

```
CREATE TABLE Trainer (  
    trainerID INTEGER PRIMARY KEY,  
    fName VARCHAR(255),  
    lName VARCHAR(255),  
    gender CHAR(1),  
    certification VARCHAR(255),  
    securityCheck BOOLEAN,  
    emailAddr VARCHAR(255),  
    phone VARCHAR(255),  
    scheduleTID INTEGER -- Foreign key added later  
);
```

```
CREATE TABLE Availability (  
    availabilityID INTEGER PRIMARY KEY,  
    date DATE,  
    startTime TIME,  
    endTime TIME  
);
```

```
CREATE TABLE TrainerAvailability (  
    trainerID INTEGER, -- Foreign key added later  
    availabilityID INTEGER, -- Foreign key added later  
    PRIMARY KEY (trainerID, availabilityID)  
);
```

```
CREATE TABLE TrainerSchedule (  
    scheduleTID INTEGER PRIMARY KEY,  
    trainerID INTEGER, -- Foreign key added later  
    updatingAdmin INTEGER -- Foreign key added later  
);
```

```
CREATE TABLE TrainerView (  
    profileID INTEGER, -- Foreign key added later  
    trainerID INTEGER, -- Foreign key added later  
    PRIMARY KEY (profileID, trainerID)  
);
```

```
CREATE TABLE TrainerAssigns (  
    trainerID INTEGER, -- Foreign key added later  
    profileID INTEGER, -- Foreign key added later  
    exerciseID INTEGER, -- Foreign key added later  
    PRIMARY KEY (trainerID, profileID)  
);
```

```
CREATE TABLE Member (  
    memberID INTEGER PRIMARY KEY,  
    profileID INTEGER, -- Foreign key added later  
    fName VARCHAR(255),  
    lName VARCHAR(255),  
    gender CHAR(1),  
    emailAddr VARCHAR(255),  
    phone VARCHAR(255),  
    homeNum VARCHAR(255),  
    streetName VARCHAR(255),  
    postalCode VARCHAR(255),  
    dateOfBirth DATE CHECK (dateOfBirth <= CURRENT_DATE - INTERVAL '18 years')  
);
```

```
CREATE TABLE MemberSchedule (  
    scheduleMID INTEGER PRIMARY KEY,  
    memberID INTEGER, -- Foreign key added later  
    updatingAdmin INTEGER -- Foreign key added later  
);
```

```
CREATE TABLE EventsMember (  
    bookingID INTEGER, -- Foreign key added later  
    scheduleMID INTEGER, -- Foreign key added later  
    PRIMARY KEY (bookingID, scheduleMID)  
);
```

```
CREATE TABLE Booking (  
    bookingID INTEGER PRIMARY KEY,  
    room VARCHAR(255),  
    type VARCHAR(255),  
    date DATE,  
    time TIME,  
    status VARCHAR(255),  
    instructor INTEGER, -- Foreign key added later  
    processingAdmin INTEGER, -- Foreign key added later  
    equipmentStatus BOOLEAN,  
    roomStatus BOOLEAN,  
    trainerAvailable BOOLEAN,  
    scheduleTID INTEGER, -- Foreign key added later  
    duration SMALLINT  
);
```

```
CREATE TABLE RequestBooking (  
    bookingID INTEGER, -- Foreign key added later
```

```

        memberID INTEGER, -- Foreign key added later
        PRIMARY KEY (bookingID, memberID)
    );

CREATE TABLE Equipment (
    equipmentID INTEGER PRIMARY KEY,
    name VARCHAR(255),
    location VARCHAR(255),
    monitoringAdmin INTEGER, -- Foreign key added later
    lastMonitored DATE,
    score SMALLINT CHECK (score BETWEEN 1 AND 10)
);

CREATE TABLE Admin (
    adminID INTEGER PRIMARY KEY,
    fName VARCHAR(255),
    lName VARCHAR(255),
    emailAddr VARCHAR(255),
    phone VARCHAR(255)
);

CREATE TABLE Payment (
    paymentID INTEGER PRIMARY KEY,
    type VARCHAR(255),
    dateIssued DATE,
    dateBilled DATE,
    amount MONEY,
    processingAdmin INTEGER, -- Foreign key added later
    payee INTEGER -- Foreign key added later
);

CREATE TABLE Profile (
    profileID INTEGER PRIMARY KEY,
    memberID INTEGER, -- Foreign key added later
    status VARCHAR(255),
    weight INTEGER,
    bloodPressure VARCHAR(255),
    bodyFat INTEGER
);

CREATE TABLE Goal (
    goalID INTEGER PRIMARY KEY,
    targetWeight INTEGER,
    targetPace TIME,

```

```
        targetBodyFat INTEGER
    );
```

```
CREATE TABLE Achievements (
    achievID INTEGER PRIMARY KEY,
    goalID INTEGER -- Foreign key added later
);
```

```
CREATE TABLE ProfileAchievements (
    profileID INTEGER, -- Foreign key added later
    achievID INTEGER, -- Foreign key added later
    PRIMARY KEY (profileID, achievID)
);
```

```
CREATE TABLE ProfileGoals (
    profileID INTEGER, -- Foreign key added later
    goalID INTEGER, -- Foreign key added later
    PRIMARY KEY (profileID, goalID)
);
```

```
CREATE TABLE ProfileRoutines (
    profileID INTEGER, -- Foreign key added later
    exerciseID INTEGER, -- Foreign key added later
    PRIMARY KEY (profileID, exerciseID)
);
```

```
CREATE TABLE Exercise(
    exerciseID INTEGER PRIMARY KEY,
    name VARCHAR(255),
    description TEXT
);
```

-- These statements, will be inserted after the DML Statments

```
ALTER TABLE Profile ADD CONSTRAINT fk_profile_member FOREIGN KEY (memberID)
REFERENCES Member(memberID);
```

```
ALTER TABLE Member ADD CONSTRAINT fk_member_profile FOREIGN KEY (profileID)
REFERENCES Profile(profileID);
```

```
ALTER TABLE Achievements ADD CONSTRAINT fk_achievements_goal FOREIGN KEY
(goalID) REFERENCES Goal(goalID);
```

```
ALTER TABLE Trainer ADD CONSTRAINT fk_trainer_scheduleTID FOREIGN KEY
(scheduleTID) REFERENCES TrainerSchedule(scheduleTID);
```

```
ALTER TABLE TrainerSchedule ADD CONSTRAINT fk_trainerSchedule_trainer FOREIGN KEY
(trainerID) REFERENCES Trainer(trainerID);
```

```
ALTER TABLE TrainerSchedule ADD CONSTRAINT fk_trainerSchedule_admin FOREIGN KEY
(updatingAdmin) REFERENCES Admin(adminID);
```

```
ALTER TABLE Booking ADD CONSTRAINT fk_booking_instructor FOREIGN KEY (instructor)
REFERENCES Trainer(trainerID);
```

```
ALTER TABLE Booking ADD CONSTRAINT fk_booking_processingAdmin FOREIGN KEY
(processingAdmin) REFERENCES Admin(adminID);
```

```
ALTER TABLE Booking ADD CONSTRAINT fk_booking_scheduleTID FOREIGN KEY
(scheduleTID) REFERENCES TrainerSchedule(scheduleTID);
```

```
ALTER TABLE MemberSchedule ADD CONSTRAINT fk_memberSchedule_member FOREIGN
KEY (memberID) REFERENCES Member(memberID);
```

```
ALTER TABLE MemberSchedule ADD CONSTRAINT fk_memberSchedule_admin FOREIGN
KEY (updatingAdmin) REFERENCES Admin(adminID);
```

```
ALTER TABLE Equipment ADD CONSTRAINT fk_equipment_admin FOREIGN KEY
(monitoredAdmin) REFERENCES Admin(adminID);
```

```
ALTER TABLE Payment ADD CONSTRAINT fk_payment_processingAdmin FOREIGN KEY
(processingAdmin) REFERENCES Admin(adminID);
```

```
ALTER TABLE Payment ADD CONSTRAINT fk_payment_payee FOREIGN KEY (payee)
REFERENCES Profile(profileID);
```

```
ALTER TABLE TrainerAvailability ADD CONSTRAINT fk_trainerAvailability_trainer FOREIGN
KEY (trainerID) REFERENCES Trainer(trainerID);
```

```
ALTER TABLE TrainerAvailability ADD CONSTRAINT fk_trainerAvailability_availability
FOREIGN KEY (availabilityID) REFERENCES Availability(availabilityID);
```

```
ALTER TABLE TrainerView ADD CONSTRAINT fk_trainerView_profile FOREIGN KEY
(profileID) REFERENCES Profile(profileID);
ALTER TABLE TrainerView ADD CONSTRAINT fk_trainerView_trainer FOREIGN KEY
(trainerID) REFERENCES Trainer(trainerID);
```

```
ALTER TABLE TrainerAssigns ADD CONSTRAINT fk_trainerAssigns_trainer FOREIGN KEY
(trainerID) REFERENCES Trainer(trainerID);
ALTER TABLE TrainerAssigns ADD CONSTRAINT fk_trainerAssigns_profile FOREIGN KEY
(profileID) REFERENCES Profile(profileID);
ALTER TABLE TrainerAssigns ADD CONSTRAINT fk_trainerAssigns_exercise FOREIGN KEY
(exerciseID) REFERENCES Exercise(exerciseID);
```

```
ALTER TABLE EventsMember ADD CONSTRAINT fk_eventsMember_booking FOREIGN KEY
(bookingID) REFERENCES Booking(bookingID);
ALTER TABLE EventsMember ADD CONSTRAINT fk_eventsMember_scheduleMID FOREIGN
KEY (scheduleMID) REFERENCES MemberSchedule(scheduleMID);
```

```
ALTER TABLE RequestBooking ADD CONSTRAINT fk_requestBooking_booking FOREIGN
KEY (bookingID) REFERENCES Booking(bookingID);
ALTER TABLE RequestBooking ADD CONSTRAINT fk_requestBooking_member FOREIGN
KEY (memberID) REFERENCES Member(memberID);
```

```
ALTER TABLE ProfileAchievements ADD CONSTRAINT fk_profileAchievements_profile
FOREIGN KEY (profileID) REFERENCES Profile(profileID);
ALTER TABLE ProfileAchievements ADD CONSTRAINT fk_profileAchievements_achiev
FOREIGN KEY (achievID) REFERENCES Achievements(achievID);
```

```
ALTER TABLE ProfileGoals ADD CONSTRAINT fk_profileGoals_profile FOREIGN KEY
(profileID) REFERENCES Profile(profileID);
ALTER TABLE ProfileGoals ADD CONSTRAINT fk_profileGoals_goal FOREIGN KEY (goalID)
REFERENCES Goal(goalID);
```

```
ALTER TABLE ProfileRoutines ADD CONSTRAINT fk_profileRoutines_profile FOREIGN KEY
(profileID) REFERENCES Profile(profileID);
ALTER TABLE ProfileRoutines ADD CONSTRAINT fk_profileRoutines_exercise FOREIGN KEY
(exerciseID) REFERENCES Exercise(exerciseID);
```