Warm-Up Project  
  
  
  
  
  
  
  
Concordia University

Dept. of Computer Science & Software Engineering

Comp 353 - Databases Winter 2025

Heena Patel (40247513)

Mariam Danioko (40243178)

MarieRose Karam (40236708)  
Mariana Bou-Saleh (40227084)  
  
  
  
  
  
  
  
  
  
  
Due: February 17, 2025 at 23:55

Table of Contents

[E/R model 3](#_Toc189407985)

[Figure 2. Entity-Relationship diagram to Relational Schema 3](#_Toc189407986)

E/R model

Figure 2. Entity-Relationship diagram to Relational Schema

Locations(location\_id, type, name, address, city, province, postal\_code, phone\_number, web\_address, capacity, personnel\_id)

Personnel(personnel\_id, location\_id, first\_name, last\_name, dob, ssn, medicare\_card, phone\_number, address, city, province, postal\_code, email, role, mandate)

FamilyMembers(family\_member\_id, location\_id, first\_name, last\_name, dob, ssn, medicare\_card, phone\_number, address, city, province, postal\_code, email\_address)

ClubMembers(club\_member\_id, family\_member\_id, location\_id, first\_name, last\_name, dob, height, weight, ssn, medicare\_card, phone\_number, address, city, province, postal\_code, relationship, status, last\_payment\_date)

Payments(payment\_id, club\_member\_id, payment\_date, amount, payment\_method, membership\_date, is\_donation, installment\_number)  
  
Teams(team\_id, location\_id, team\_gender, team\_name, age\_group)

PersonnelLocations(personnel\_id, location\_id, start\_date, end\_date)  
  
FamilyMemberLocations(family\_member\_id, location\_id, start\_date, end\_date)  
  
  
  
  
**Figure 3**. Creation of the Locations table  
  
CREATE TABLE Locations (

location\_id INT AUTO\_INCREMENT,

type VARCHAR(255),

name VARCHAR(255),

address VARCHAR(255),

city VARCHAR(255),

province VARCHAR(2),

postal\_code VARCHAR(20),

phone\_number VARCHAR(20),

web\_address VARCHAR(255),

capacity INT,

personnel\_id INT,

PRIMARY KEY (location\_id)

);

**Figure 4**. Creation of the Personnel table  
  
CREATE TABLE Personnel (

personnel\_id INT AUTO\_INCREMENT,

location\_id INT,

first\_name VARCHAR(255),

last\_name VARCHAR(255),

dob DATE,

ssn VARCHAR(20) UNIQUE NOT NULL,

medicare\_card VARCHAR(20) UNIQUE,

phone\_number VARCHAR(20),

address VARCHAR(255),

city VARCHAR(255),

province VARCHAR(2),

postal\_code VARCHAR(20),

email VARCHAR(255),

role VARCHAR(255) NOT NULL,

mandate TEXT,

PRIMARY KEY (personnel\_id),

FOREIGN KEY (location\_id) REFERENCES Locations(location\_id)

);  
  
  
**Figure 5**. Creation of the FamilyMembers table  
  
CREATE TABLE FamilyMembers (

family\_member\_id INT AUTO\_INCREMENT,

location\_id INT,

first\_name VARCHAR(255),

last\_name VARCHAR(255),

dob DATE,

ssn VARCHAR(20) UNIQUE NOT NULL,

medicare\_card VARCHAR(20) UNIQUE,

phone\_number VARCHAR(20),

address VARCHAR(255),

city VARCHAR(255),

province VARCHAR(2),

postal\_code VARCHAR(20),

email\_address VARCHAR(255),

PRIMARY KEY (family\_member\_id),

FOREIGN KEY (location\_id) REFERENCES Locations(location\_id)

);  
  
**Figure 6**. Creation of the ClubMembers table  
  
CREATE TABLE ClubMembers (

club\_member\_id INT AUTO\_INCREMENT,

family\_member\_id INT,

location\_id INT,

first\_name VARCHAR(255),

last\_name VARCHAR(255),

dob DATE,

height INT,

weight INT,

ssn VARCHAR(20),

medicare\_card VARCHAR(20),

phone\_number VARCHAR(20),

address VARCHAR(255),

city VARCHAR(255),

province VARCHAR(2),

postal\_code VARCHAR(20),

relationship VARCHAR(20),

status VARCHAR(20),

last\_payment\_date DATE,

PRIMARY KEY (club\_member\_id),

FOREIGN KEY (family\_member\_id) REFERENCES FamilyMembers(family\_member\_id),

FOREIGN KEY (location\_id) REFERENCES Locations(location\_id)

);

**Figure 7**. Creation of the Payments table  
  
CREATE TABLE Payments (

payment\_id INT AUTO\_INCREMENT,

club\_member\_id INT,

payment\_date DATE,

amount DECIMAL(10, 2),

payment\_method VARCHAR(20),

membership\_date DATE,

is\_donation BOOLEAN,

installment\_number INT,

PRIMARY KEY (payment\_id),

FOREIGN KEY (club\_member\_id) REFERENCES ClubMembers(club\_member\_id)

);

**Figure 8**. Creation of the Teams table  
  
CREATE TABLE Teams (

team\_id INT AUTO\_INCREMENT,

location\_id INT,

team\_gender VARCHAR(20),

team\_name VARCHAR(255),

age\_group VARCHAR(255),

PRIMARY KEY (team\_id),

FOREIGN KEY (location\_id) REFERENCES Locations(location\_id)

);

**Figure 9**. Creation of the PersonalLocations table

CREATE TABLE PersonnelLocations (

personnel\_id INT,

location\_id INT,

start\_date DATE,

end\_date DATE,

PRIMARY KEY (personnel\_id, location\_id, start\_date),

FOREIGN KEY (personnel\_id) REFERENCES Personnel(personnel\_id),

FOREIGN KEY (location\_id) REFERENCES Locations(location\_id)

);

**Figure 10**. Creation of the FamilyMemberLocations table  
  
CREATE TABLE FamilyMemberLocations (

family\_member\_id INT,

location\_id INT,

start\_date DATE,

end\_date DATE,

PRIMARY KEY (family\_member\_id, location\_id, start\_date),

FOREIGN KEY (family\_member\_id) REFERENCES FamilyMembers(family\_member\_id),

FOREIGN KEY (location\_id) REFERENCES Locations(location\_id)

);