

**A
MINI PROJECT REPORT
ON
“FITNEZ GEEKZ”**

**As Partial Requirement for the Degree of
MASTERS OF SCIENCE (COMPUTER SCIENCE)
(MSc. CS)
Submitted to**



**MIT WORLD PEACE UNIVERSITY, PUNE
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ACKNOWLEDMENT

Success in such comprehensive project cannot be achieved single handed.it is team effort that sails the ship to the coast. So, we would like to express out sincere thanks to all the dignitaries who involved in making this project a great joy and turning it into successful piece of work.

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Finally, we would like to thank our Parents for their support throughout the project. We owe a special debt to our family & friends to their supports, blessing and encouragement for us.

Thank You,

Sincerely,

Disha Gupta

Harshvardhan Kale



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Introduction

In today's world, we all know the importance and awareness that has been spread about health and fitness in the world. We all know that when we register in a gym, we get a schedule written in a paper about workout and we have to find that paper every day in the gym. Whenever our workout changes or the paper get lost, they have to use a new paper. This also happens with our diet. We have to write it somewhere when our trainer tells us. Just imagine how easy it would get when you have your schedule of workout and diet with you every time. We are making this app so that the clients can look in for their workouts and diet whenever and wherever they need in their phones. Here we provide 7 – days workout so that user has various options in workout and for diet as well we will give options such as vegetarian, non-vegetarian and eggetarian so that each user can find it useful. It even tells your Body Mass Index (BMI) which tells you your perfect weight according to your height and weight.

Project Scope

The FITNEZ GEEKZ application has a wide scope which covers the following perspective:

- ❖ Trainer and Client can register and view/ update the profile data.
- ❖ Client can view all the BMI of his/her body.
- ❖ Client can look at the BMI result and decide whether to lose or gain weight.
- ❖ Client can look in for diet and workout in both categories.
- ❖ Client will follow the day wise diet and workout.



Objectives

- ❖ To remove the manual or paper work in the Gym.
- ❖ Provide a platform with interactive user interface for trainer and client.
- ❖ Save the time of both trainer and client.
- ❖ To save cost for each other.
- ❖ User friendly.

Project Profile

✚ Three Entities:

1. Client/User.
2. Trainer.
3. Admin.

✚ User/Client Side:

1. Sign Up/ Sign In.
2. Weight Preference
3. Diet
 - Vegetarian
 - Non – Vegetarian
 - Eggetarian
4. Workout • 7 Days Workout 5. Feedback.
6. About Us.
7. Contact Us.
8. Logout.



✚ Trainer Side:

1. Sign Up/ Sign In.
2. Edit Diet
3. Edit Workout
4. View Feedback.
5. About Us.
6. Contact Us.
7. Log out

✚ Admin Side:

1. Login
2. Manage Users/Clients.
3. Manage Trainers.
4. Manage About Us.
5. Manage Contact Us.
6. Logout.

❖ **Technology :**

Java, Firebase.

❖ **Front End :**

Java

❖ **Back End :**

Firebase.



Project Category

- ❖ The FITNEZ GEEKZ is categorized into the Mobile Application. Means this is developed in the JAVA with Firebase technology.
- ❖ Mobile application means this system is host onto the server and manages on the server and 24-hour INTERNET facility is required.
- ❖ The database is stored on the server computer and managed by any computer and any validations or any scripts are executed on the server.
- ❖ Any verifications or any checking is done before sending it to database which is done by server only.
- ❖ In the mobile-based application, the workload on servers is slightly greater because they are responsible for the manageability of the system.
- ❖ The development of mobile-based application is considerable because security is much better than the desktop application.
- ❖ The management of database is much easier than managing single PC means database is also stored on the server so it is the responsibility of server for managing It.



Environment Description

❖ Hardware Requirement :

Client-Side Hardware Requirements

Sr. No	Hardware	Requirement
1.	Android Version	9.0
2.	RAM	4 GB
3.	Storage	100 MB

❖ Software Requirement :

Software Requirements for developing the Mobile Application.

Operating System	Windows 10/ 11
Software	Android Studio
RAM	16 GB
Storage	250 GB



Analysis Report

❖ Current System :

- The gyms are working manually.
- The current system is time consuming and also it is very costly, because it involves a lot of paperwork.
- To manually handle the system was very difficult task. But now-a-days computerization made easy to work.
- The following are the reasons why the current system should be computerized:
 - To increase efficiency with reduced cost.
 - To reduce the burden of paper work.
 - To save time management for recording details of each and every patient and doctor.
 - To generate required reports easily.



❖ Limitations of Current System:

- **Time Consuming:**

- As the records are to be manually maintained it consumes a lot of time.

- **Paper Work:**

- Lot of paper work is involved as the records are maintained in the files & registers.

- **Storage Requirements:**

- As files and registers are used the storage space requirement is increased.

- **Less Reliable:**

- Use of papers for storing valuable data information is not at all reliable.

- **Accuracy:**

- As the system is in manual there are lot many chances of human errors. These can cause errors in calculating mechanism or maintaining patient details.

- **Difficulty In Keeping New Records:**

- It is difficult for keeping all the new entries of members, their account and transaction details.



❖ Proposed System:

- We introduced the new proposed system for reducing the limitations of the current paper-based system.
- The new system is totally based on the internet and it is paperless system means the data is storing on such database and totally mobile based system is introduced.
- In the new system there are basically two entities Trainer and Client.
- The proposed system is providing the client to get the diet and workout in one app. There the client has access to day wise workout and diet for weight gain or weight loss. They can even look at their BMI and work accordingly on their body.
- The trainer can change the diet and workout if the client is opting for a personal trainer so they get customised diet and workout.
- So, we identify the major difference is that, how convenient the proposed system than the current system.



❖ Advantages of Proposed System:

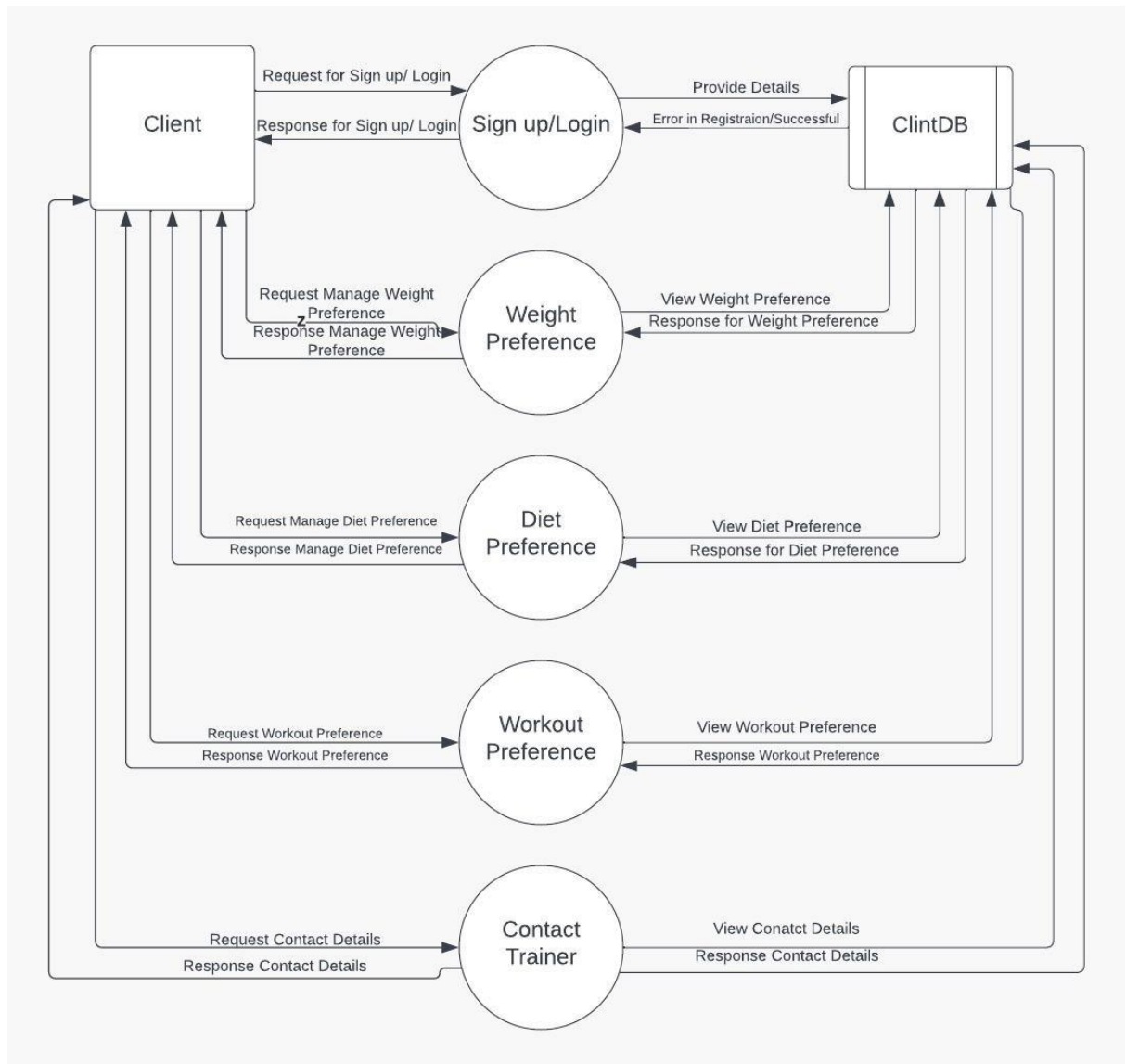
- The proposed system has many advantages over the current system.
- Proposed system is less time consuming, cost effective, overcome tediousness over the current system.
- The major backup problem of current system is reduced by the proposed system means the data is stored on the database so we not required much paper storages.
- Data is stored on the electronically format so we can easily change in the database and data entry should be easily modified.
- The impact of workload is less than the current system.
- Proposed system is very user friendly and much faster throughput than the current system.
- The response time is faster than the current system.
- The proposed system has many new techniques for handling multiple clients so data accuracy is maintained easily.
- Security level is higher than the current system.
- The well knowledgeable doctor is higher for maintaining the daily work so data accuracy and data manageability is in easy manner.
- The data corruption is not possible because the security level is maintaining and all rights is not given to the owners for modifying the database.



- Through the new system the patient can easily view the whole doctor information but can't change it, so we can easily circulate any information easily.
- The backup problem is overcome by the proposed system and reducing the cost factor, time factor and storing problem is also reduced.

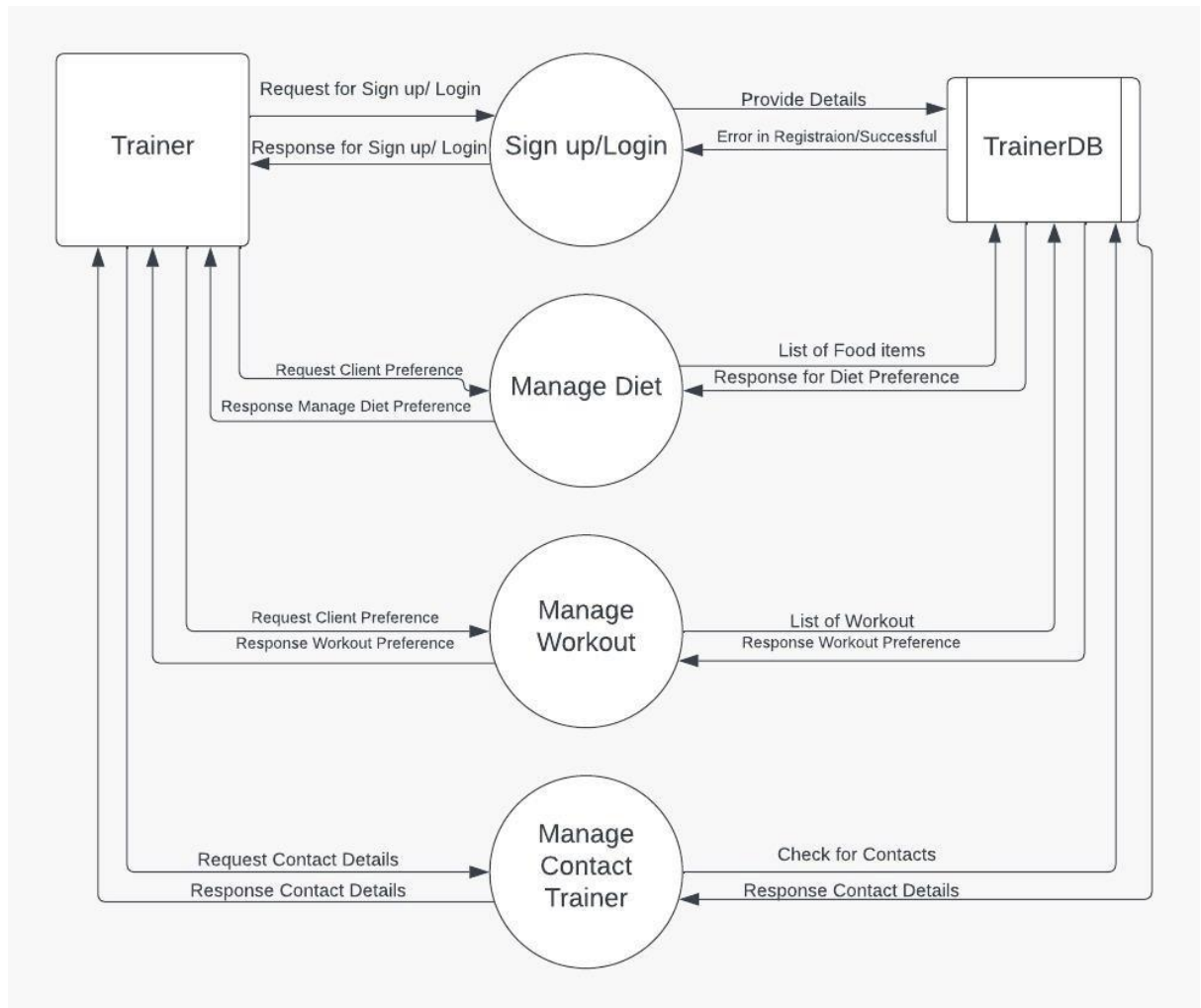


- 1st Level Client DFD :



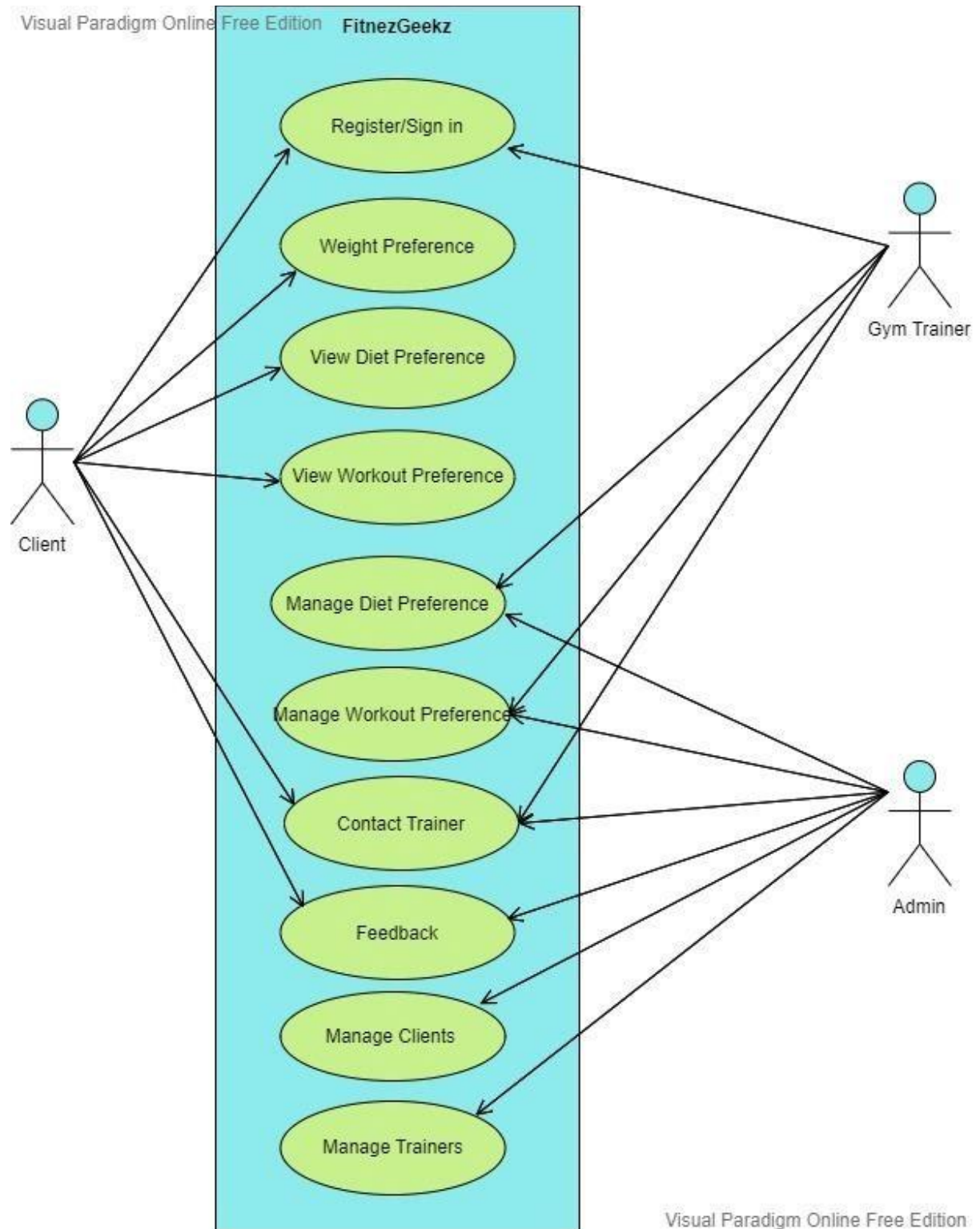


- 1st Level Trainer DFD :





❖ Use Case Diagram :





Design Report

❖ Screen Layout :

- Client / User Side Screen Report :

1. Splash Screen :



➤ Fitnez Geekz application splash screen.



2. Sign in Screen :

- After splash screen showing sign in screen user/client can enter the email id and password.



3. Sign Up Screen :

17:14 100% 4G

FitnezGeekz

Name

Mobile Number

Choose your Gender

☐ Female ☐ Male

Email

Password

Confirm Password

REGISTER

- Successfully Sign Up. Redirected to Profile screen enter the User/Patient personal details.



4. Sign Up Screen filled:

17:15

FITNEZ GEEKZ

FitnezGeekz

Disha Gupta

8390662266

Choose your Gender

☒ Female ☐ Male

Disha5214@gmail.com

.....

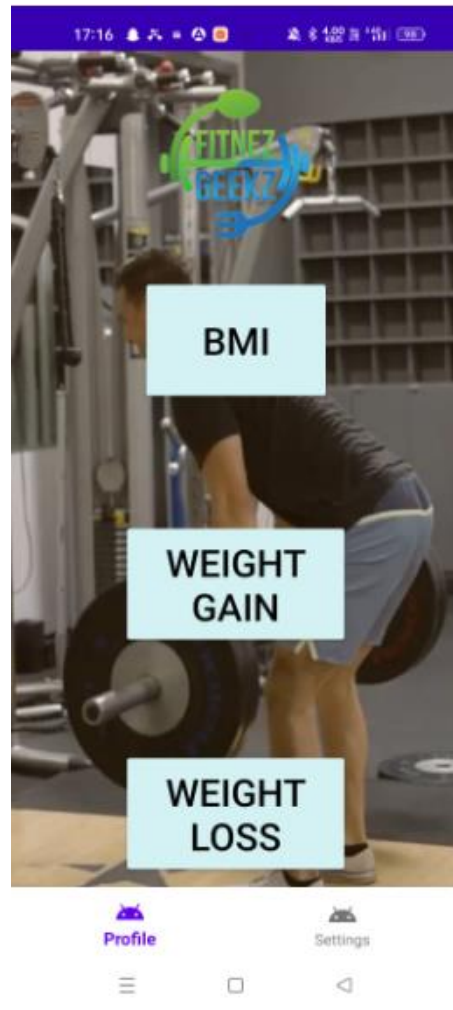
.....

REGISTER

- Added successfully personal data.



5. Home Page



- Successfully signed in redirected to home screen. This is the main page where client can look for options.



6. BMI Page:

The screenshot shows a mobile app interface for a BMI calculator. At the top, there's a status bar with the time 17:16 and various icons. Below that is the Fitnez Geekz logo, which features a green dumbbell and the text 'FITNEZ GEEKZ'. The title 'BMI CALCULATOR' is centered. Below the title, there are two input sections: 'Your Height in Cm' with a text field containing 'Enter Your Height Here', and 'Your Weight in kg' with a text field containing 'Enter Your Weight Here'. A large blue button labeled 'CALCULATE' is positioned below the weight input. At the bottom, the text 'YOUR RESULT' is displayed in a light gray font. The entire app interface is set against a light blue background.

- In the BMI option, the client just has to mention his/her weight and height and can look at the body type they are in.



7. BMI Page Result:

17:16 100% 700 111 100%

FITNEZ GEEKZ

BMI CALCULATOR

Your Height in Cm

170

Your Weight in kg

90

CALCULATE

YOUR RESULT

31.1

Obese Class 1 -
Moderately Obese

- Once the weight and height is mentioned by the client, he/she will be able to see their body type. Here as it's mentioned Obese Class 1- Moderately Obese.



8. Weight Loss Page:



- Once clicked on Weight Loss option, client get to see this page where he/she can choose diet or workout option to look for. You can logout or redirect to home page with the buttons.



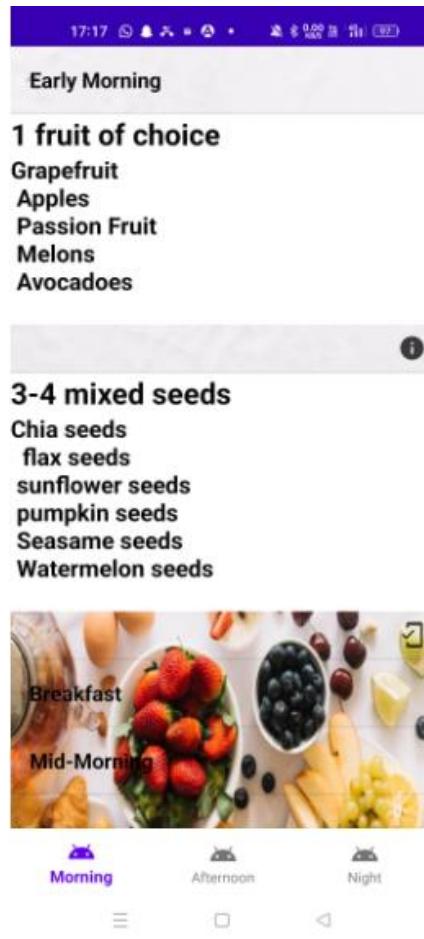
9. Morning Diet Page:



- When a client opens a diet page, he/she will see this page where there are 3 fragments Morning, afternoon, and night. In morning, there are 3 options as it is shown Early morning, Breakfast and mid-morning.



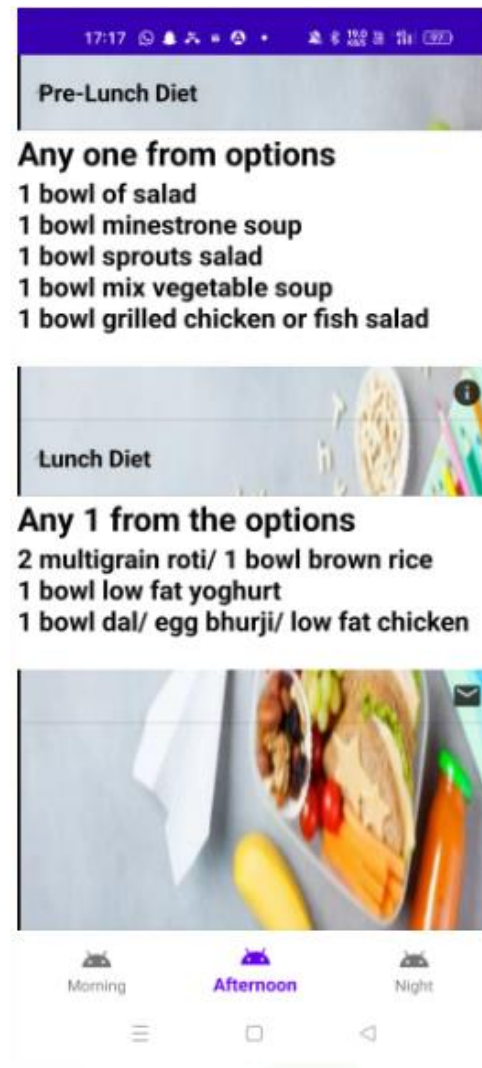
10. Morning Diet Expanded:



- When clicked on Early morning, a list view will open and you can get the detailed information about the food client can eat in morning.



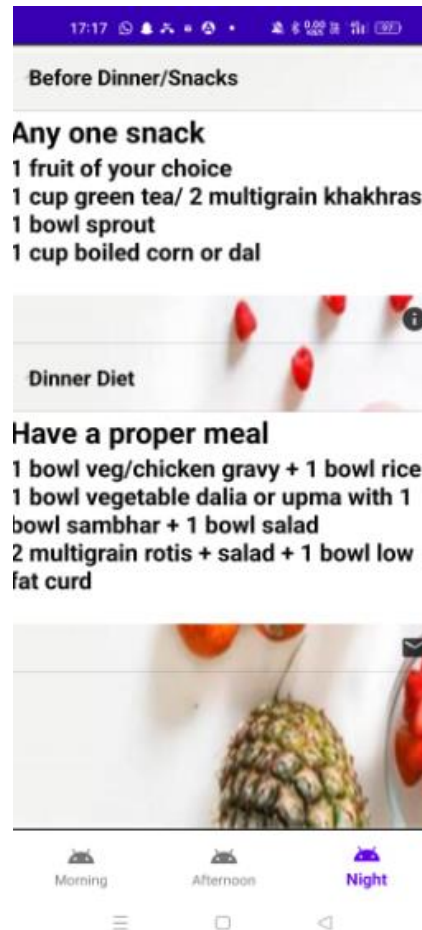
11. Lunch Diet:



- As seen for morning diet, this is the diet for lunch and pre-lunch.



12. Dinner Diet:



➤ Diet for dinner.



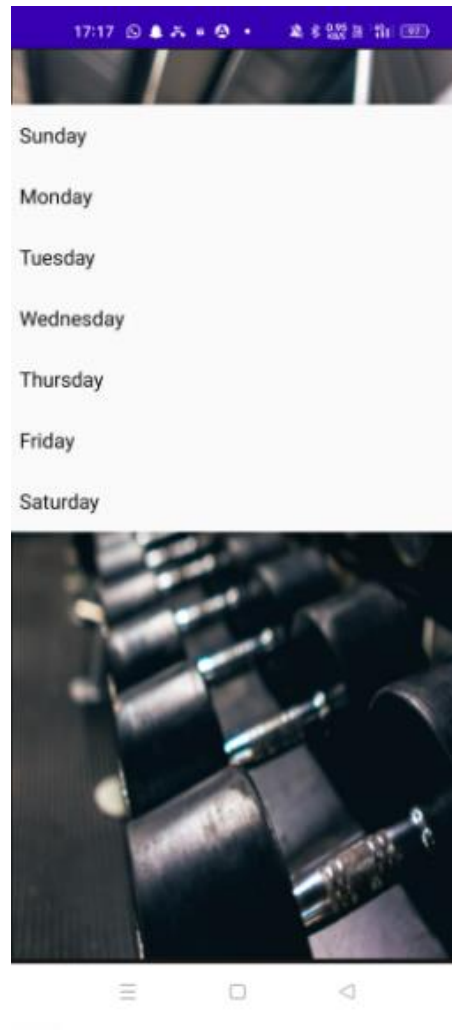
13. Workout Main Screen:



- After clicking on the workout option, this page opens up.



14. Workout options:



- So, once we reach the workout main page, the client has the option to choose the day and workout.



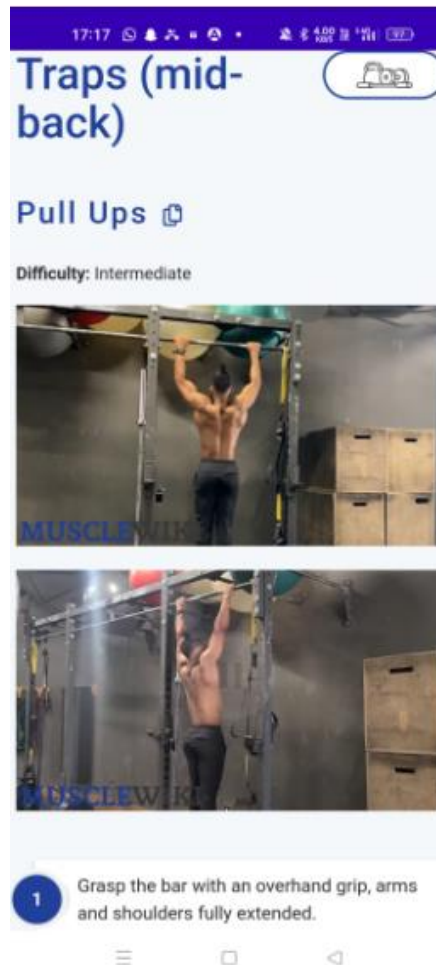
15. Monday Wokrout:



- Once the client clicks on Monday this workout will open up which is done using web view.



16. Tuesday Workout:



➤ Workout for Tuesday.



17. Wednesday Workout:



➤ Workout for Wednesday.



18. Thursday Workout:



➤ Workout for Thursday.



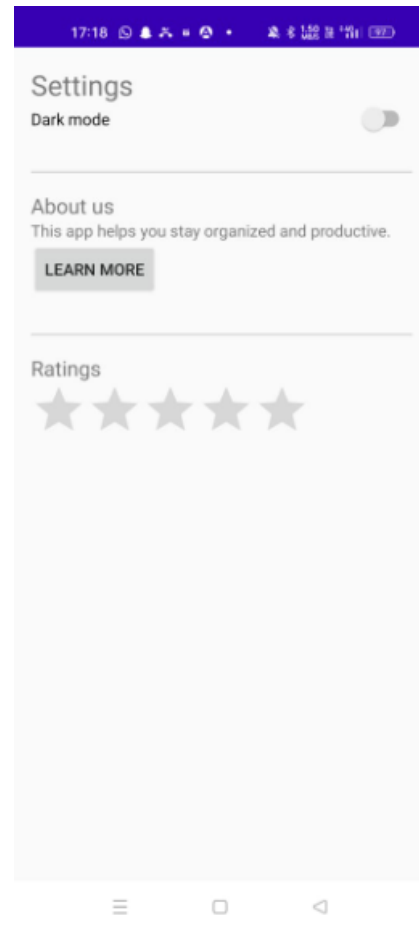
19. Fridays Workout:



➤ Workout for Friday.



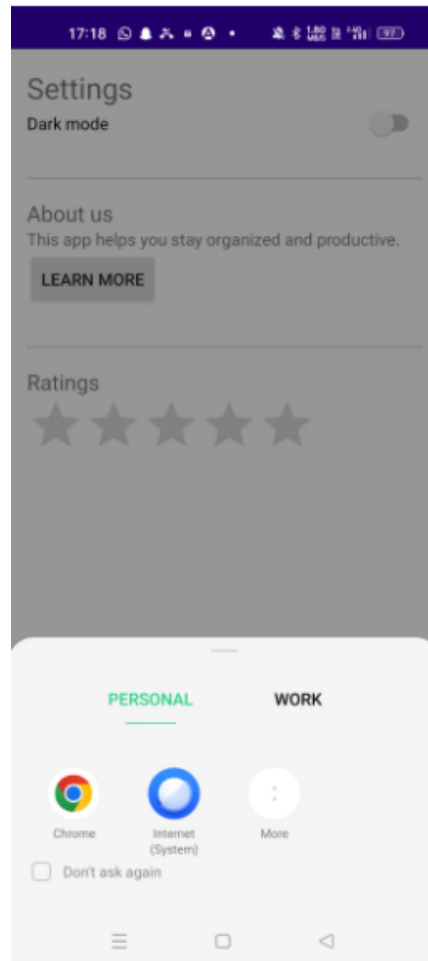
20. Settings Page:



- This is the settings page. The client can rate the app and change the whole app in dark or light mode.

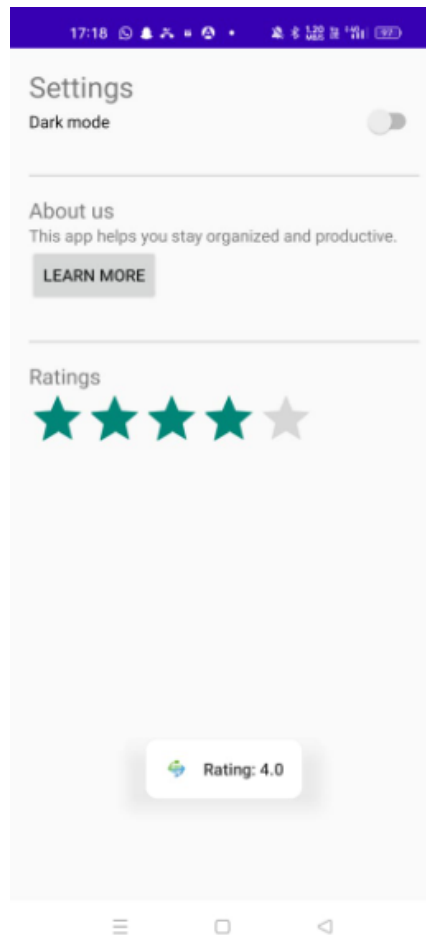


21. About us:



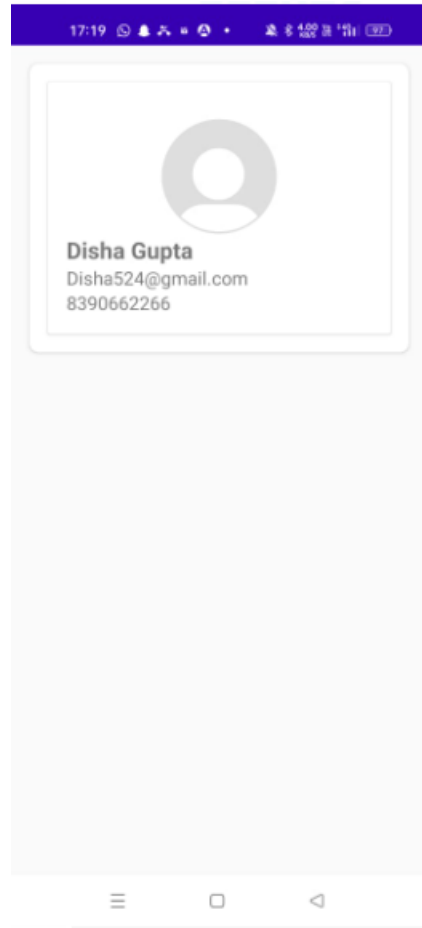


22. Rating app:





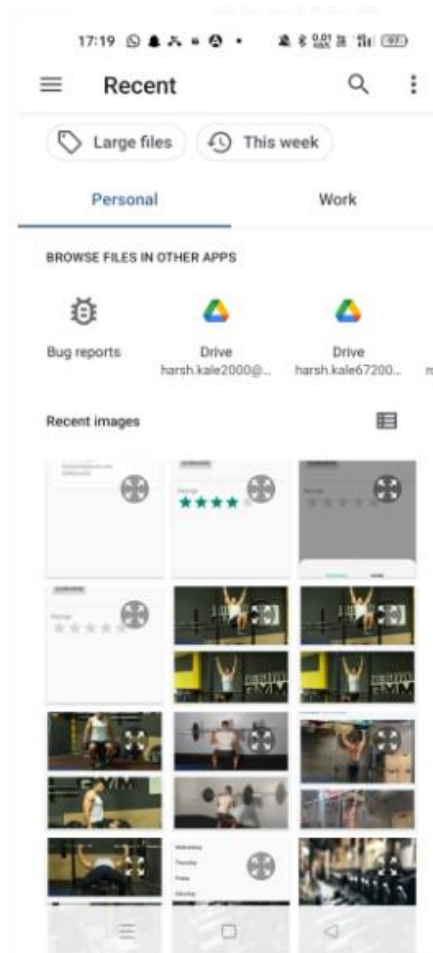
23. Profile Page:



- Showing all the information of the client.

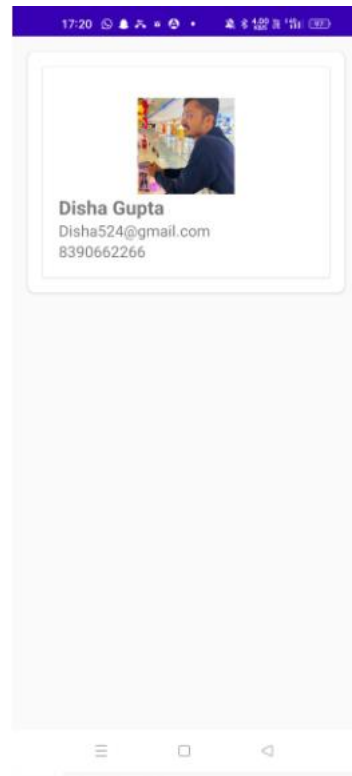


24. Image:





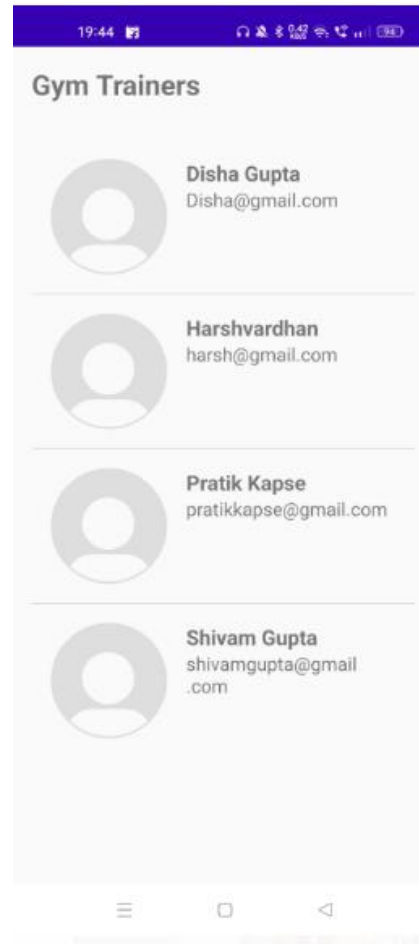
25. Profile Page with image:



- The image is been uploaded from the last screen shot we have seen.



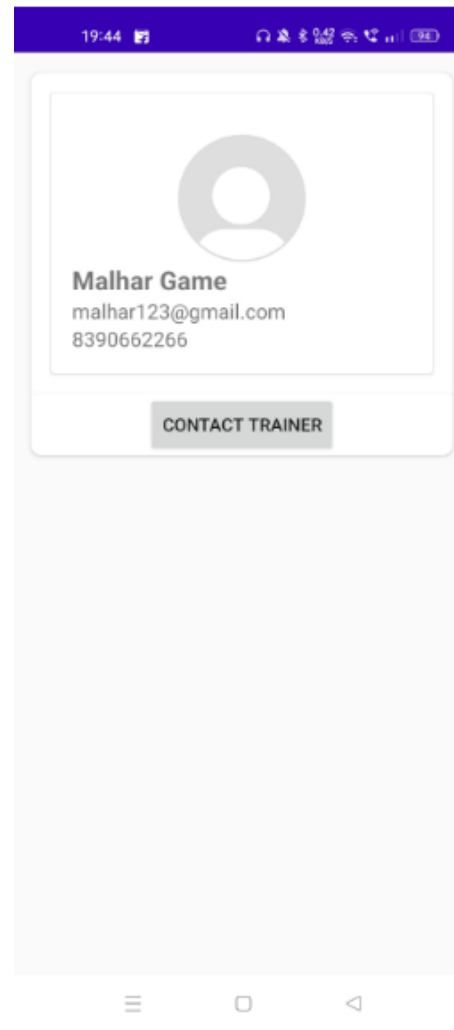
26. Trainer's Page



- This is the trainer's page where the client can call a trainer by clicking on the page.



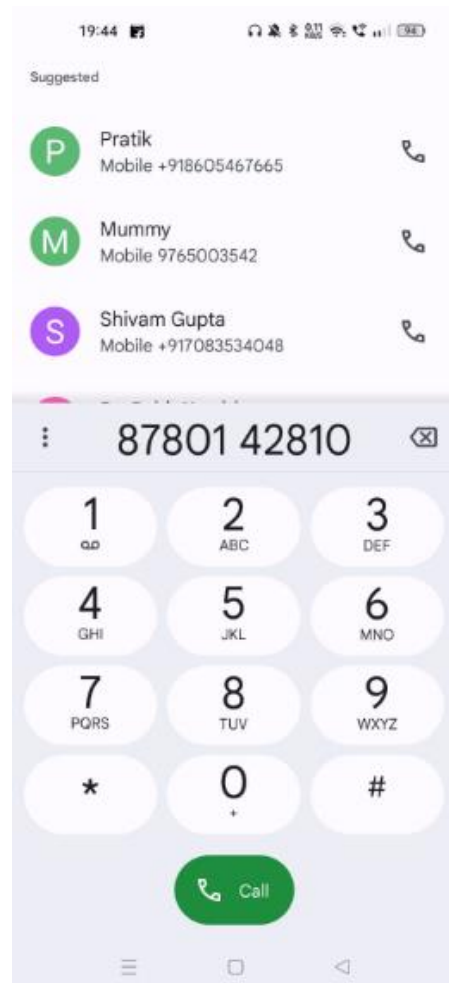
27. New Page:



- On clicking we get this page and the client can call the trainer.



28. Contact Page:



- This is the page which will be shown after clicking on the button.



29. Firebase:

The screenshot shows the Firebase Authentication console for the project 'FitnezzGekzzP'. The 'Users' tab is selected, displaying a table of users. The table has columns for Identifier, Providers, Created, Signed In, and User UID. There are 12 users listed, all created on April 15 or 16, 2023. The left sidebar shows the Firebase project overview and navigation options.

Identifier	Providers	Created	Signed In	User UID
disha524@gmail.com	Google	Apr 16, 2023	Apr 16, 2023	29EgT9nlCVNIX02gQd3K7aKzLv2
harsh.kale62030@gmail.c...	Google	Apr 16, 2023	Apr 16, 2023	vpAABYk2UZIFuYUTXPe5dgKBr2
disha19@gmail.com	Google	Apr 15, 2023	Apr 15, 2023	Ho46FkQDW8Y2CV9GYU72L6Xve...
parth7@gmail.com	Google	Apr 15, 2023	Apr 15, 2023	DKuocYV3YIYWJGsqPz2Wqfx1
sath@gmail.com	Google	Apr 15, 2023	Apr 15, 2023	qzAh81LYCAccSr7THFon4CIUuX2
john@gmail.com	Google	Apr 15, 2023	Apr 15, 2023	4DTtHamefMeixbrara0Isaf64Q2
patrik@gmail.com	Google	Apr 15, 2023	Apr 15, 2023	xEY1Pj1V5ngaGjJbHRmcm1HUg1
disha6@gmail.com	Google	Apr 15, 2023	Apr 15, 2023	coeN79Y8GfP7nSIQHm0gJ4mE...
hobbit@gmail.com	Google	Apr 15, 2023	Apr 15, 2023	2GhAss4th9u6XBzQpWJQDe5eE2
disha12@gmail.com	Google	Apr 15, 2023	Apr 15, 2023	WnR72ywjwPOCgr5KyeCQsjaS8Bx2



Future Enhancement

- ❖ We will implement an option of personal trainer where the client will get customized diet and workout.
- ❖ We will also be implementing an option for client to chat with the trainer.
- ❖ There is a scope of improvement in diet and workout that has been given in the app.
- ❖ We will also be trying to give our app in gyms so that it will gain more users.
- ❖ We can add home workouts so the clients can work at home also.



Conclusion

- ❖ It has been a great Pleasure for us to work on this exciting and challenging project. This project provided good for us as it provided practical knowledge on Android Studio and Firebase.
- ❖ The system has been developed with much care and free of errors and at the same time it is efficient and less time consuming.
- ❖ This project helped us in gaining valuable information on several topics like designing different screens and management of database using Firebase.
- ❖ The entire system is secured. Also, the project helped us understanding about the development phases of a project and android development life cycle.
- ❖ This project has given us great satisfaction in having designed an application which can be implemented to gym users in easy way.



References

- <https://musclewiki.com/>
- <https://stackoverflow.com/>
- <https://firebase.google.com/>
- The presentations given by sir was a big help for us to complete the project.

GIT LINK OF THE PROJECT

<https://github.com/The-Hobbit-hk/FitnessGeekzzP.git>

