Relational Schema [Tokyo 2021 Olympics Dataset]

CREATE TABLE Country (CCA3:VARCHAR(30)[PK], rank_of_population:INT, continent: VARCHAR(30), population_2020: INT, population_2022:INT, rank_of_medals: INT, num_gold_medals:INT, num_silver_medals:INT, num_bronze_medals: INT, num_total_medals: INT)

Description: Each Country has CCA3 as its unique identifier or PK. Each country has defining attributes as well: the rank of its population, the continent it belongs to, its population in 2020, its population in 2022, the rank of medals it won, the number of gold, silver, and bronze medals it one, and the total number of olympic medals it won.

CREATE TABLE Athlete (name: VARCHAR(255) [PK], country_CCA3: VARCHAR(30) [FK to Country.CCA3], discipline_name: VARCHAR(30) [FK to Discipline.Name])

Description: Each athlete has a name that it identifies by. Each athlete can only represent one country, while a country can be represented by many athletes. Each athlete can only choose one discipline, while a discipline can be chosen by many athletes.

CREATE TABLE Coaches(name: VARCHAR(255) [PK], country_CCA3: VARCHAR(30) [FK to Country.CCA3], discipline_name: VARCHAR(30) [FK to Discipline.Name], event: VARCHAR(30))

Description: Each coach has a name that it identifies by. Each athlete can only represent one country, while a country can be represented by many athletes. Each athlete can only choose one discipline, while a discipline can be chosen by many athletes. Each coach also has an event that they coach.

CREATE TABLE Discipline(name: VARCHAR(255) [PK], male_amt: INT, female_amt: INT, total_num: INT)

Description: Each discipline has an identifying name. Each discipline also has the amount of females and males, and the total number of males and females that have chosen that discipline.

CREATE TABLE User (login_ID: VARCHAR(255)[PK], gender:VARCHAR(30), phone_number:INT)

Description: Each user has a unique login IN, a defining gender, and phone number.

CREATE TABLE Login (login_ID: VARCHAR(255) [FK for User.login_ID] , password: REAL)

Description: Each login has a unique user that it represents based on the user login ID; it also has a password to login with.

Assumptions regarding our ER Diagram:

Assume athletes must have one and only one country.
Assume a country can have 0 athletes.
Assume a coach must have one and only one country.
Assume a country can have 0 coaches.
Assume each athlete must have one and only one discipline.
Assume each discipline has at least one athlete.
Assume each coach must have one and only one discipline.
Assume each discipline has at least one coach.
Assume each user only has one login, and each login only refers to one user.