The Fit Indian Mobile Application

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Abstract- *The FitIndia App is designed to serve and cater to the fitness needs for people specifically belonging to India. In the present scenario, there is abundance of fitness information on the internet but none of it is valuable and effective enough when it comes to its applications in Indian environment and conditions. Thus, the FitIndia app is designed to provide workouts and diet plans for various Fitness Goals which are designed specifically considering Indian conditions and market availability. The app will contain various Fitness categories for the user to choose from. Inside these categories,the user will be displayed various fitness regimes and diet plans according to the needs of the user. It will contain text,image and video references to aid the user.*

Keywords- Fitness, Workout, Diet, Android, Database.

I. INTRODUCTION

In a country that comprises of 1.324 billion people and which provides a life expectancy of about 67 years to males and 70 years to females, fitness has a major role to play. The FitIndian app is designed to provide workouts and diet plans for various Fitness Goals which are designed specifically considering Indian conditions and market availability.

In the present scenario, there is an abundance of information on the internet regarding fitness and diet. The problem arises when it is noticed that none of the information is relevant to the conditions that prevail in India. The fitness regimes that are described are often based on the equipment that are not available in most of the gymnasiums.

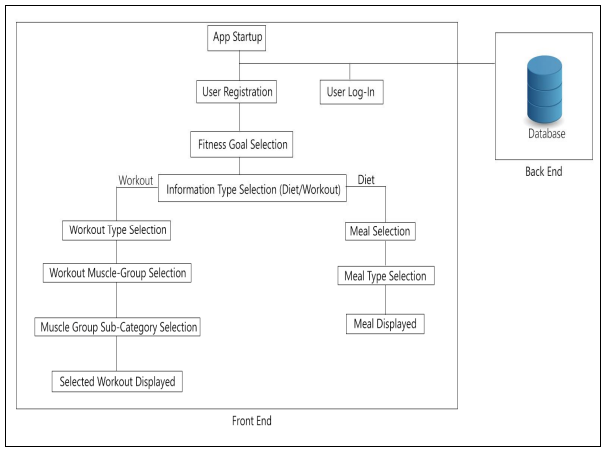
Even if the fitness regimes are relevant to the conditions prevalent in India, the diet plans are totally irrelevant. The biggest reason for this being the difference between availability of food items in the market in India compared to the other nations. Also, there is not much information available regarding the diet plans that can be planned using food items that are available in India.

Moreover, there is limited knowledge online about the nutritious value of the diet that are prevalent across different parts of India based on the availability of products and climatic conditions. Thus, the main theme is to create an android application that is designed according to the fitness needs for people specifically belonging to India.

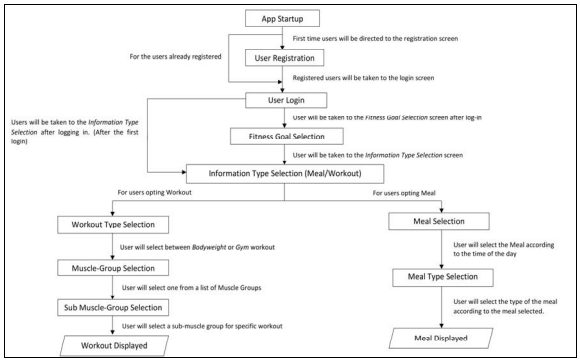
II. LITERATURE SURVEY

During a literature survey we collect some of information about the statistics of health and fitness in India. The statistics describe that for a male the average life expectancy is 67 years, and for a female, the average life expectancy is 70 years. It also showed that the percentage of obesity in males was found to be 1.5% and that to be 2.5% in females. The issue of raised blood pressure affected 23.1% males on an average, and affected 22.6% females on an average. Also, it was seen that 9% of the total population died of heart attacks. Thus to conclude with, on an average basis, only 25% of people for every 100 people are fit and healthy to live a comfortable life. It could also be seen that on an average around 4.5k people die of acute respiratory diseases, 4k die of other infectious diseases, 3k die of cardiovascular diseases and diabetes, 1.75k of chronic respiratory diseases, and 1k of other NCD's.

III. SYSTEM ARCHITECTURE



IV. DATAFLOW DIAGRAM



V. MODULE IMPLEMENTATION

Following are the modules for the FitIndian Mobile Application:

- Registration Module
- Login Module
- Fitness Goal Module
- Diet and Workout Module

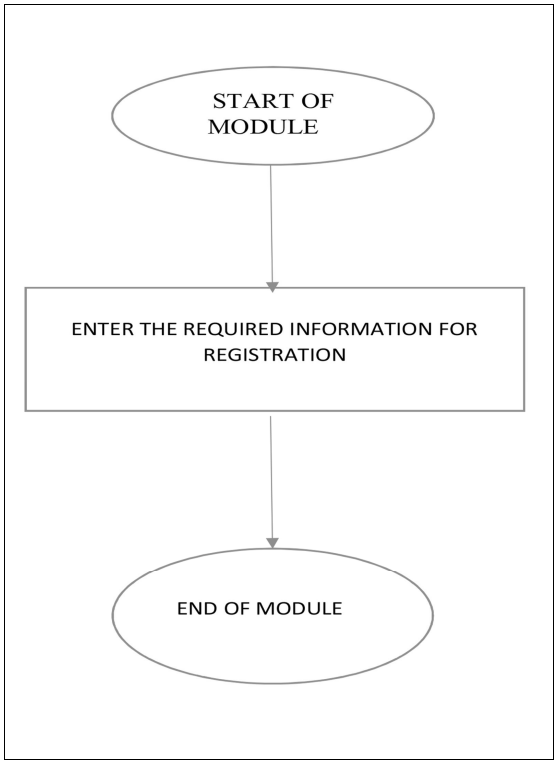
REGISTRATION MODULE: This activity will be responsible for the creation of the user account which would enable access to the application.

With the help of "text fields", spinners, and dropdown boxes the user will fill up all the given fields and at the end of this activity there would be a button that would finalize the account creation and generate a "Toast" message.

At the time of registration the user will have to fill up only the email and password sections of the activity.

This will be done with the help of PlainTextFields
At the end of this activity, there would be a button "SignUp" that would finalize the account creation andgenerate a "Toast" message stating the creation of account was a success or a failure depending on the status of the authentication.

The details entered by the user for account creation is stored in the database and can be managed by the application administrator.



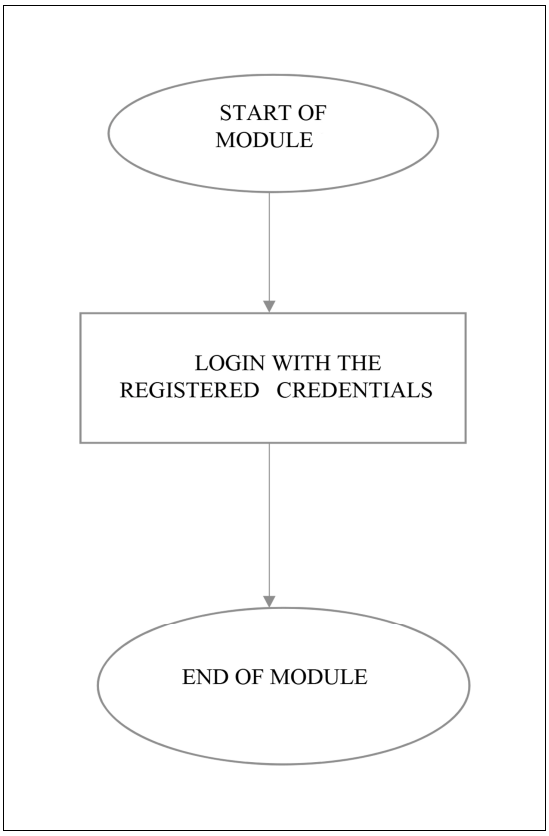
LOG-IN MODULE: This activity will contain only two empty fields that is the user's email-id and the password.

Upon entering the data, the user's credentials will be verified, with the data stored in the database and if the data exists the user will be logged into the application.

This activity will contain only two empty fields that is the user's email-id and the password.

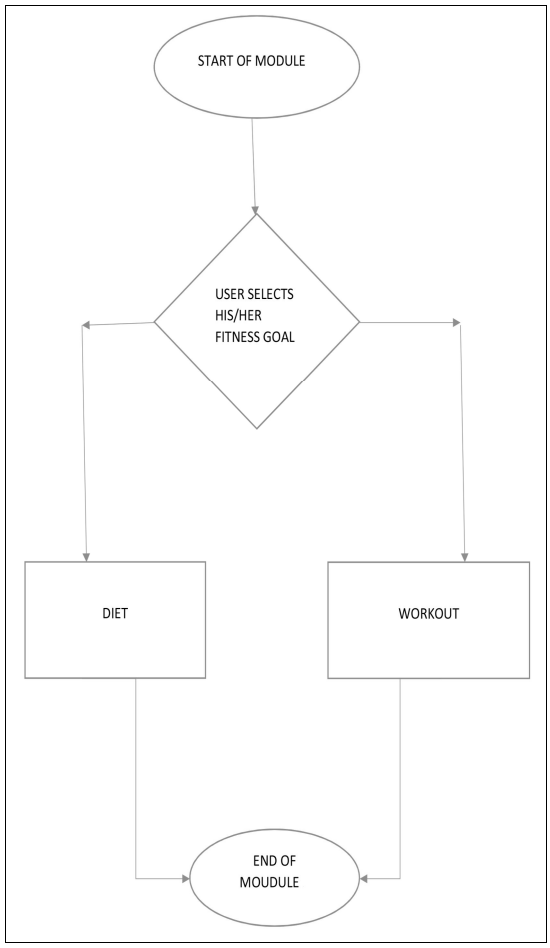
Upon entering the data, the user's credentials will be authenticated, with the data stored in the database and if the data exists the user will be logged into the application. In case of wrong password or wrong email entered by the user, a toast message will be generated asking the user to check the data entered by him.

In case the user has forgotten his password, there is another option "Forgot password", this will send him a password reset link to his registered email id.



FITNESS GOAL MODULE: The application will provide the users with different Fitness Goals to choose from. The user will then be displayed with the diet and workout plans that are according to the fitness goal opted by the user. The app will provide the user with the following fitness goals:

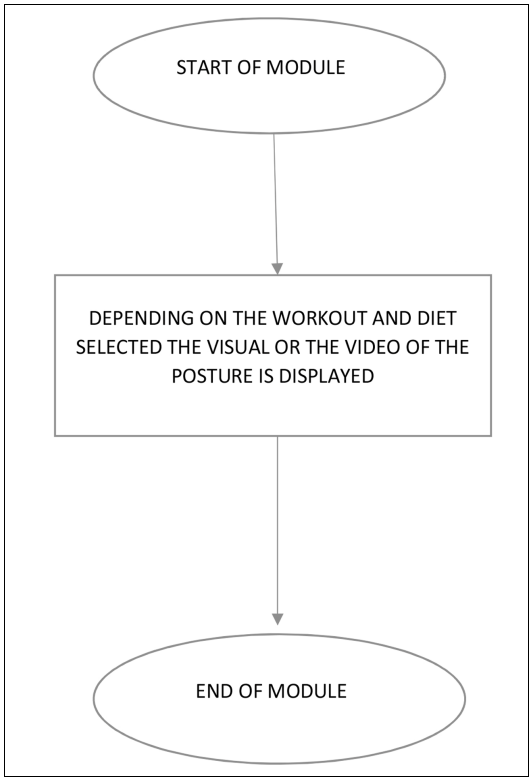
- Lose Weight
- Gain Weight
- Build Muscle
- Be Athletic



DIET AND WORKOUT MODULE: In this module, upon the selection of the desired fitness goal by the user, the user will be provided with the option of selecting the diet or the workout related to the desired goal.

The workout category will comprise of all the major muscle groups of the body and the exercises required to be performed upon them.

The diet category will comprise of the different sections of meals in a day and the diet to be followed in each of those meals.



VI. FUTURE ENHANCEMENT

We are looking forward to add a bundle of new modules such as fitness tracking using smart watches, displaying nutritious values for each individual food item, 3D-modelled workout infographics, 3D-Anatomy references, Mental and Psychological Health tips, Miscellaneous Workouts and some more enhancements as the development of the application progresses.

VII. CONCLUSION

In the light of all the details that have been mentioned above, this project is valuable to the people who have access to limited fitness resources and have a minor amount of budget to be spent on their health and fitness, though it will be beneficial for all kinds of people, of all ages, genders and physical body types. In the country that we currently inhabit, there is an essential need of keeping ourselves healthy and fit given the rising conditions of pollution and diseases. This project is developed with the belief that it will cater to all the needs of the user.

REFERENCES

[1] "Fitness Applications for Home-based Training" by #1Iman Khagani Far, #2Svetlana Nikitna, #3Marcos Baez, #4Ekaterina Taran, #5Fabio Casati. Pervasive Computing, IEEE.
[2] "India: WHO Statistical profile" by Country statistics and global health estimates by WHO and UN partners
[3] http://www.who.int/countries/ind/en/.
[4] https://en.wikipedia.org/wiki/Health_in_India.