldn't be surprise for fitness industry to launch applications. Thesehasalreadybeenthousandsoffitnessapplicationw

hicharespecifictocertainagegroup,gender, medical condition, interests, region, culture to aid them to achieve the goal. They'll either focus on tracking diet and workout or advisory based or on clinical/ medicinal condition. Although there are many applications, they lack in a fewways.

- Focuses only on one set of groups, leaving out majority of thepopulation.
- Lack of including mental health as an aspect of overallwell-being.
- Tracking, advisory, informative, shopping and socializing aren't integrated which reduces user convenience.
- Doesn't allow for user to form communities based on interests or to organize groupevents

.

III. MOTIVATION

India is a story of a growing middle class. With millions joining the workforce every year competing to sustain their careers, there is a co promise made unknowing Increasing physical inactivity, bad diet sand falling health which gets ignored in order to survive the rigor of the work life. Frenetic work schedules, extensive health disorders than ever before. The lifestyle diseases are becoming endemic to our society and almost always, the solution begins with getting off your couch and making simple lifestyle changes. The number of overweight and obese people in India doubled in last decade. India stands at 65 million obese citizens and this number is increasing at very high rate every year. Diabetes develops in adults due to poor eating

habits and bad lifestyle choices. India has the largest number of diabetics (72 Million) with type II at 50 million. At least 150 million people in the country, affected by mental disorders, and are in need of active medical intervention. Lack of social support, changing diets and economic instability are the main triggers of mental disorders.26 percent of all deaths in happen due to cardio vascular diseases. The application is designed in such a way that it takes care of overall wellbeing of a person

IV. PROPOSED SYSTEM

The study aims to provide an application that not only focuses on physique but also their mental health by enabling them to get consultation from professionals and to help them improve and socialize to increase their emotional strength by providing online communities to share, learn their thoughts, join and organize events. The study also tries to include majority of the population by providing curated diet, workout plans based on their age, gender, medical condition and be check by the trainer, nutritionist and doctor of their choice. This project also provides an online retail where the user can buy groceries in accord to their diet plan, gadgets for their workout or events, medicine suggested by the doctor. The application provides users and trainers an opportunity to post informative blogs, logs, QA platform, discussion and polling etc. This project is a cloud based android application which provides user faster access to the data given that there is internet connectivity. The users, trainers and others' details can be added, updated by the admin via the web application.

V. SYSTEM ARCHIETECTURE

A system architecture or systems architecture is the conceptual model that defines the structure, behaviour, and more views of a system. An architecture description is formal description and representation of a system, organized in a way that supports reasoning about the structures and behaviours of the system. A system architecture system contains components and sub-systems developed, which will work together to implement the general The application stores all the details of the registered user on a NOSQL based Database Management System Mongo DB, which also stores the details regarding trainer, nutritionist, doctors including the articles,blog,communitiesetc. All these details are collected from users via android application which can be installed and used by multiple clients at a time. First time users need to enter all the essential details after which the user can select trainer, doctors, join community of their choice. The administrator can add, delete and/or

modify the information regarding the articles, items in the retail on the website application, which is built on Angular framework and Node.js technologies.
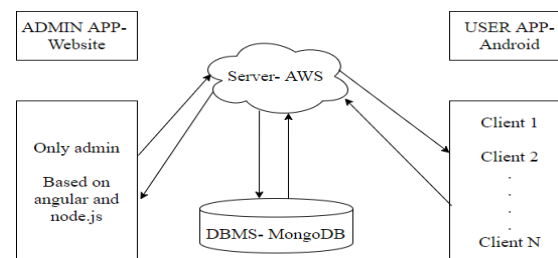

Fig1: *System Architecture of Vazyata application*

VI. METHODOLOGY
A. Elements within the system
1. Server: In computing, a server may be a computer programora tool that provides functionality forother programs or devices, called "clients". This architecture is named the client–server model, and one overall computation is distributed across multiple processes or devices. Servers can provide various functionalities, often called "services", like sharing data or resources among multiple clients, or performingcomputationforaclient.Oneservercanserve multipleclients,andasingleclientcan use multiple servers. A client process may run on the same device or may connect over a network to a server on a special device. Typical servers are database servers, file servers, mail servers, print servers, web servers, game servers, and applicationservers. Here the server is cloud based and acts as web, application and database server.

2. Local Unit: This is often the part which acts as client end for the n-number of users, who can access to the application and other information, remotely provided the web connectivity.

3. Control Unit: This is the website module, which provides the access to its administrator to modify, delete or add the information which can be used by the user. This can be access by admin only and if theyhaveaccesstoitwhichcanbe assignedbytheadmin.Andwiththeinternetconnectivity connects to mobile application via server.

4. Storage Unit: NOSQL database to store the information in key-value order for easy and faster retrieval by the query. Key-value databases are an easier sort of database where each item contains keys and values. A value can typically only be retrieved by referencing its value, so learning how to query for a specific key-value pair is typically simple. Key-value databases are great for use cases where one may want to store large amountsof data

but one don't need to perform complex queries to retrieve it.

B. Flow of Android Application

The user logs in with the required credentials as created during the registration process. If he is first time user, he needs to register by providing the required information. As soon as he login, he will be taken to the calorie counter activity where he needs to enter his daily intakes by selecting which date and time of the day (Morning/Afternoon/Night). He should also enter the water intake. Through the navigation panel he can move to different tabs to select trainer, nutritionist, doctor, or to read article or to create/ join communities, or to shop.

Under these professionals' tab, the user can scroll and look for the most suitable personnel of their choice and start their conversion regarding the same. Under the article tab, user can filter or sort the article in accords to date, name, and type of article. The shopping tab has 3 different sections food, equipment, medicinal drugs eachof such are further divided and has its own criteria. And the community tab can be used to surf different communities to join oroption to create their own.
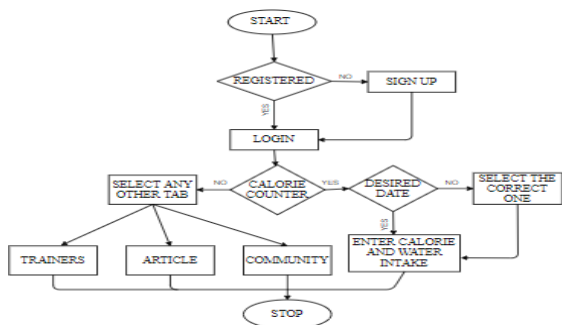

Fig 2: *Flowchart of Android Application*

B. Flow of Webapplication

The admin initially needs to log in with proper credentials, if he is assigned the role by his super admin. Then he can add, delete, change and view all the data regarding the tabs and activities of the mobile application and credentials.
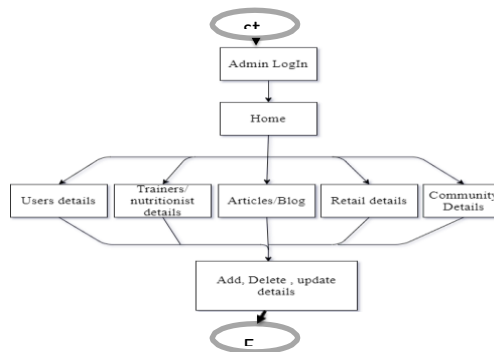

Fig 3: Flow of web application

VII.   RESULTS AND DISCUSSION

The user can now improve their healthy; both physical and mental but also increase their social circle which helps one to reduce the feeling of loneliness. The users here can communicate with other users to improvise their physical, mental health and their social life. Our application provides the platform to discuss issues, a forum to arrange events and suggestions on the exercises and diets. Hence, Vazyata provides users a fitness and socializing application, which help people stay motivated and stick to the plan with the help of friends, trainers and nutrients.
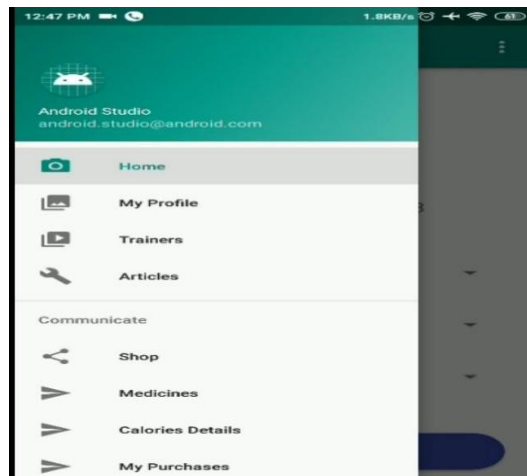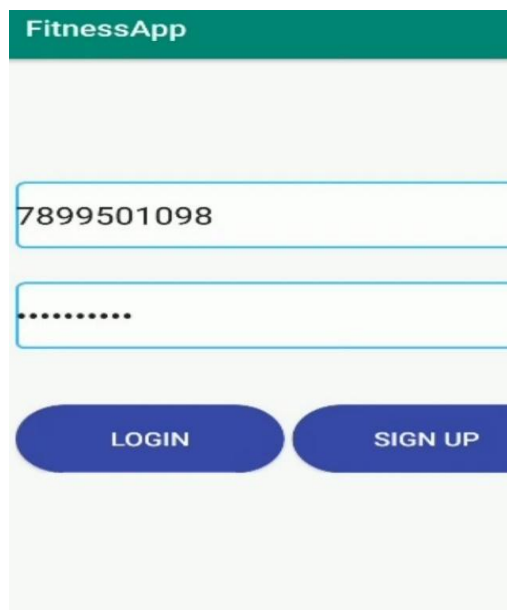

Fig 3: *navigation panel*

Fig 4:*collecting user credentials*

customized, personal workout, diet-based shopping lists for the user. We can include an assistant to get the user data instead of user typing the data.

VIII. CONCLUSION

Vazyata helps to attend people overall well-being through fitness as well as desired health for the user. But in extreme cases it is better to seek professional help.

REFERENCES

[1]. Statista, "Digital Market Outlook on Fitness Market in India",2019.
[2]. Barbara Strasser, Dietmar Fuchs, "Diet Versus Exercise in Weight Loss and Maintenance: Focus on Tryptophan",2016.
[3]. John Spencer Ingels, RanjitaMisra, Jonathan Stewart, Brandon Lucke-Wold, and Samantha Shawley-Brzoska, "The Effect of Adherence to Dietary Tracking on Weight Loss: Using HLM to Model Weight Loss over Time", pp 1-6,2017.
[4]. Klaas R Westerterp, "Exercise for weight loss", v. 110, pp 540–541,2019.
[5]. FatemehAziziSoeliman,LeilaAzadbakht,"eigh tlossmaintenance:Areviewondietary related strategies", 268– 275,2014.

FUTURE SCOPE

Physical fitness movement is another area of development, which is receiving more attention nowadays among all segments of the society. People are striving to improve their fitness and are engaged in activities like jogging, brisk walking, cycling, yoga, aerobic dancing and many more

Although most of the features are included in the application Vazyata, we can include modern and advanced technology such as machine learning. We can use machine learning technology to get the