Assignment 2, Injury tracker

Create Tables:

```
CREATE TABLE Athlete(
    Athlete_id int PRIMARY KEY,
    Athlete_name char(30) NOT NULL,
    ssn int,
    Date_of_Birth date,
    ContactNO char(15) unique,
    Team_id int,
    FOREIGN KEY(Team_id) REFERENCES Team(Team_id)
) ;
```

```
CREATE TABLE Team (
    Team_id int PRIMARY KEY,
    Team_name char(30),
    Country char(30)
) ;
```

```
CREATE TABLE Injury_Type (
    Injury_id int PRIMARY KEY,
    Injury_name char(50),
    Body_part char(30)
) ;
```

```
CREATE TABLE Injury_record (
    Record_id int PRIMARY KEY,
    Athlete_id int NOT NULL,
    Injury_id int NOT NULL,
    Date_inj date,
    Injury_Status char(20),
    STAFF_in_Charge INT,
    FOREIGN KEY (STAFF_in_Charge ) REFERENCES Staff(Staff_id) ,
    FOREIGN KEY (Athlete_id) REFERENCES Athlete(Athlete_id),
    FOREIGN KEY (Injury_id) REFERENCES Injury_Type(Injury_id)
)
```

```
CREATE TABLE Short_term(
    Record_id int PRIMARY KEY,
    Treatment char(30),
    Recovery_time char(30),
    FOREIGN KEY(Record_id) REFERENCES Injury_record(Record_id)
) ;
```

```
CREATE TABLE Long_term (
    Record_id int PRIMARY KEY,
    Long_term_effect char(100),
    Able_to_continue_career bool,
    FOREIGN KEY(Record_id) REFERENCES Injury_record(Record_id)
) ;
```

```
CREATE TABLE Users(
    User_id int PRIMARY KEY,
    User_name char(30),
    Email char(30) UNIQUE
) ;
```

```sql
CREATE TABLE Public(
    User_id int PRIMARY KEY,
    Interest char(100),
    Team_supporting INT,
    FOREIGN KEY(Team_supporting) REFERENCES Team(Team_id),
    FOREIGN KEY(User_id) REFERENCES Users(User_id)
)
```

```sql
CREATE TABLE Professional (
    User_id int PRIMARY KEY,
    Permission_code int unique,
    Staff_id int,
    FOREIGN KEY (Staff_id) REFERENCES Staff(Staff_id),
    FOREIGN KEY(User_id) REFERENCES Users(User_id)
)
```

```sql
CREATE TABLE Staff (
    Staff_id int PRIMARY KEY,
    Staff_name char(30),
    Year_join INT
)
```

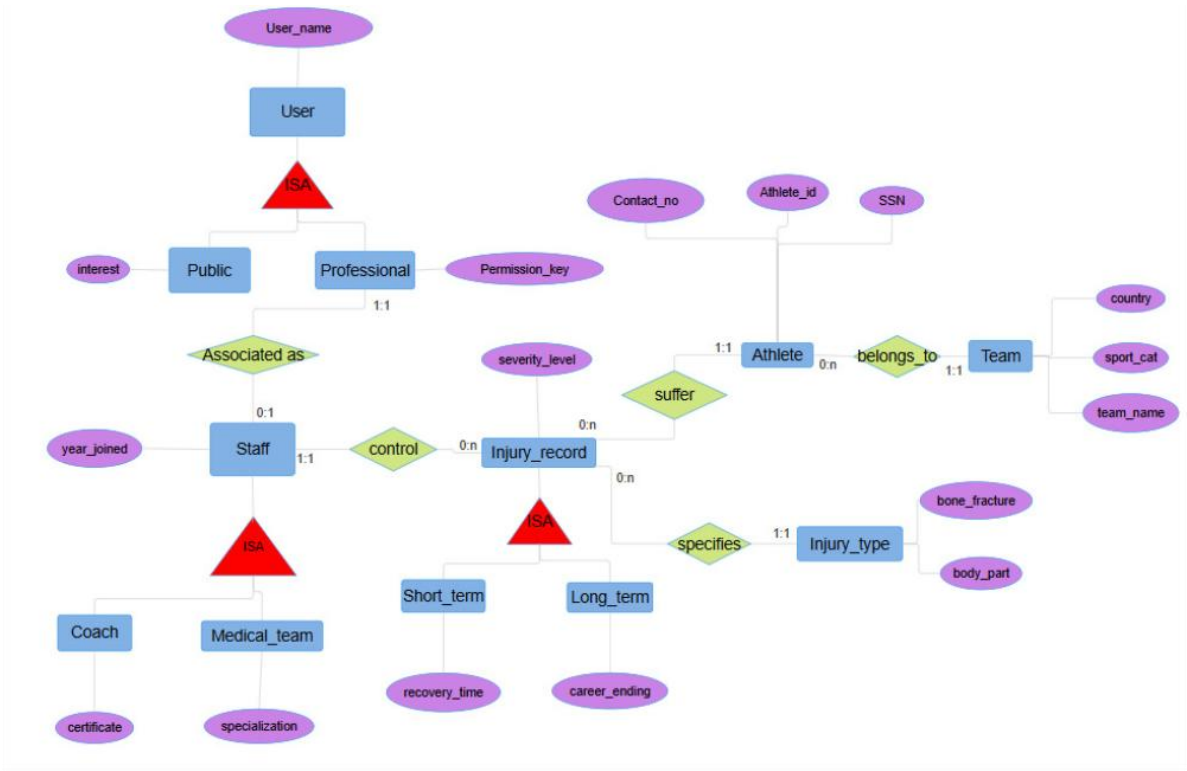
```sql
CREATE TABLE Coach (
    Staff_id int PRIMARY KEY,
    Team_id int ,
    Cerificate char(30),
    FOREIGN KEY (Team_id) REFERENCES Team(Team_id),
    FOREIGN KEY(Staff_id) REFERENCES Staff (Staff_id)
)
```

```sql
CREATE TABLE Medical_team (
    Staff_id int PRIMARY KEY,
    Specialization char(40),
    Licence_number char(30),
    FOREIGN KEY(Staff_id) REFERENCES Staff(Staff_id)
)
```

Approach:

We separated the ISA hierarchy into 3 tables, since we had relations from different entity sets referring to the subclass. Such a choice was made to minimize the data redundancy and null values.

If we create one big relation (Alt 3), there are too many null values, which we want to avoid that.


User_name
User
ISA
interest
Public
Professional
Permission_key
1:1
Associated as
0:1
year_joined
Staff
1:1
control
0:n
Injury_record
severity_level
0:n
suffer
1:1
Athlete
0:n
belongs_to
1:1
Team
country
sport_cat
team_name
Contact_no
Athlete_id
SSN
0:n
ISA
specifies
1:1
Injury_type
bone_fracture
body_part
ISA
Coach
Medical_team
Short_term
Long_term
certificate
specialization
recovery_time
career_ending