DATABASE SYSTEMS LAB

PROJECT

Group members:

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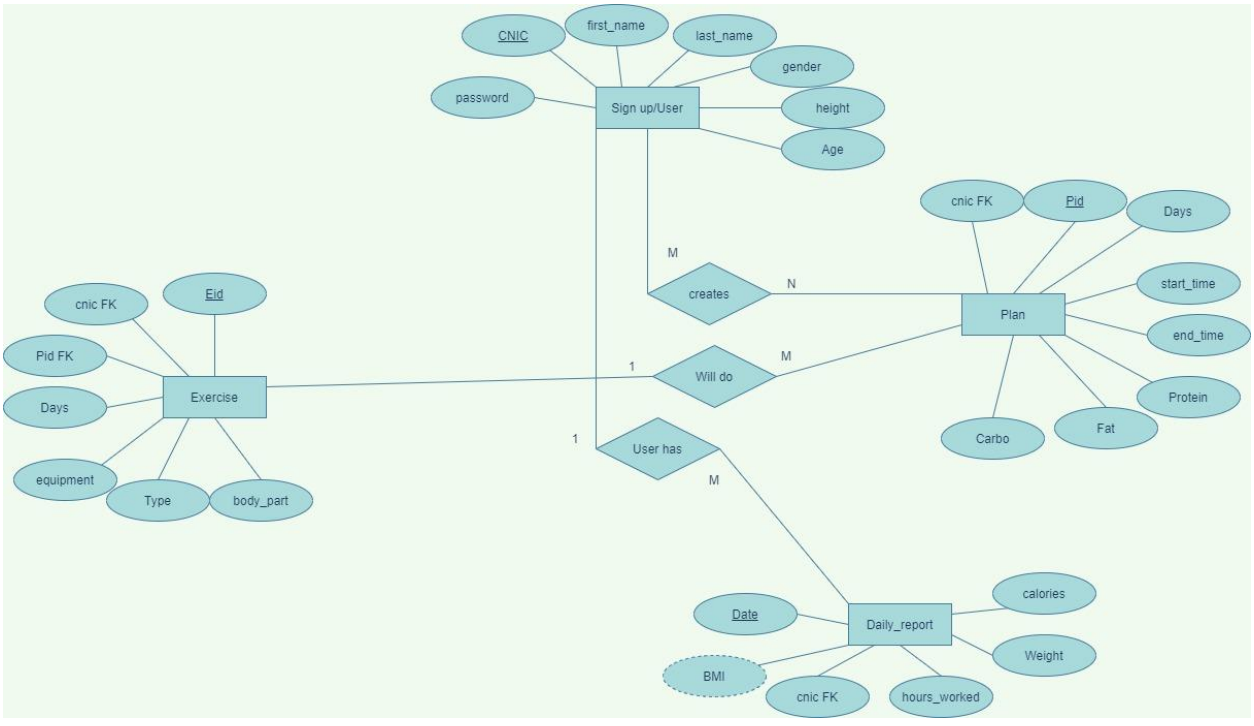
ERD


CNIC
first_name
last_name
gender
password
Sign up/User
height
Age
cnic FK
Pid
Days
M
creates
N
start_time
Plan
end_time
Eid
cnic FK
Pid FK
Days
Exercise
1
Will do
M
Protein
Carbo
Fat
equipment
Type
body_part
1
User has
M
calories
Date
Daily_report
Weight
BMI
cnic FK
hours_worked

Relational schema

- Sign up

CNIC	First_name	Last_name	Gender	Height	Age	password

- Plan

Pid	CNIC (FK)	Days	Start_time	End_time	Protein	Fat	Carbo

- Exercise

Eid	CNIC (FK)	Pid (FK)	Days	equipment	Type	Body_part

- DailyReport

Date	BMI	CNIC (FK)	Hours_worked	Weight	calories

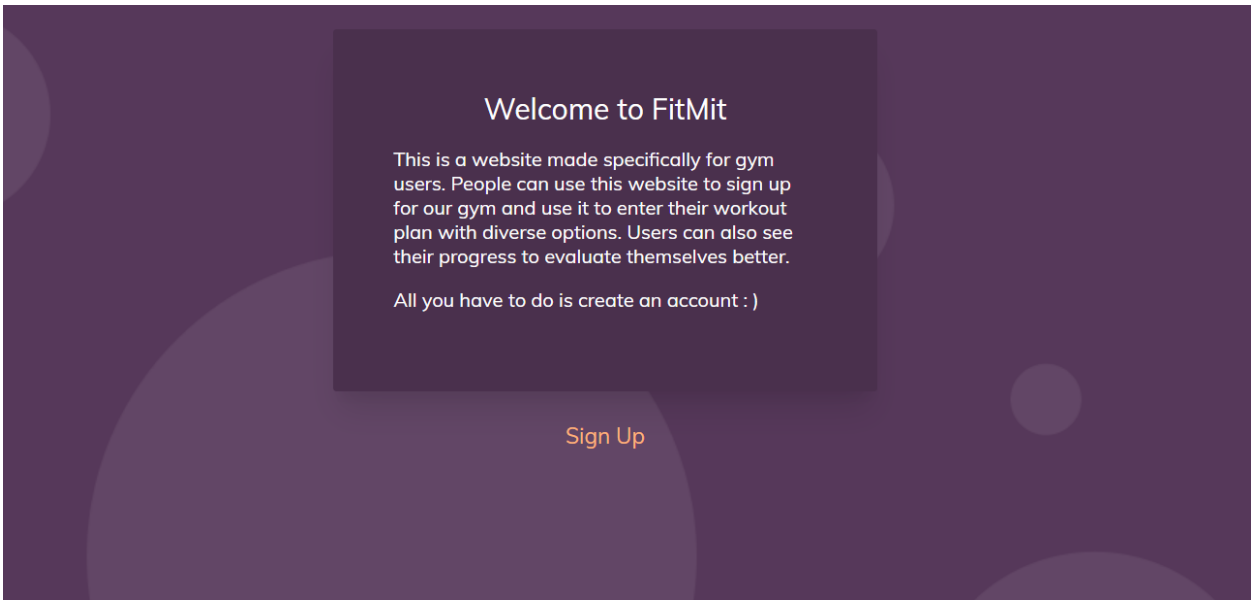
Table	Description
SignUp	Consists of attributes that are needed to make an account for a user. CNIC will be the primary key. Most of the attributes must be inserted for the requirement to be complete. The data inserted in this table will be useful for logging in so that the other tables can insert the data in front of the user id (CNIC). It will be helpful while selecting data.
Plan	Here the user will insert data to plan his/her exercise and diet plan. User will insert the number of protein, carbohydrates, and fat needed along with the day he/she wants to workout with the starting and ending time. Primary will be auto assigned by the system.
Exercise	In this table, users will choose what type of machine they want to use to workout along with what type of exercise they want to perform and what muscle they want to focus on. Primary will be auto assigned by the system.
DailyReport	Here the user will enter the number of hours he/she worked in the day, and what is their weight after the workout. Weight and height is used to calculate BMI on run time (derived attribute).

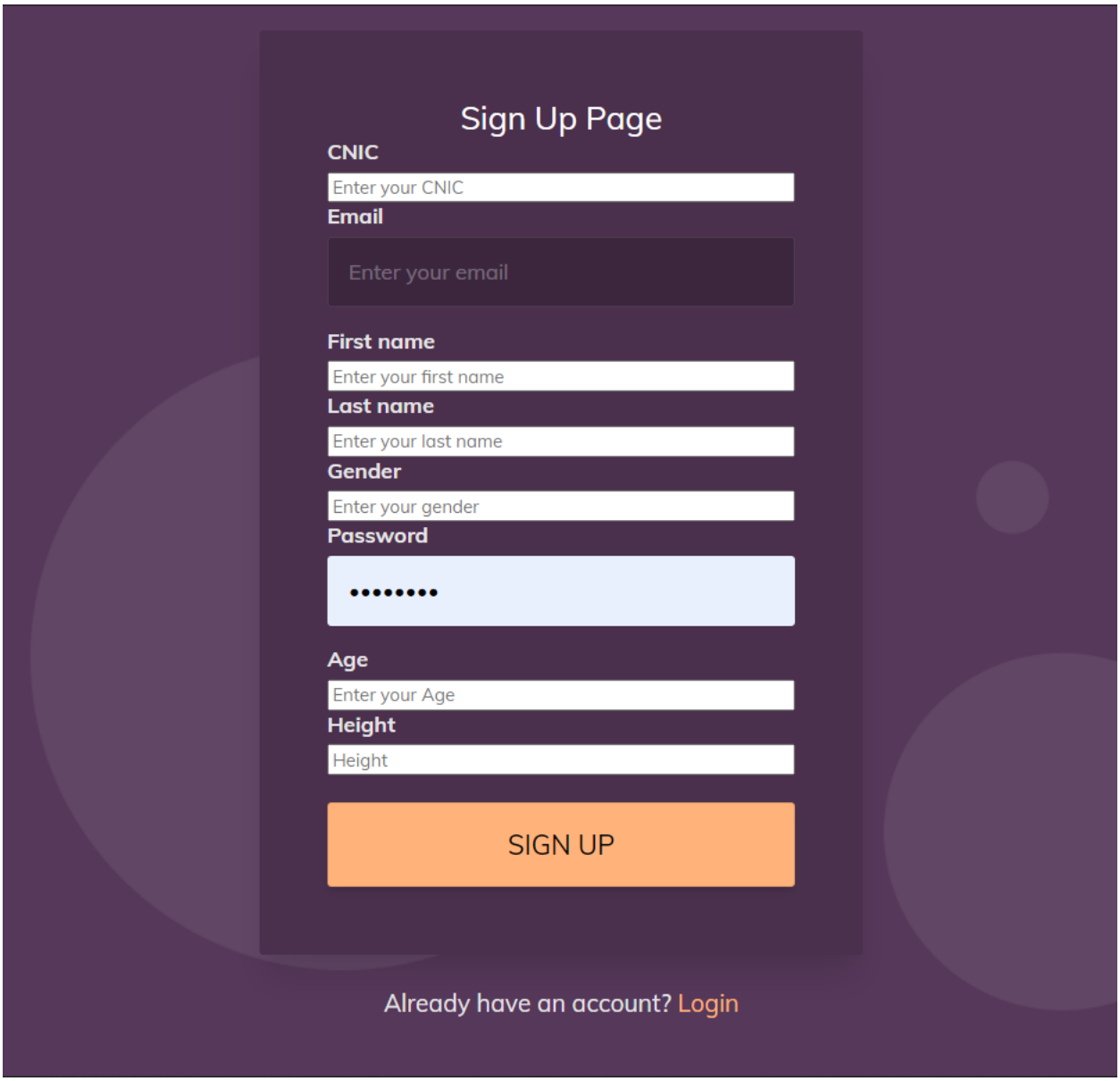
- Another page is made just for the reports. In this page, the logged in user can see what his/her progress was. Some data will be displayed under their respective headings. Each data will have a serial number displayed so that the user can see what data belongs to what date and day.

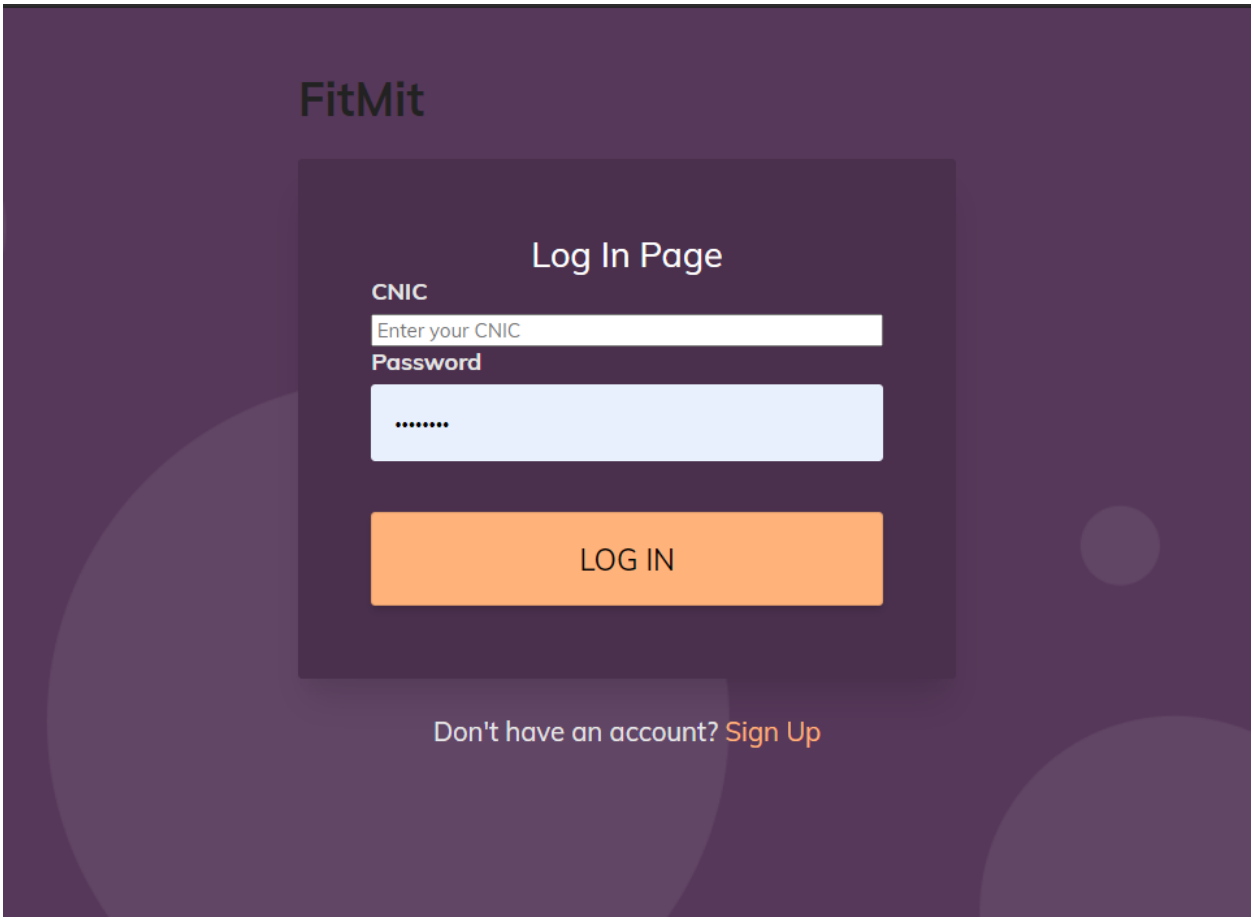
User Interface

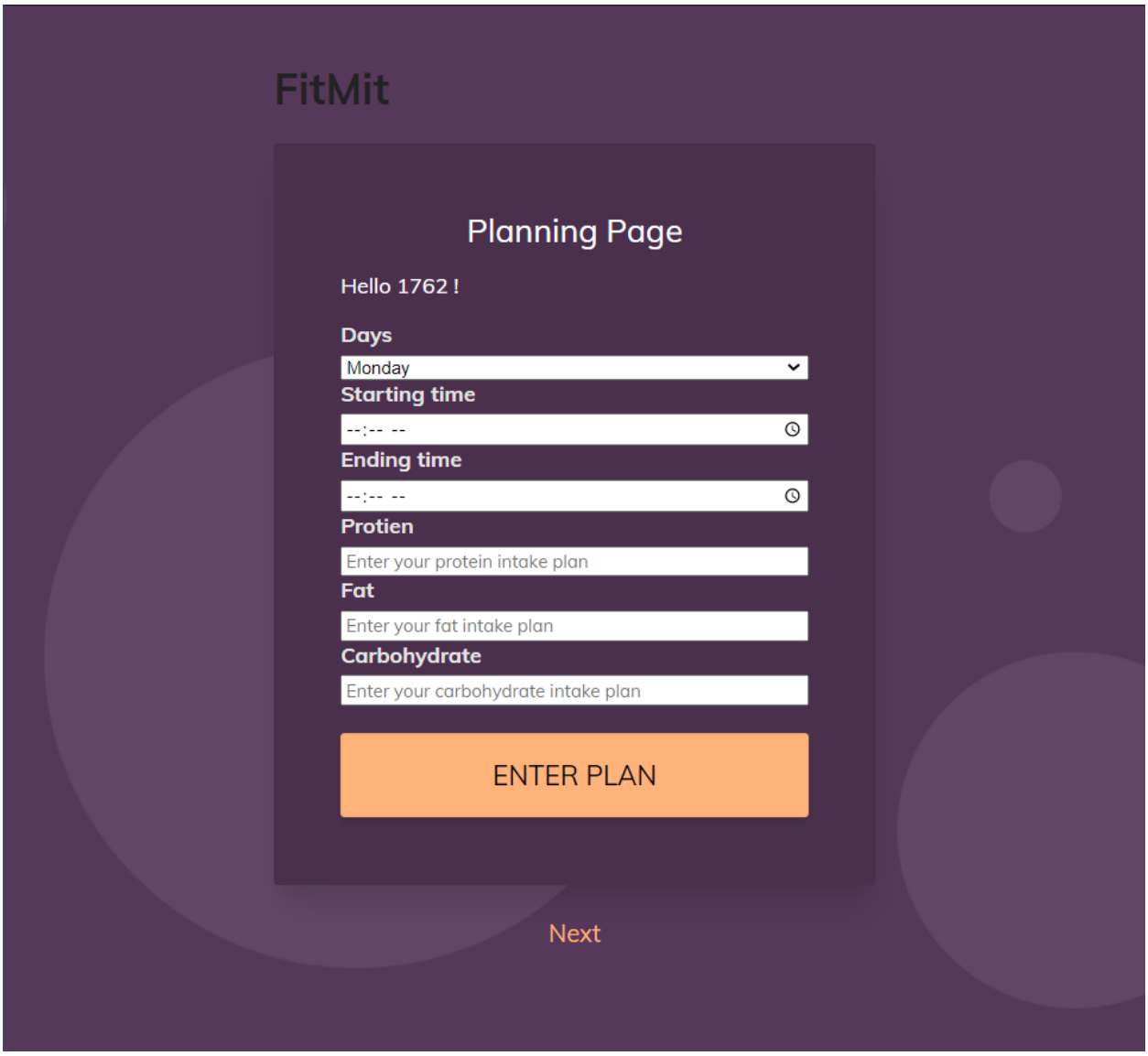
HTML, and CSS files are used to create the front end, UI and to make the website aesthetically pleasing.

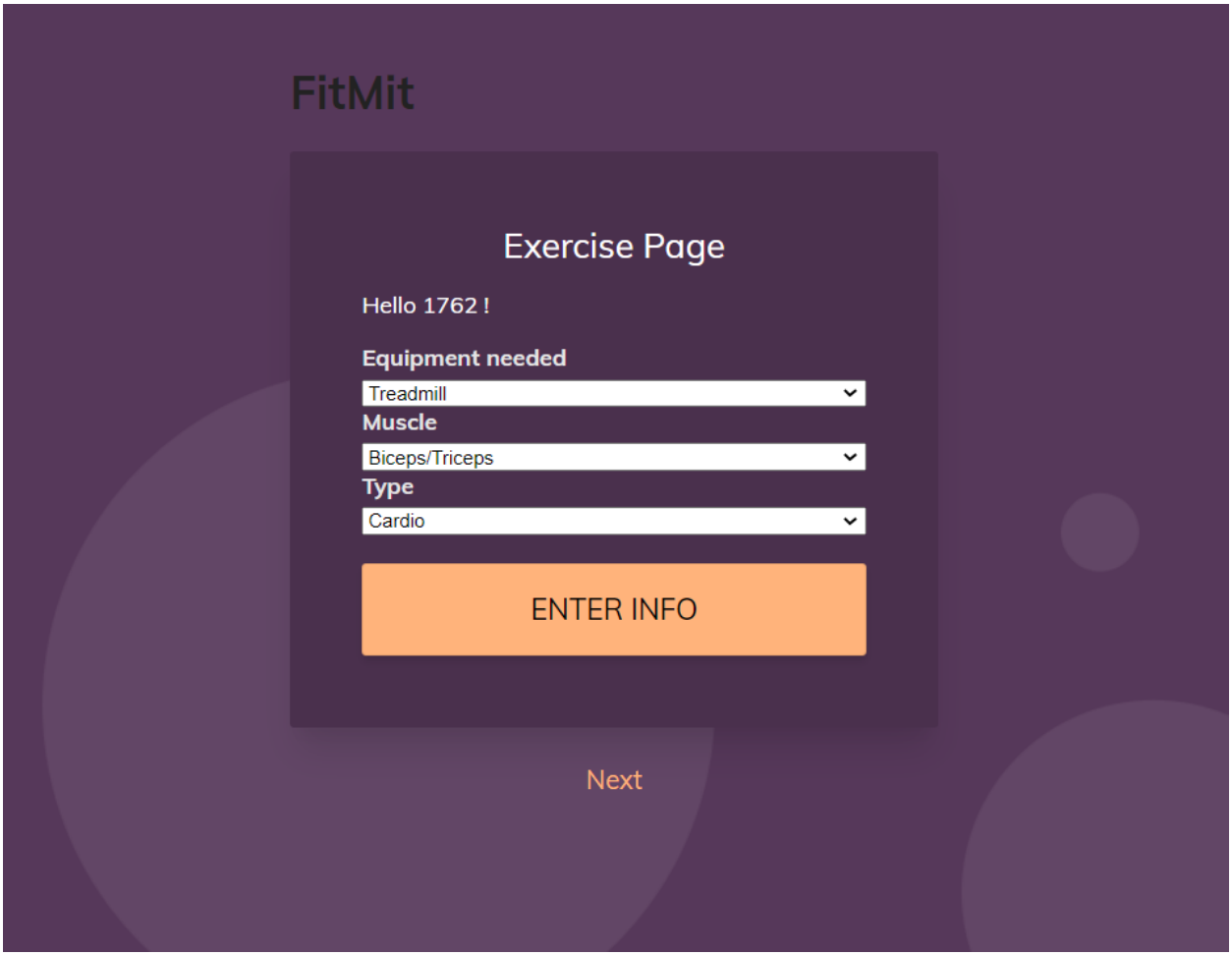
Home page

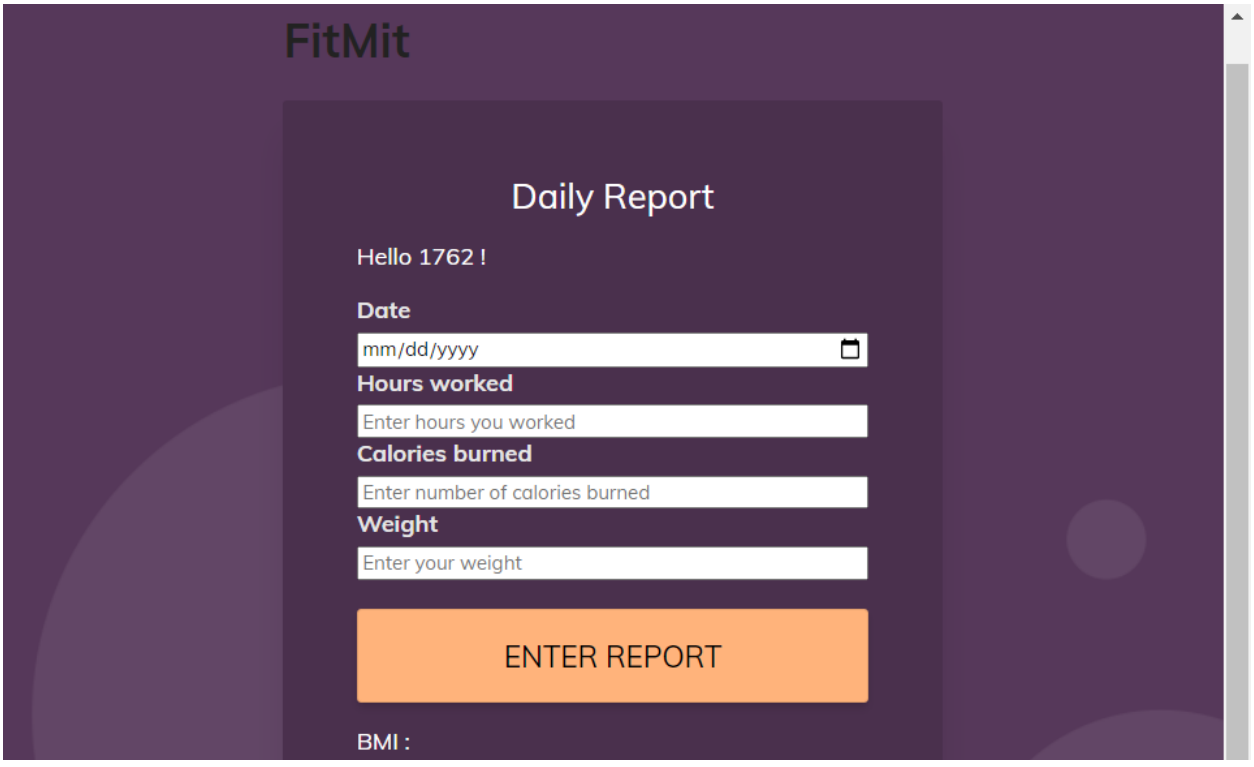



Sign Up Page
CNIC
Enter your CNIC
Email
Enter your email
First name
Enter your first name
Last name
Enter your last name
Gender
Enter your gender
Password
••••••••
Age
Enter your Age
Height
Height
SIGN UP
Already have an account? Login


FitMit
Log In Page
CNIC
Enter your CNIC
Password
LOG IN
Don't have an account? Sign Up


FitMit
Planning Page
Hello 1762 !
Days
Monday
Starting time
--:-- --
Ending time
--:-- --
Protien
Enter your protein intake plan
Fat
Enter your fat intake plan
Carbohydrate
Enter your carbohydrate intake plan
ENTER PLAN
Next


FitMit
Exercise Page
Hello 1762 !
Equipment needed
Treadmill
Muscle
Biceps/Triceps
Type
Cardio
ENTER INFO
Next


FitMit
Daily Report
Hello 1762 !
Date
mm/dd/yyyy
Hours worked
Enter hours you worked
Calories burned
Enter number of calories burned
Weight
Enter your weight
ENTER REPORT
BMI :

FitMit

Report

Hello 1762 !

Date

1. 2021-06-16

Days worked

1. Monday

Protein

1. 10

Fat

1. 20

Carbohydrates

1. 30

Equipment used

1. GymBike

Muscle worked on

1. Thighs

BMI

1. 22

Weight

1. 65

Back to Login

SQL Query Report

Results of the submitted SQL file containing DDL and DML are attached below.

1. For dropping tables.

Queries:

- drop table dailyreport;
- drop table exercise;
- drop table plan;
- drop table signup;

Explanation:

These queries are just used to drop the tables if they already exist so that there isn't any clash with the tables of the same name.

```
SQL> @"C:\Program Files (x86)\Zend\Apache2\htdocs\HTML-CSS-login-page-template-master\sql_report.sql"
Table dropped.

Table dropped.

Table dropped.

Table dropped.
```

2. For creating tables and inserting data.

Queries:

Creating tables:

- create table signup(CNIC number(38), first_name varchar2(200) not null, last_name varchar2(200) not null, email varchar2(100) not null, password varchar2(100) not null, gender varchar2(20) not null, height number(20, 2), age number(20) not null, PRIMARY KEY (CNIC));

- create table plan(pid number(38), cnic number(38), days varchar2(100), start_time varchar2(100), end_time varchar2(100), protein number(38), fat number(38), carbo number(38), FOREIGN KEY (cnic) references signup(cnic), PRIMARY KEY(pid));
- create table exercise(eid number(38), cnic number(38), plan_id number(38), days varchar2(100), type varchar2(100), equipment varchar2(100), body_part varchar2(100), FOREIGN KEY(cnic) references signup(cnic), FOREIGN KEY(plan_id) references plan(pid), PRIMARY KEY(eid));
- create table dailyreport(date_ varchar2(100), cnic number(38), hours_worked number(38), calories_burned number(38), weight number(38), bmi number(38), PRIMARY KEY(date_));

Explanation:

The “create table” queries used for creating table for each form on the pages wherever data is taken as input from the user. The tables are created in a manner that they can be linked with each other via foreign keys. You can see “Table created” in the images below that show that these queries run just fine.

The “insert table” queries are used to insert data taken as input from the user on the web pages in the tables that were created via queries given. The data is inserted in a certain order so that there is less chance of error. For example, the tables containing foreign keys from other tables were created later. Each table is inserted with Primary keys to help distinguish them. The “1 row created” in the images below show that the queries work.

3.
Selecting data from the database tables.

Queries:

- select date_ from dailyreport where cnic=1762;
- select days from plan where cnic=1762;
- select protein from plan where cnic=1762;
- select fat from plan where cnic=1762;
- select carbo from plan where cnic=1762;
- select equipment from exercise where cnic=1762;
- select body_part from exercise where cnic=1762;
- select bmi from dailyreport where cnic=1762;
- select weight from dailyreport where cnic=1762;

Explanation:

These queries are used to select data from the tables already created based on the cnic (user_id) of a member. This way only the member selected has his/her data selected and then displayed. These queries are used on the report page where this data is displayed. The images below prove that the queries work.

```
DAYS
--------------------------------------------------------------------------------
Monday

   PROTEIN
----------
        10

       FAT
----------
        20

     CARBO
----------
        30

EQUIPMENT
--------------------------------------------------------------------------------
Treadmill

BODY_PART
--------------------------------------------------------------------------------
Thighs
```

```
       BMI
----------
         2

    WEIGHT
----------
        60
```