Darshana pubudu keerthirathna

ICM 106 OR23106564

DATABASE MANAGEMENT SYSTEM – FINAL COURSEWORK 02

CREATE DATABASE final\_course\_dbms;

USE final\_course\_dbms;

CREATE TABLE guest(

    guest\_id INT,

    name VARCHAR(20),

    address VARCHAR(20),

    country VARCHAR(20),

    gender ENUM('male','female'),

    email VARCHAR(10) UNIQUE,

    user\_name VARCHAR(10),

    password VARCHAR(20),

    CONSTRAINT PRIMARY KEY (guest\_id)

);

DESC guest;

INSERT INTO guest VALUES

(1,'Nimal rathnayaka','Kandy','Sri Lanka','male','nimal@example.com','nimal123','nimal@123'),

(2,'Ragu singhe','Kolkata','India','male','ragu@example.com','ragu123','ragu@123'),

(3,'Linda smith','London','England','female','linda@example.com','linda123','linda@123'),

(4,'John doe','New York','USA','male','john@example.com','john123','john@123'),

(5,'Bella porch','Milan','Italy','female','bella@example.com','bella123','bella@123');

SELECT \* FROM guest;

CREATE TABLE receptionist\_staff(

    receptionist\_staff\_id INT,

    name VARCHAR(20),

    phone VARCHAR(15),

    user\_name VARCHAR(10),

    password VARCHAR(20),

    CONSTRAINT PRIMARY KEY (receptionist\_staff\_id)

);

DESC receptionist\_staff;

INSERT INTO receptionist\_staff VALUES

(1, 'Samantha Perera', '1234567890', 'samantha', 'samantha@123'),

(2, 'Rajitha Silva', '9876543210', 'rajitha', 'rajitha@456'),

(3, 'Nimal Gunawardana', '8765432109', 'nimal', 'nimal@789'),

(4, 'Dilani Fernando', '2345678901', 'dilani', 'dilani@012'),

(5, 'Chathura Jayasena', '3456789012', 'chathura', 'chathura@345');

SELECT \* FROM receptionist\_staff;

CREATE TABLE housekeeping\_staff(

    housekeeping\_staff\_id INT,

    name VARCHAR(20),

    phone VARCHAR(15),

    user\_name VARCHAR(10),

    password VARCHAR(20),

    CONSTRAINT PRIMARY KEY (housekeeping\_staff\_id)

);

DESC housekeeping\_staff;

INSERT INTO housekeeping\_staff VALUES

(1, 'Kumara Bandara', '1234567890', 'kumara', 'kumara@123'),

(2, 'Thilini Mendis', '9876543210', 'thilini', 'thilini@456'),

(3, 'Sunil Rajapaksa', '8765432109', 'sunil', 'sunil@789'),

(4, 'Dulani Perera', '2345678901', 'dulani', 'dulani@012'),

(5, 'Pradeepa Ranasinghe', '3456789012', 'pradeepa', 'pradeepa@345');

SELECT \* FROM housekeeping\_staff;

CREATE TABLE financial\_staff(

    financial\_staff\_id INT,

    name VARCHAR(20),

    phone VARCHAR(15),

    user\_name VARCHAR(10),

    password VARCHAR(20),

    CONSTRAINT PRIMARY KEY (financial\_staff\_id)

);

DESC financial\_staff;

INSERT INTO financial\_staff VALUES

(1, 'Asanka Silva', '1234567890', 'asanka', 'asanka@123'),

(2, 'Shalini Fernando', '9876543210', 'shalini', 'shalini@456'),

(3, 'Dinesh Rajapaksa', '8765432109', 'dinesh', 'dinesh@789'),

(4, 'Menaka Perera', '2345678901', 'menaka', 'menaka@012'),

(5, 'Chaminda Jayawardena', '3456789012', 'chaminda', 'chaminda@345');

SELECT \* FROM financial\_staff;

CREATE TABLE it\_staff(

    it\_staff\_id INT,

    name VARCHAR(20),

    phone VARCHAR(15),

    user\_name VARCHAR(10),

    password VARCHAR(20),

    CONSTRAINT PRIMARY KEY (it\_staff\_id)

);

DESC it\_staff;

INSERT INTO it\_staff VALUES

(1, 'Rukmal Perera', '1234567890', 'rukmal', 'rukmal@123'),

(2, 'Ishara Silva', '9876543210', 'ishara', 'ishara@456'),

(3, 'Nuwan Rajapaksa', '8765432109', 'nuwan', 'nuwan@789'),

(4, 'Anusha Fernando', '2345678901', 'anusha', 'anusha@012'),

(5, 'Chandana Jayasena', '3456789012', 'chandana', 'chandana@345');

SELECT \* FROM it\_staff;

CREATE TABLE room\_views(

    view\_id INT,

    view VARCHAR(20),

    CONSTRAINT PRIMARY KEY (view\_id)

);

DESC room\_views;

INSERT INTO room\_views VALUES

(1, 'City View'),

(2, 'Mountain View'),

(3, 'Ocean View'),

(4, 'Garden View'),

(5, 'Pool View');

SELECT \* FROM room\_views;

CREATE TABLE room\_type(

    room\_type\_id INT,

    room\_type\_name VARCHAR(20),

    has\_bathtub BOOLEAN,

    has\_kitchen BOOLEAN,

    has\_tv BOOLEAN,

    has\_internet BOOLEAN,

    has\_hot\_tub BOOLEAN,

    has\_fridge BOOLEAN,

    has\_microwave BOOLEAN,

    number\_of\_guests INT,

    total\_double\_beds INT,

    total\_single\_beds INT,

    CONSTRAINT PRIMARY KEY (room\_type\_id)

);

DESC room\_type;

INSERT INTO room\_type VALUES

(1, 'Single Room', false, false, true, true, false, true, false, 1, 0, 1),

(2, 'Double Room', true, true, true, true, false, true, true, 2, 1, 1),

(3, 'Suite', true, true, true, true, true, true, true, 2, 1, 2);

SELECT \* FROM room\_type;

CREATE TABLE payment\_methods(

    payment\_method\_id INT,

    payment\_method\_name VARCHAR(20),

    CONSTRAINT PRIMARY KEY (payment\_method\_id)

);

DESC payment\_methods;

INSERT INTO payment\_methods VALUES

(1, 'Cash'),

(2, 'Cheque'),

(3, 'Credit Card');

SELECT \* FROM payment\_methods;

CREATE TABLE software\_maintain\_information(

    report\_id INT,

    description VARCHAR(50),

    CONSTRAINT PRIMARY KEY (report\_id)

);

DESC software\_maintain\_information;

INSERT INTO software\_maintain\_information VALUES

(1, 'System Update'),

(2, 'Security Patch'),

(3, 'Bug Fix'),

(4, 'Performance Optimization'),

(5, 'Database Backup');

SELECT \* FROM software\_maintain\_information;

CREATE TABLE room\_information(

    room\_id INT,

    available BOOLEAN,

    room\_area INT,

    has\_balcony BOOLEAN,

    room\_type\_id INT,

    CONSTRAINT PRIMARY KEY (room\_id),

    CONSTRAINT FOREIGN KEY (room\_type\_id) REFERENCES room\_type(room\_type\_id)

);

DESC room\_information;

INSERT INTO room\_information VALUES

(101, true, 300, true, 1),

(102, true, 400, false, 2),

(103, true, 500, true, 3),

(104, true, 350, false, 1),

(105, true, 450, true, 2);

SELECT \* FROM room\_information;

CREATE TABLE booking\_preferences(

    booking\_id INT,

    booking\_create\_date DATE,

    expected\_arrival\_date DATE,

    checkin\_date DATE,

    checkout\_date DATE,

    cancellation BOOLEAN NOT NULL,

    guest\_id INT,

    receptionist\_staff\_id INT,

    room\_id INT,

    CONSTRAINT PRIMARY KEY (booking\_id),

    CONSTRAINT FOREIGN KEY (guest\_id) REFERENCES guest(guest\_id),

    CONSTRAINT FOREIGN KEY (receptionist\_staff\_id) REFERENCES receptionist\_staff(receptionist\_staff\_id),

    CONSTRAINT FOREIGN KEY (room\_id) REFERENCES room\_information(room\_id)

);

DESC booking\_preferences;

INSERT INTO booking\_preferences VALUES

(1, '2024-01-01', '2024-01-05', '2024-01-05', '2024-01-10', false, 1, 1, 101),

(2, '2024-02-10', '2024-02-15', '2024-02-15', '2024-02-20', false, 2, 2, 102),

(3, '2024-03-20', '2024-03-25', '2024-03-25', '2024-03-30', false, 3, 3, 103),

(4, '2024-04-05', '2024-04-10', '2024-04-10', '2024-04-15', false, 4, 4, 104),

(5, '2024-05-15', '2024-05-20', '2024-05-20', '2024-05-25', false, 5, 5, 105);

SELECT \* FROM booking\_preferences;

CREATE TABLE cancellation\_details(

    cancellation\_id INT,

    cancellation\_date DATE,

    reason VARCHAR(50),

    room\_id INT,

    CONSTRAINT PRIMARY KEY (cancellation\_id),

    CONSTRAINT FOREIGN KEY (room\_id) REFERENCES room\_information(room\_id)

);

DESC cancellation\_details;

INSERT INTO cancellation\_details VALUES

(1, '2024-01-04', 'Change of plans', 101),

(2, '2024-02-14', 'Family emergency', 102),

(3, '2024-03-24', 'Business trip canceled', 103),

(4, '2024-04-09', 'Health issues', 104),

(5, '2024-05-19', 'Unexpected circumstances', 105);

SELECT \* FROM cancellation\_details;

CREATE TABLE room\_information\_housekeeping\_staff(

    room\_id INT,

    housekeeping\_staff\_id INT,

    duties VARCHAR(50),

    CONSTRAINT FOREIGN KEY (room\_id) REFERENCES room\_information(room\_id),

    CONSTRAINT FOREIGN KEY (housekeeping\_staff\_id) REFERENCES housekeeping\_staff(housekeeping\_staff\_id),

    CONSTRAINT PRIMARY KEY (room\_id,housekeeping\_staff\_id)

);

DESC room\_information\_housekeeping\_staff;

INSERT INTO room\_information\_housekeeping\_staff VALUES

(101, 1, 'Cleaning and tidying'),

(102, 2, 'Ensuring cleanliness and order'),

(103, 3, 'Housekeeping duties'),

(104, 4, 'Room maintenance'),

(105, 5, 'Cleaning and organizing');

SELECT \* FROM room\_information\_housekeeping\_staff;

CREATE TABLE room\_information\_room\_views(

    room\_id INT,

    view\_id INT,

    CONSTRAINT FOREIGN KEY (room\_id) REFERENCES room\_information(room\_id),

    CONSTRAINT FOREIGN KEY (view\_id) REFERENCES room\_views(view\_id),

    CONSTRAINT PRIMARY KEY (room\_id,view\_id)

);

DESC room\_information\_room\_views;

INSERT INTO room\_information\_room\_views VALUES

(101, 1),

(102, 2),

(103, 3),

(104, 4),

(105, 5);

SELECT \* FROM room\_information\_room\_views;

CREATE TABLE discount\_information(

    discount\_info\_id INT,

    discount\_name VARCHAR(20),

    discount\_percentage DECIMAL,

    payment\_method\_id INT,

    CONSTRAINT PRIMARY KEY (discount\_info\_id),

    CONSTRAINT FOREIGN KEY (payment\_method\_id) REFERENCES payment\_methods(payment\_method\_id)

);

DESC discount\_information;

INSERT INTO discount\_information VALUES

(1, 'No Discount', 0.00, 1),

(2, 'Cheque Discount', 2.00, 2),

(3, 'Credit Card Discount', 3.00, 3);

SELECT \* FROM discount\_information;

CREATE TABLE final\_bill(

    final\_bill\_id INT,

    bill\_date DATE,

    final\_amount DECIMAL,

    booking\_id INT,

    payment\_method\_id INT,

    financial\_staff\_id INT,

    discount\_info\_id INT,

    CONSTRAINT PRIMARY KEY (final\_bill\_id),

    CONSTRAINT FOREIGN KEY (booking\_id) REFERENCES booking\_preferences(booking\_id),

    CONSTRAINT FOREIGN KEY (payment\_method\_id) REFERENCES payment\_methods(payment\_method\_id),

    CONSTRAINT FOREIGN KEY (financial\_staff\_id) REFERENCES financial\_staff(financial\_staff\_id),

    CONSTRAINT FOREIGN KEY (discount\_info\_id) REFERENCES discount\_information(discount\_info\_id)

);

DESC final\_bill;

INSERT INTO final\_bill VALUES

(1, '2024-01-10', 4000.00, 1, 3, 1, 1),

(2, '2024-02-20', 7600.00, 2, 2, 2, 2),

(3, '2024-03-30', 7000.00, 3, 1, 3, 3),

(4, '2024-04-15', 3800.00, 4, 3, 4, 1),

(5, '2024-05-25', 6650.00, 5, 2, 5, 2);

SELECT \* FROM final\_bill;

CREATE TABLE software\_it\_staff(

    report\_id INT,

    it\_staff\_id INT,

    duties VARCHAR(50),

    CONSTRAINT FOREIGN KEY (report\_id) REFERENCES software\_maintain\_information(report\_id),

    CONSTRAINT FOREIGN KEY (it\_staff\_id) REFERENCES it\_staff(it\_staff\_id),

    CONSTRAINT PRIMARY KEY (report\_id,it\_staff\_id)

);

DESC software\_it\_staff;

INSERT INTO software\_it\_staff VALUES

(1, 1, 'System updates and maintenance'),

(1, 2, 'Ensuring system security'),

(2, 3, 'Bug fixing and troubleshooting'),

(2, 4, 'Performance optimization tasks'),

(3, 5, 'Database backup and maintenance');

SELECT \* FROM software\_it\_staff;