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/*
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Course: ISM 431 001 Database Systems II
Professor: Maggie Guo
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*/
---tables
/*
drop table person cascade constraints;
drop table student cascade constraints;
drop table staff cascade constraints;
drop table rentals cascade constraints;
drop table services cascade constraints;
drop table computer_lab cascade constraints;
drop table tutoring cascade constraints;
drop table study_hall cascade constraints;
drop table items cascade constraints;
*/

-- Create table: Person
CREATE TABLE Person (
    Person_ID CHAR(10) PRIMARY KEY,
    Name VARCHAR2(20) NOT NULL,
    Contact_Info VARCHAR2(60) NOT NULL
);

-- Create table: Student
CREATE TABLE Student (
    Student_ID CHAR(10) PRIMARY KEY,
    Person_ID CHAR(10),
    DOB DATE,
    CONSTRAINT fk_student_person FOREIGN KEY (Person_ID) REFERENCES
Person(Person_ID)
);

-- Create table: Staff
CREATE TABLE Staff (
    Staff_ID CHAR(10) PRIMARY KEY,
    Person_ID CHAR(10),
    Department VARCHAR2(20),
    CONSTRAINT fk_staff_person FOREIGN KEY (Person_ID) REFERENCES
Person(Person_ID)
);

-- Create table: Rentals
CREATE TABLE Rentals (
    Rental_ID CHAR(10) PRIMARY KEY,
    Student_ID CHAR(10),
    Staff_ID CHAR(10),
    Date_Issued DATE,
    Due_Date DATE,
    Date_Returned DATE,
    CONSTRAINT fk_rentals_student FOREIGN KEY (Student_ID) REFERENCES
Student(Student_ID),

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        CONSTRAINT fk_rentals_staff FOREIGN KEY (Staff_ID) REFERENCES
Staff(Staff_ID)
);

-- Create table: Services
CREATE TABLE Services (
    Service_ID CHAR(10) PRIMARY KEY,
    Staff_ID CHAR(10),
    Student_ID CHAR(10),
    Service_Type VARCHAR2(200),
    CONSTRAINT fk_services_staff FOREIGN KEY (Staff_ID) REFERENCES
Staff(Staff_ID),
    CONSTRAINT fk_services_student FOREIGN KEY (Student_ID) REFERENCES
Student(Student_ID)
);

-- Create table: Computer Lab
CREATE TABLE Computer_Lab (
    Computer_ID CHAR(10) PRIMARY KEY,
    Service_ID CHAR(10),
    CONSTRAINT fk_computer_lab_services FOREIGN KEY (Service_ID)
REFERENCES Services(Service_ID)
);

-- Create table: Tutoring
CREATE TABLE Tutoring (
    Tutoring_ID CHAR(10) PRIMARY KEY,
    Service_ID CHAR(10),
    CONSTRAINT fk_tutoring_services FOREIGN KEY (Service_ID) REFERENCES
Services(Service_ID)
);

-- Create table: Study Hall
CREATE TABLE Study_Hall (
    Study_Hall_ID CHAR(10) PRIMARY KEY,
    Service_ID CHAR(10),
    CONSTRAINT fk_study_hall_services FOREIGN KEY (Service_ID) REFERENCES
Services(Service_ID)
);

-- Create table: Items
CREATE TABLE Items (
    Item_ID CHAR(10) PRIMARY KEY,
    Rental_ID CHAR(10),
    Books VARCHAR2(200),
    CDs VARCHAR2(200),
    Articles VARCHAR2(200),
    CONSTRAINT fk_items_rentals FOREIGN KEY (Rental_ID) REFERENCES
Rentals(Rental_ID)
);

---describe the physical design of each table
describe person;
describe student;

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describe staff;
describe rentals;
describe services;
describe computer_lab;
describe tutoring;
describe study_hall;
describe items;

-- Inserting values into the Person table
INSERT INTO Person VALUES ('0001', 'John Doe', 'johndoe@umich.edu');
INSERT INTO Person VALUES ('0002', 'Jane Smith', 'janesmith@umich.edu');
INSERT INTO Person VALUES ('0003', 'Alice Johnson',
'alicejohnson@umich.edu');
INSERT INTO Person VALUES ('0004', 'Bob Thompson',
'bobthompson@umich.edu');
INSERT INTO Person VALUES ('0005', 'Emily Davis', 'emilydavis@umich.edu');
INSERT INTO Person VALUES ('0006', 'Michael Brown',
'michaelbrown@umich.edu');
INSERT INTO Person VALUES ('0007', 'Olivia Wilson',
'oliviawilson@umich.edu');
INSERT INTO Person VALUES ('0008', 'William Martinez',
'williammartinez@umich.edu');
INSERT INTO Person VALUES ('0009', 'Sophia Anderson',
'sophiaanderson@umich.edu');
INSERT INTO Person VALUES ('0010', 'James Garcia',
'jamesgarcia@umich.edu');

INSERT INTO Person VALUES ('0011', 'Linda Hernandez',
'lindahernandez@umich.edu');
INSERT INTO Person VALUES ('0012', 'David Lopez', 'davidlopez@umich.edu');
INSERT INTO Person VALUES ('0013', 'Sarah Gonzalez',
'sarahgonzalez@umich.edu');
INSERT INTO Person VALUES ('0014', 'Christopher Perez',
'christopherperez@umich.edu');
INSERT INTO Person VALUES ('0015', 'Mary Turner', 'maryturner@umich.edu');

-- Inserting values into the Student table
INSERT INTO Student VALUES ('1111', '0001', TO_DATE('September 15, 1995',
'Month DD, YYYY'));
INSERT INTO Student VALUES ('2222', '0002', TO_DATE('February 28, 1992',
'Month DD, YYYY'));
INSERT INTO Student VALUES ('3333', '0003', TO_DATE('November 12, 1990',
'Month DD, YYYY'));
INSERT INTO Student VALUES ('4444', '0004', TO_DATE('March 8, 1989',
'Month DD, YYYY'));
INSERT INTO Student VALUES ('5555', '0005', TO_DATE('July 25, 1976',
'Month DD, YYYY'));
INSERT INTO Student VALUES ('6666', '0006', TO_DATE('October 30, 1993',
'Month DD, YYYY'));
INSERT INTO Student VALUES ('7777', '0007', TO_DATE('May 3, 1992', 'Month
DD, YYYY'));
INSERT INTO Student VALUES ('8888', '0008', TO_DATE('July 21, 1995',
'Month DD, YYYY'));

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INSERT INTO Student VALUES ('9998', '0009', TO_DATE('December 30, 1997',
'Month DD, YYYY'));
INSERT INTO Student VALUES ('9999', '0010', TO_DATE('June 6, 1988', 'Month
DD, YYYY'));

-- Inserting values into the Staff table
INSERT INTO Staff VALUES ('2000', '0011', 'Tutoring Department');
INSERT INTO Staff VALUES ('2001', '0012', 'Tutoring Department');
INSERT INTO Staff VALUES ('2002', '0013', 'Library Department');
INSERT INTO Staff VALUES ('2003', '0014', 'Library Department');
INSERT INTO Staff VALUES ('2004', '0015', 'Counselor Department');

-- Inserting values into the Rentals table
Insert into rentals values('3000','1111',null, '01-sep-23', '15-oct-23',
'10-oct-23');
Insert into rentals values('3001','2222',null, '06-jun-23', '06-jul-23',
'01-jul-23');
Insert into rentals values('3002','3333',null, '05-may-23', '05-jun-23',
'01-jun-23');
Insert into rentals values('3003','4444',null, '01-oct-23', '15-oct-23',
'14-oct-23');
Insert into rentals values('3004','5555',null, '16-sep-23', '16-oct-23',
'15-oct-23');
Insert into rentals values('3005','6666',null, '03-sep-23', '15-oct-23',
'09-oct-23');
Insert into rentals values('3006','7777',null, '01-sep-23', '20-oct-23',
'10-oct-23');

Insert into rentals values('3007', null,'2000', '10-oct-23', '15-dec-23',
'10-dec-23');
Insert into rentals values('3008', null,'2001', '01-sep-23', '22-oct-23',
'20-oct-23');
Insert into rentals values('3009', null,'2002', '01-sep-23', '15-oct-23',
'10-oct-23');

-- Inserting values into the services table
insert into services values('4000','2000',null,'Online Tutoring');
insert into services values('4001','2001',null,'In Person Tutoring');
insert into services values('4002','2002',null,'Computer Lab');
insert into services values('4003','2003',null,'Study Hall');

-- Inserting values into Computer_lab table
insert into computer_lab values('6000','4002');
insert into computer_lab values('6001','4002');
insert into computer_lab values('6002','4002');
insert into computer_lab values('6003','4002');
insert into computer_lab values('6004','4002');

-- Inserting values into tutoring table
Insert into tutoring values ('5000','4000');
Insert into tutoring values ('5001','4001');

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--Inserting values into Study_Hall table
Insert into study_hall values('7000', '4003');

--Inserting books into items table
insert into items values('8000','3000','The Maze Runner',null,null);
insert into items values('8001','3001','The Lord of the Rings',null,null);
insert into items values('8002','3002','Harry Potter',null,null);
insert into items values('8003','3003','The Hunger Games',null,null);
insert into items values('8004','3004','To Kill a Mockingbird',null,null);

--Inserting CDs into items table
insert into items values('8005','3007',null,'Human Biology',null);
insert into items values('8006','3008',null,'Economics 10th
edition',null);

--Inserting articles into items table
insert into items values('8007','3009',null,null,'Racial Injustice');
insert into items values('8008','3005',null,null,'Economics in the world
today');
insert into items values('8009','3006',null,null,'Samsung vs Apple');

commit;
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