

Description: The **fit_mind** database supports a fitness platform, enabling trainees and trainers to connect through categorized workout programs and videos. It includes tables for managing user accounts (**TRAINEE**, **TRAINER**), workout categories (**CATEGORY**), video resources (**WORKOUT_VIDEO**), and structured programs (**WORKOUT_PROGRAM**). Relationships are established between trainers, categories, videos, and programs to maintain data integrity and organization.

#DDL

1. Create DB

```
CREATE DATABASE fit_mind;
```

2. Create DB tables

2.1 Trainee table

```
CREATE TABLE TRAINEE
```

```
(
    id      int primary key,
    username varchar(10) unique not null,
    password varchar(20)      not null,
    email    varchar(255) unique not null,
    gender   char(1) check ( gender = 'f' or gender = 'm'),
    created_at TIMESTAMP DEFAULT CURRENT_TIMESTAMP

```

```
);
```

2.2 Trainer table

```
CREATE TABLE TRAINER
```

```
(
    id      int primary key,
    username varchar(10) unique not null,
    password varchar(20)      not null,
    email    varchar(255) unique not null,
    created_at TIMESTAMP DEFAULT CURRENT_TIMESTAMP

```

```
);
```

2.3 Category table

```
CREATE TABLE CATEGORY
```

```
(
    id int primary key,
    name varchar(50) unique not null

```

```
);
```

2.4 Workout_video table

```
CREATE TABLE WORKOUT_VIDEO
(
    id          int primary key,
    video_length int          not null,
    video_url   varchar(255) unique not null,
    created_at  TIMESTAMP DEFAULT CURRENT_TIMESTAMP
);
```

2.5 Workout_program table

```
CREATE TABLE WORKOUT_PROGRAM
(
    id          int primary key,
    description  varchar(100) not null,
    number_of_days int        not null,
    total_hours  int          not null,
    created_at  TIMESTAMP DEFAULT CURRENT_TIMESTAMP,
    trainer_id  int          not null,
    foreign key (trainer_id) references trainer (id),
    category_id int          not null,
    foreign key (category_id) references category (id),
    video_id    int          not null,
    foreign key (video_id) references workout_video (id)
);
```

#DML

1. Insert new values

1.1 Insert into trainee table

```
INSERT INTO TRAINEE VALUES (1, 'renad.xo2', 'rex@1829', 'renad@gamil.com', 'f', null);
INSERT INTO TRAINEE VALUES (2, 'saleh21', 's$43252', 'saleh@gamil.com', 'm', null);
INSERT INTO TRAINEE VALUES (3, 'mohamed_i9', 'mo6542', 'mohamed@gamil.com', 'm', null);
INSERT INTO TRAINEE VALUES (4, 'salem2', 's@1121', 'salem@gamil.com', 'm', null);
INSERT INTO TRAINEE VALUES (5, 'sara.32', 'saa&9535', 'sara@gamil.com', 'f', null);
```

1.2 Insert into trainer table

```
INSERT INTO TRAINER VALUES (1, 'roaa.20', 'r$8984', 'roaa@gamil.com', null);
INSERT INTO TRAINER VALUES (2, 'saad3', '64548&7', 'saad@gamil.com', null);
INSERT INTO TRAINER VALUES (3, 'kahled44', 'k7123', 'kahled@gamil.com', null);
INSERT INTO TRAINER VALUES (4, 'lena11', 'l46665#5', 'lena@gamil.com', null);
INSERT INTO TRAINER VALUES (5, 'samar55', '448654', 'samar@gamil.com', null);
```

1.3 Insert into category table

```
INSERT INTO CATEGORY VALUES (1, 'Flexibility & Mobility');
INSERT INTO CATEGORY VALUES (2, 'Cardiovascular');
INSERT INTO CATEGORY VALUES (3, 'Weight Loss & Fat Burn');
INSERT INTO CATEGORY VALUES (4, 'Bodybuilding');
INSERT INTO CATEGORY VALUES (5, 'Core and Abdominal');
```

1.4 Insert into workout_video table

```
INSERT INTO WORKOUT_VIDEO VALUES
(1,20,'https://www.youtube.com/watch?v=dljnYqbrTws',null);
INSERT INTO WORKOUT_VIDEO VALUES
(2,45,'https://www.youtube.com/watch?v=UBMk30rjy0o',null);
INSERT INTO WORKOUT_VIDEO VALUES
(3,30,'https://www.youtube.com/watch?v=ZLFmPHoOe3Y',null);
INSERT INTO WORKOUT_VIDEO VALUES
(4,15,'https://www.youtube.com/watch?v=ml6cT4AZdql',null);
INSERT INTO WORKOUT_VIDEO VALUES
(5,53,'https://www.youtube.com/watch?v=IODxDxX7oi4',null);
```

1.5 Insert into workout_program table

```
INSERT INTO WORKOUT_PROGRAM VALUES
(1, 'A full-body workout program targeting all major muscle groups with cardio.', 25, 12, null,
1, 2, 1),
(2, 'A high-intensity interval training (HIIT) program for fat burning and improved endurance.',
15, 11.25, null, 2, 3, 2),
(3, 'Strength training focusing on upper body strength and muscle development.', 30, 15,
null, 3, 4, 3),
(4, 'A yoga program designed for flexibility and relaxation for all skill levels.', 60, 30, null, 4,
1, 4),
(5, 'An advanced bodybuilding program designed to build strength and muscle mass.', 45,
22.5, null, 5, 4, 5);
```

2. Select data

2.1 Display trainees whose gender is 'f' (female)

```
SELECT * FROM TRAINEE WHERE gender = 'f';
```

2.2 Display trainers whose username contains 'sa'

```
SELECT * FROM TRAINER WHERE username LIKE '%sa%';
```

2.3 Display categories where the name contains 'Body'

```
SELECT * FROM CATEGORY WHERE name LIKE '%Body%';
```

2.4 Display workout videos with a length greater than 30 minutes

```
SELECT * FROM WORKOUT_VIDEO WHERE video_length > 30;
```

2.5 Display workout programs with a number of days greater or equal than 20 days

```
SELECT * FROM WORKOUT_PROGRAM WHERE number_of_days >= 20;
```

3. Update

3.1 Update a record in the trainee table

```
UPDATE TRAINEE SET email = 'renad2022@gamil.com' WHERE id = 1;
```

3.2 Update a record in the trainer table

```
UPDATE TRAINER SET password = 'fgdyy44' WHERE id = 2;
```

3.3 Update a record in the category table

UPDATE CATEGORY SET name = 'Power Training' WHERE id = 3;

3.4 Update a record in the workout_video table

UPDATE WORKOUT_VIDEO SET video_length = 25 WHERE id = 4;

3.5 Update a record in the workout_program table

UPDATE WORKOUT_PROGRAM SET description = 'Full-body workout program focusing on strength and mobility.' WHERE id = 1;

4. Delete

4.1 Delete a record in the trainee table

DELETE FROM TRAINEE WHERE id = 5;

These four queries related to each other

4.2 Delete a record in the workout_program table

DELETE FROM WORKOUT_PROGRAM WHERE id = 4;

4.3 Delete a record in the trainer table

DELETE FROM TRAINER WHERE id = 4;

4.4 Delete a record in the category table

DELETE FROM CATEGORY WHERE id = 1;

4.5 Delete a record in the workout_video table

DELETE FROM WORKOUT_VIDEO WHERE id = 4;