

PSG College of Technology
DATABASE MANAGEMENT SYSTEM MINI PROJECT REPORT
ODYSSEY

A fitness tracking windows application

Done by

Deepthishree G S 18Z312

Harshini S 18Z320

Iswaryaa G P 18Z323

Janani R 18Z324

Swetha M 18Z360



COMPUTER SCIENCE & ENGINEERING
PSG COLLEGE OF TECHNOLOGY
(Autonomous Institution)
COIMBATORE – 641 004

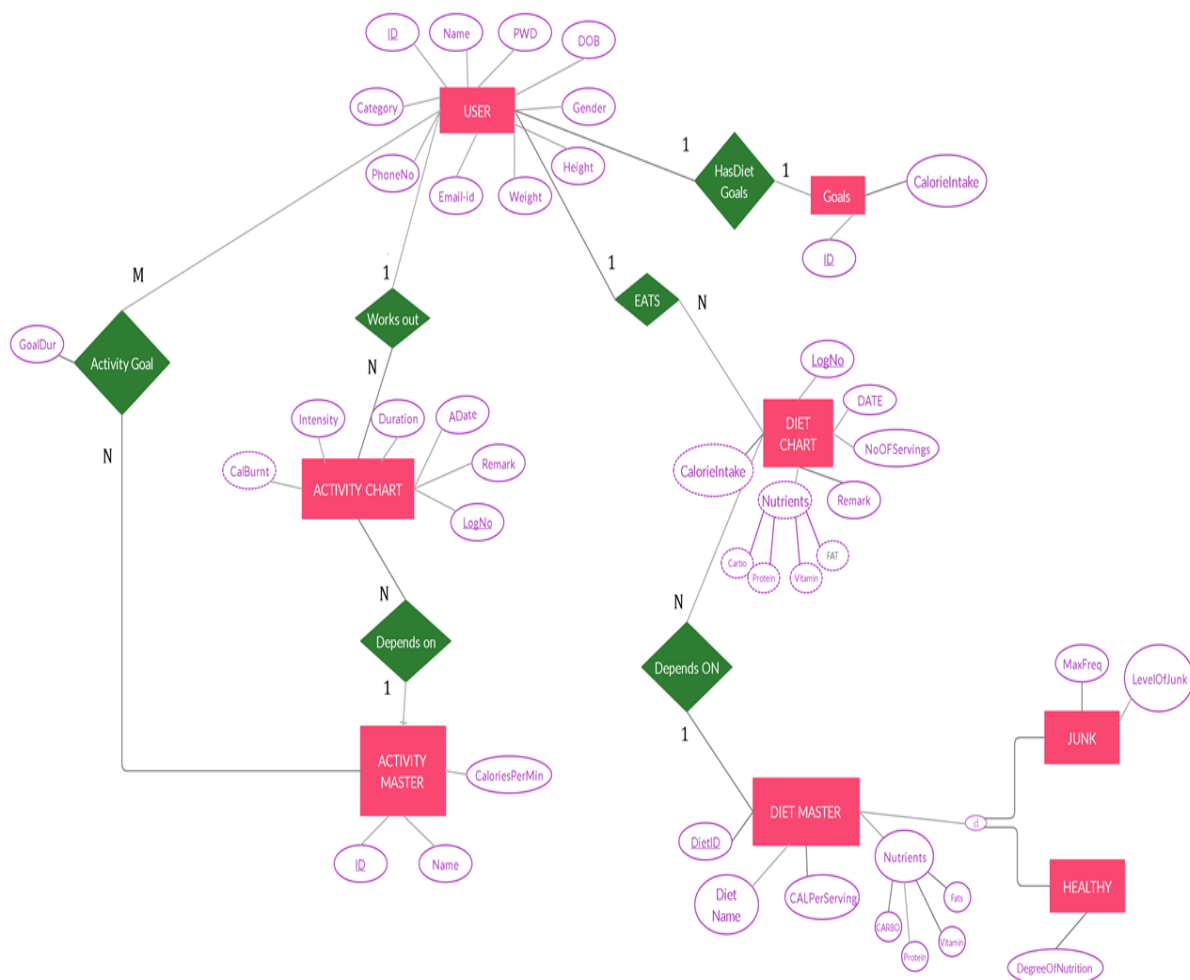
PROBLEM STATEMENT:

The objective of this project is to track daily diet and physical activities. Some features are to set up goals, check how far they are achieved, get comprehensive daily and periodical reports on our fitness details. Data may look meaningless as letters and numbers, but when properly interpreted especially in forms of graphs or charts, could be so sensible and could help us move in the right direction. The application aims to show the user how consistent they are in maintaining their health. It motivates the user to stay fit and healthy. Daily ratings are given indicating whether they are a foodie or fitness freak.

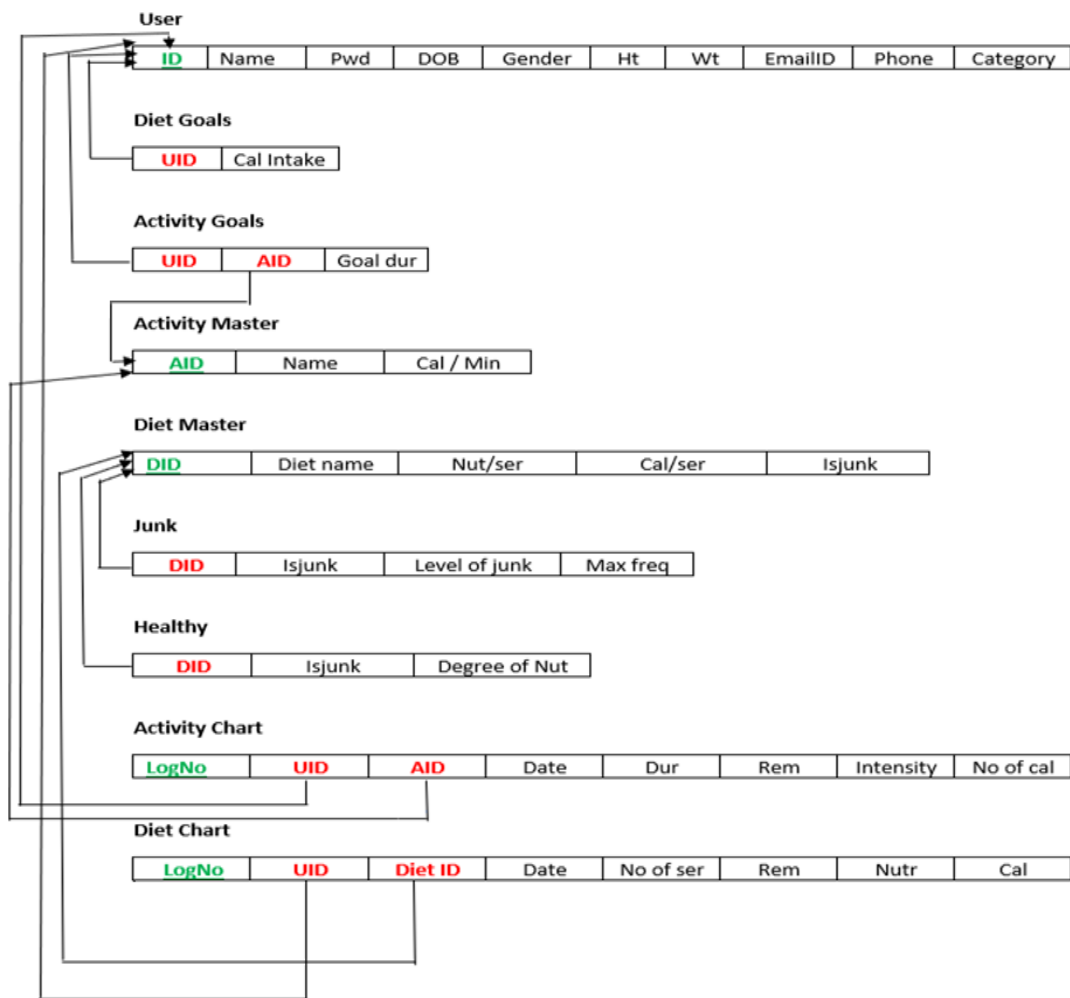
The application helps record calories burnt and consumed. The mere activity of recording makes us realise how much we eat and work out everyday. The numbers add to give a very proper daily monitoring. A list of must-do activities with duration pops up to remind how much more is left for the day. Notifications and emails are sent for increasing the utility of the application.

DESIGN:

EER Diagram:

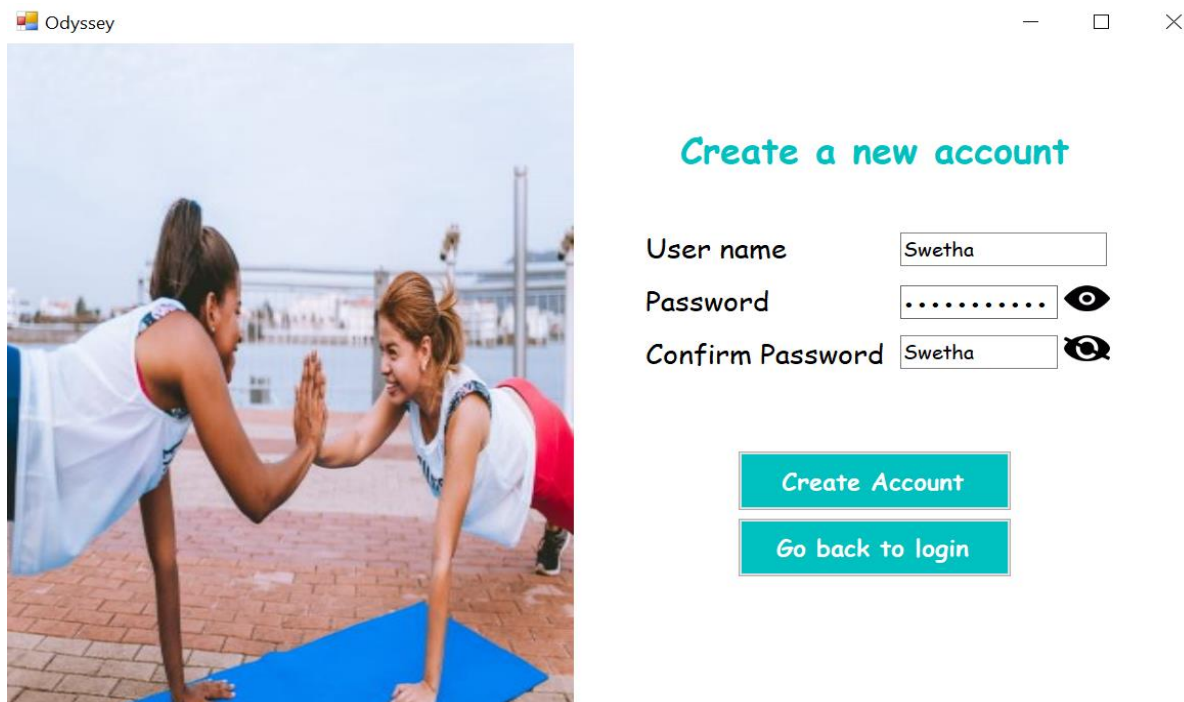


Relational Model:

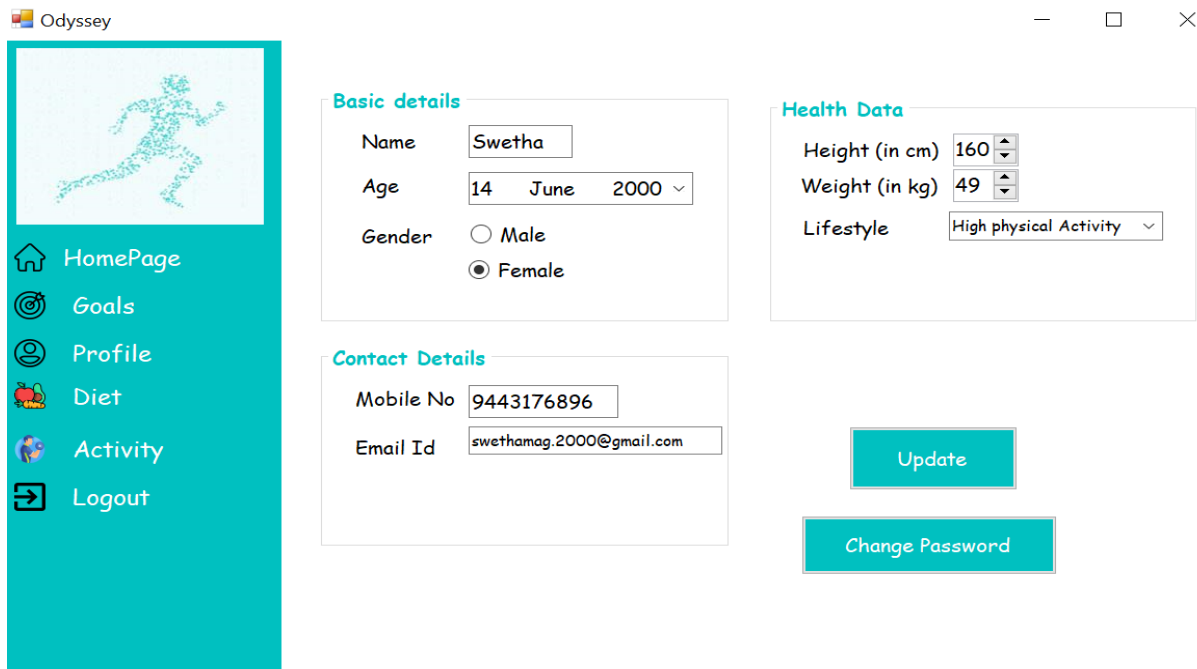


The design of our project and assumptions associated with it are detailed below. The application accepts the profile details from users including height, weight and lifestyle based on their profession. This recommends a suitable calorie goal which the user can change if they need. Activity goals can be set by specifying a list of activities and target duration. Ultimately, calorie intake and burnt are compared and also goal completion progress is used to remind the user through emojis. Assumptions are that the user does not manipulate data to meet goals and are truthful to some extent. The daily and monthly reviews can be viewed anytime. The goals and profile can be updated anytime. The new recipes or activities can be added if their standard calorie and nutrient values are known.

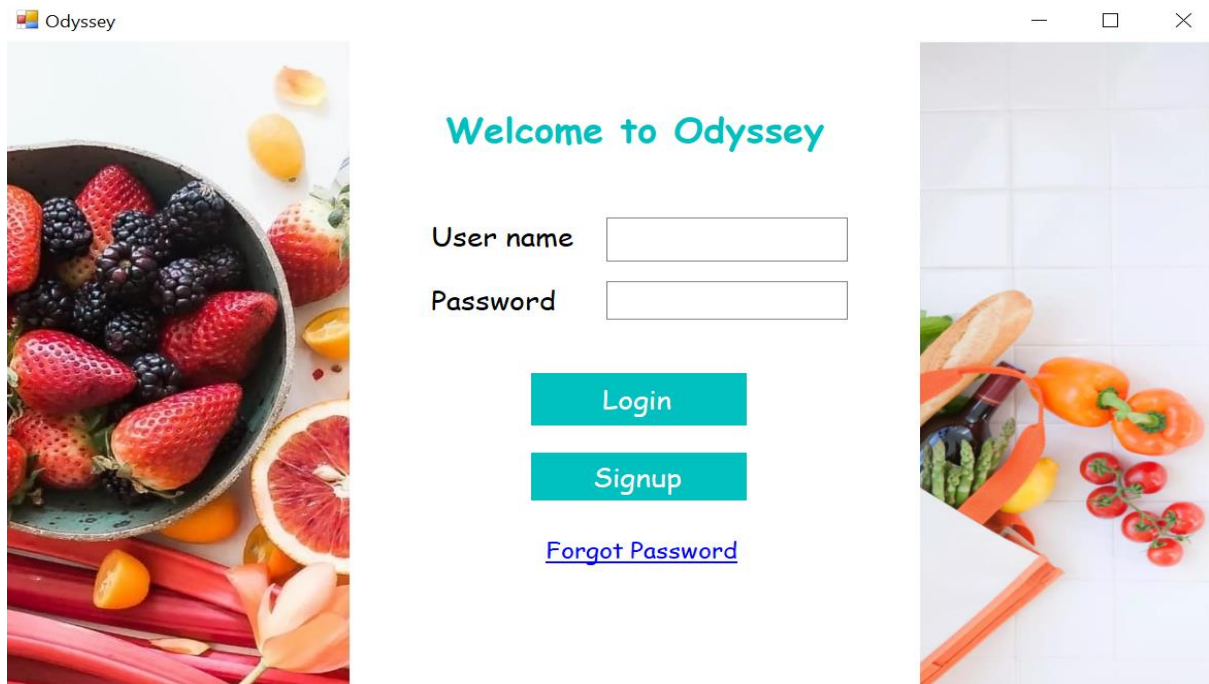
SCREENSHOTS:



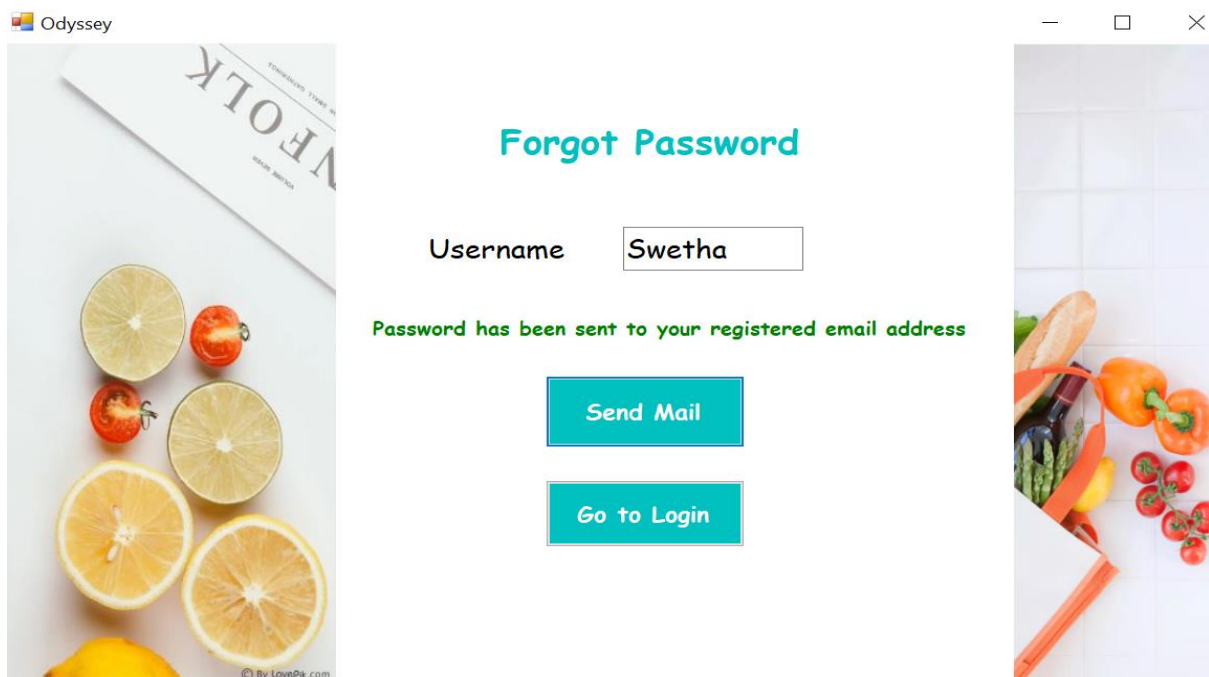
The signup page allows the user to create a new account in the application in order to get registered and make use of the application.



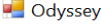
Once the user creates the account, he/she has to fill the necessary details. The details get stored in databases and aids in suggesting diets and activities.




The login page permits the user to gain access to our application by entering their registered username and password.



This page lets the user to reset the password with the help of a registered email address.





- HomePage
- Goals
- Profile
- Diet
- Activity
- Logout

Add activity to your Goal

Activity Name

Running

Duration (in min)

15

[Edit Your Goal](#)

ADD

Your Daily Activity Goal

☒ Walking

Diet Goal

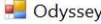
Calories To Be Taken


ADD

Your Daily Diet Goal

You are recommended for a minimum diet goal of 2750 calories ! Add some 500 cal or something depending on your workout plan!!

The application suggests some goals for the user based on the details they provided and also allows the user to add and edit the goals according to their needs.







- HomePage
- Goals
- Profile
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Your goals and how you have met them is helping you being rated

Excellent! You reached your goal!



You are a FOODDIEE today



Quote of the Day

"Excuses do not burn calories."

Depending on the goals met by the user remarks will be given which helps the user in improving their performance.

Odyssey

HomePage
Goals
Profile
Diet
Activity
Logout

ADD NEW ITEM

Diet Name
Dosa

No of serving
4

Remark
Lunch

Add in my log

NUTRIENT INTAKE TODAY

Carbohydrates
76.00

Protein
10.80

Vitamins
1.60

Fat
20.80

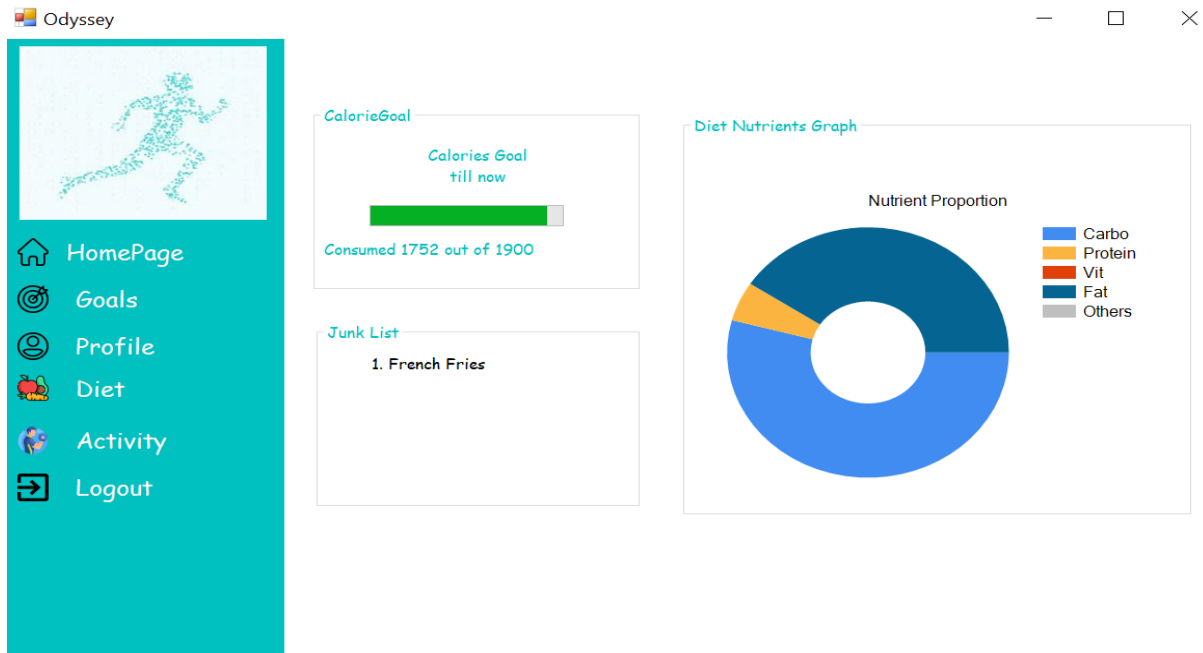
Calories
532.00

ALREADY TAKEN TODAY

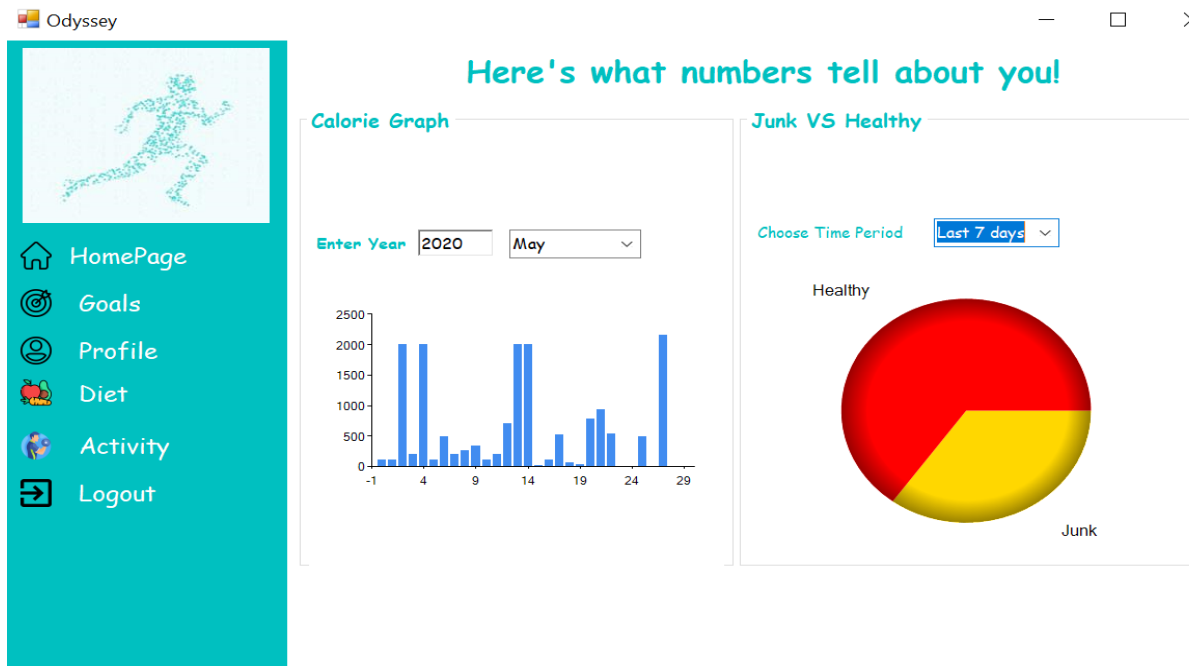
☒ Chappathi

***All nutrients are in unit g per serving

This page is basically like a log which focuses on diet . It allows the user to add diet items , and also keep track of the diet the user has taken.



At the end of the day a report will be generated based on the diet the user has taken and corresponding nutrients gets calculated.



A monthly report will also be generated based on the intake of the user which helps the user to keep an eye on the type of food they had (Junk or healthy) and the calories they consumed which helps in boosting their food habits.

Odyssey

Existing activities

- 1) Walking
- 2) Running
- 3) Yoga
- 4) Badminton
- 5) PushUps
- 6) Aerobic
- 7) Cycling
- 8) Zumba
- 9) Tennis

Add a new activity

Activity Name

Calories burnt per min

This is the master page for activity which consists of activities which are already stored in databases and the user can also add activities of their choice.

Odyssey

HomePage
Goals
Profile
Diet
Activity
Logout

Your Goal

- Walking - 10 mins
- Running - 1 mins
- Yoga - 15 mins
- Badminton - 15 mins
- PushUps - 14 mins

About Today

- ☒ PushUps - 12 mins
- ☒ Yoga - 15 mins

Add New entry..

Activity Name

Duration (in mins)

Workout Intensity ☒ High ☐ Low

Remark

This page serves as a log for activity which covers the completed activities, goals left out, and the user can also add activities based on intensity and duration.

Odyssey

HomePage
Goals
Profile
Diet
Activity
Logout

Report

| Activity | Target | Story So far | Remark |
|-----------|--------|--------------|--------------|
| Walking | 10 | 10 | OK |
| Running | 1 | 0 | NOT achieved |
| Yoga | 15 | 15 | OK |
| Badminton | 15 | 0 | NOT achieved |
| PushUps | 14 | 12 | NOT achieved |

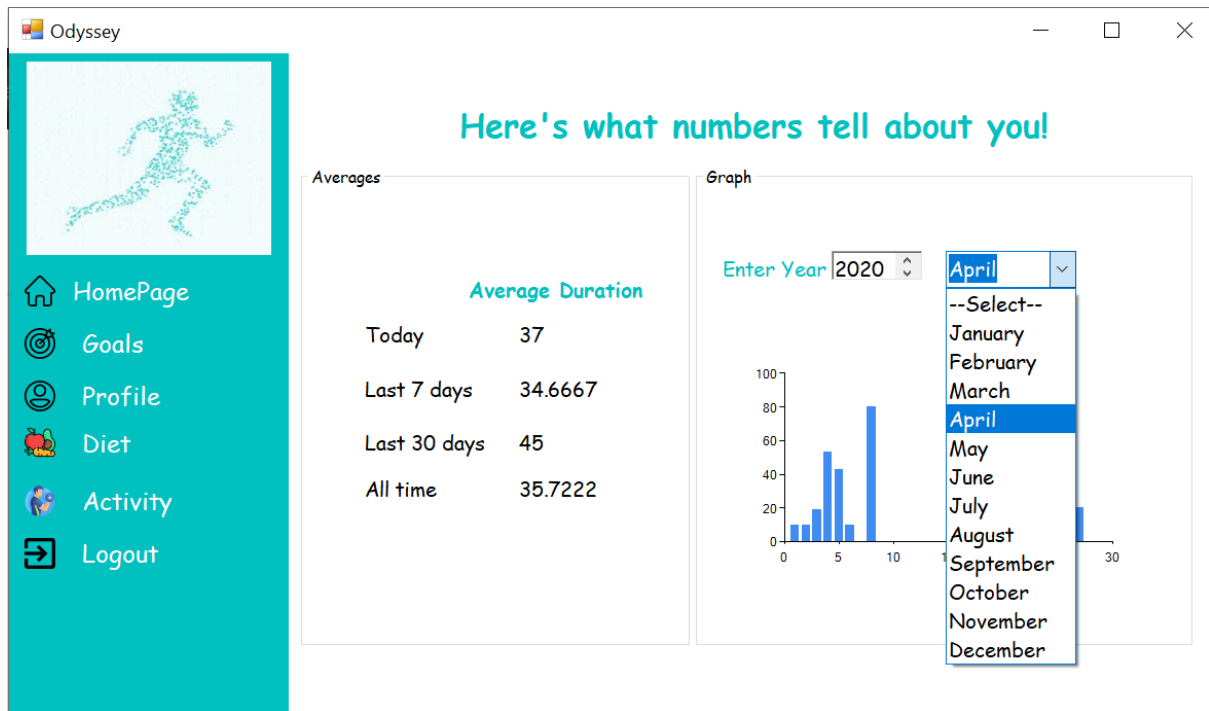
Low Intense workouts

| Activity | Duration | Calories |
|----------|----------|----------|
| PushUps | 12 | 48.00 |

High Intense workouts

| Activity | Duration | Calories |
|----------|----------|----------|
| Yoga | 15 | 90.00 |
| Walking | 10 | 50.00 |

Everyday a report will be generated which keeps track of the activities based on the goals and provides remarks. It also monitors the intensity of the works the user has performed.



Monthly report gets generated for activity which gives average duration of time the activities are performed and also helps in upgrading the performance of the user for the upcoming days.

CONCLUSION:

Thus, this project served to be a great learning experience for us. It is really useful and creates fitness consciousness. We not only learnt about C# or SQL, but also how to cover all aspects and finish it as a worthwhile product. We also learnt some new things about fitness, diet and nutrition. We could apply all types of queries including complex joins for our report which served as a useful application of DBMS concepts learnt in class. It was altogether a wonderful hands-on experience to work on a mini project as a team.