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DBMS PROJECT DESCRIPTION

Health and Fitness app's Database:

What is the Scenario for this database?

So the scenario that we undertook for this project is of an application that provides subscription based services to the users such as nutrition programs, daily intake/diet programs, exercise/training programs and all of the programs are made appropriately as per the user's details.

What purpose does the database provide for the scenario?

While creating any database there should be certain categories of users to be considered.

In our case we have took 3 types of users and they are:

- 1. Customer(the user who subscribes to the services provided by the company). This user can only access a portion of the database which is necessary for him/her.**
- 2. Nutritionist/Trainer(the user who is working with the company to provide a variety of services to the customer). This user can only access a portion of the database which includes the customer's data to which they are providing many services.**
- 3. Company's Employee(the user who overlooks the data and monitors it). This user can access the whole database.**

Overview of the Database:

First of all a customer starts the application and enters his personal information such as name,email address,password, date of birth, gender, height, weight, date of entry, subscriptionid ,diet plan, training plan that he/she has subscribed to and apart from this the database also stores the userid. And by this an account of the user is created.

After this , the application also asks for medical records such as medications(if any), surgeries(if any), allergies(if any), these details are necessary for the further processing, as the application would suggest the data of such diets/exercises only if they don't interfere with these conditions.

Now, as per the selected diet plan, training plan of the customer, the nutritionist/trainer who is working with the company will suggest the diet for the subscription period and will create a table for daily exercises.

If the customer feels a need to change any portion of the diet/training, he/she can ask the trainer/nutritionist to modify the diet/training plan.

Now for the details of instructor, there would be instructorid.

For the diet plan, there would be a dietid, the amount of fats,proteins,carbs per day consumption in terms of gram.

For the training plan , there would be a workoutid, exercise id, calories that would be burnt during the exercise, sets of that particular exercise, duration of the exercise and workout.

And the application would also ask for weekly entries of weight, as to monitor the effect of diet plan and the training plan.

User - Customer(With a certain subscription):

The customer can access his/her details, the diet plans given by the nutritionist and the workout plans given by the trainer.

To be particular , following the will be the exact details that will be necessary to be entered by the customer:

user_id (will be generated by the app and not customer)

username

password_hash

Email

date_of_birth

gender

height

Weight

Goal

created_at

allergies(if any)

medications(if any)

Surgeries(if any)

He/She will be given certain a diet plan + training plan by nutritionist/trainer. So there are certain set of plans on the app and appropriate plan would be recommended by considering the details entered by the customer(especially the goal). There are few options for goals such as : slim fit , muscular fit, basic fitness, detoxify.

For the diet plan , following will be the details given by the nutritionist:

nutritionist_id

diet_id

created_at

Calories per day

fooditem_id

For the training plan, following will be the details given by the trainer:

trainer_id

workout_id

Created_at

Calories burnt per day

Exercise_id

Reps

User - Nutritionist/Trainer

1. Nutritionist: Nutritionist will typically have access to

a) User Profiles(including all the required details of the connected user).

b) Diet plans: Nutritionist will be able to view the ongoing plans of the users, and if needed then to change them in the next term of plan.

Nutritionist would not have access to workout plans.

2. Trainer : Trainers will typically have access to

a) User Profiles(including all the required details of the connected user).

b) Workout Plans: Trainer will be able to view the ongoing plans of the users, and if needed then to to change them in the next term of plan.

Trainers would not have access to diet plans.

Nutritionist and Trainer , both of them would be able to get user's details which would include EHR data on a regularly basis, which would be pulse, heartbeat, steps, weight, blood pressure, sugar levels(if needed).

User - Company's Employee

The company's employee would be able to see each and every user's data and also each and every nutritionist/trainer's data . He/She would be able to monitor everything and if there would be any irregularities then to act upon them. Also to conclude a user's financial statements as per the number of subscriptions that he/she has subscribed till date.

Also the user's details would include EHR data on a regularly basis, which would be pulse, heartbeat, steps, weight, blood pressure, sugar levels(if needed).

Considering these set of users, an implementable database for an application could be created.

