CREATE DATABASE messenger;

use messenger;

CREATE TABLE users (

user\_id INT PRIMARY KEY,

username VARCHAR(50) NOT NULL,

email VARCHAR(100) NOT NULL,

created\_at DATETIME2 DEFAULT GETDATE()

);

CREATE TABLE chat\_rooms (

room\_id INT PRIMARY KEY,

room\_name VARCHAR(100) NOT NULL,

created\_at DATETIME2 DEFAULT GETDATE()

);

CREATE TABLE chat\_rooms\_members (

member\_id INT PRIMARY KEY,

room\_id INT,

user\_id INT,

joined\_at DATETIME2 DEFAULT GETDATE(), -- Change TIMESTAMP to DATETIME2

FOREIGN KEY (room\_id) REFERENCES chat\_rooms(room\_id),

FOREIGN KEY (user\_id) REFERENCES users(user\_id)

);

CREATE TABLE chat\_rooms\_messages (

message\_id INT PRIMARY KEY,

room\_id INT,

user\_id INT,

message TEXT NOT NULL,

created\_at DATETIME2 DEFAULT GETDATE(),

FOREIGN KEY (room\_id) REFERENCES chat\_rooms(room\_id),

FOREIGN KEY (user\_id) REFERENCES users(user\_id)

);

CREATE TABLE private\_rooms (

room\_id INT PRIMARY KEY,

created\_at DATETIME2 DEFAULT GETDATE()

);

CREATE TABLE private\_room\_members (

member\_id INT PRIMARY KEY,

room\_id INT,

user\_id INT,

created\_at DATETIME2 DEFAULT GETDATE(),

FOREIGN KEY (room\_id) REFERENCES private\_rooms(room\_id),

FOREIGN KEY (user\_id) REFERENCES users(user\_id)

);

CREATE TABLE private\_room\_messages (

message\_id INT PRIMARY KEY,

room\_id INT,

user\_id INT,

message TEXT NOT NULL,

created\_at DATETIME2 DEFAULT GETDATE(),

FOREIGN KEY (room\_id) REFERENCES private\_rooms(room\_id),

FOREIGN KEY (user\_id) REFERENCES users(user\_id)

);

CREATE TABLE services (

service\_id INT PRIMARY KEY,

service\_name VARCHAR(100) NOT NULL,

service\_description TEXT,

service\_price DECIMAL(10, 2) NOT NULL,

created\_at DATETIME2 DEFAULT GETDATE()

);

CREATE TABLE users\_services (

user\_service\_id INT PRIMARY KEY,

user\_id INT,

service\_id INT,

purchase\_date DATETIME2 DEFAULT GETDATE(), -- Change TIMESTAMP to DATETIME2

FOREIGN KEY (user\_id) REFERENCES users(user\_id),

FOREIGN KEY (service\_id) REFERENCES services(service\_id)

);

CREATE TABLE payments (

payment\_id INT PRIMARY KEY,

user\_id INT,

service\_id INT,

amount DECIMAL(10, 2) NOT NULL,

payment\_date DATETIME2 DEFAULT GETDATE(), -- Change TIMESTAMP to DATETIME2

FOREIGN KEY (user\_id) REFERENCES users(user\_id),

FOREIGN KEY (service\_id) REFERENCES services(service\_id)

)

-- Insert records into the users table

INSERT INTO users (user\_id, username, email) VALUES

(1, 'john\_doe', 'john.doe@example.com'),

(2, 'jane\_smith', 'jane.smith@example.com'),

(3, 'bob\_jones', 'bob.jones@example.com'),

(4, 'alice\_wang', 'alice.wang@example.com'),

(5, 'michael\_clark', 'michael.clark@example.com'),

(6, 'sarah\_adams', 'sarah.adams@example.com');

-- Insert records into the chat\_rooms table

INSERT INTO chat\_rooms (room\_id, room\_name) VALUES

(1, 'General'),

(2, 'Sports'),

(3, 'Music'),

(4, 'Technology'),

(5, 'Movies'),

(6, 'Books');

INSERT INTO chat\_rooms\_members (member\_id, room\_id, user\_id) VALUES

(1, 1, 1),

(2, 1, 2),

(3, 2, 1),

(4, 2, 3),

(5, 3, 2),

(6, 3, 3);

INSERT INTO chat\_rooms\_messages (message\_id, room\_id, user\_id, message) VALUES

(1, 1, 1, 'Hello, everyone!'),

(2, 1, 2, 'Hi! How are you?'),

(3, 2, 1, 'Did you watch the game last night?'),

(4, 2, 3, 'Yes, it was amazing!'),

(5, 3, 2, 'What is your favorite band?'),

(6, 3, 3, 'I love The Beatles.');

INSERT INTO private\_rooms (room\_id) VALUES

(1),

(2),

(3),

(4),

(5),

(6);

INSERT INTO private\_room\_members (member\_id, room\_id, user\_id) VALUES

(1, 1, 1),

(2, 1, 2),

(3, 2, 1),

(4, 2, 3),

(5, 3, 2),

(6, 3, 3);

INSERT INTO private\_room\_messages (message\_id, room\_id, user\_id, message) VALUES

(1, 1, 1, 'Private message 1'),

(2, 1, 2, 'Private message 2'),

(3, 2, 1, 'Private message 3'),

(4, 2, 3, 'Private message 4'),

(5, 3, 2, 'Private message 5'),

(6, 3, 3, 'Private message 6');

INSERT INTO services (service\_id, service\_name, service\_description, service\_price) VALUES

(1, 'Streaming Service', 'Access to streaming content', 9.99),

(2, 'Cloud Storage', '100GB of cloud storage', 4.99),

(3, 'Online Courses', 'Access to all online courses', 19.99),

(4, 'Music Subscription', 'Unlimited music streaming', 14.99),

(5, 'Video Editing Software', 'Professional video editing tools', 29.99),

(6, 'Data Backup Service', 'Secure data backup solutions', 7.99);

INSERT INTO users\_services (user\_service\_id, user\_id, service\_id) VALUES

(1, 1, 1),

(2, 1, 2),

(3, 2, 1),

(4, 3, 3),

(5, 4, 4),

(6, 5, 2);

INSERT INTO payments (payment\_id, user\_id, service\_id, amount) VALUES

(1, 1, 1, 9.99),

(2, 1, 2, 4.99),

(3, 2, 1, 9.99),

(4, 3, 3, 19.99),

(5, 4, 4, 14.99),

(6, 5, 2, 4.99);

UPDATE users SET username = 'john\_doe\_updated' WHERE user\_id = 1;

UPDATE users SET email = 'john.doe.updated@example.com' WHERE user\_id = 1;

UPDATE chat\_rooms SET room\_name = 'General Updated' WHERE room\_id = 1;

UPDATE chat\_rooms SET created\_at = '2024-07-09 12:00:00' WHERE room\_id = 2;

UPDATE private\_rooms SET created\_at = '2024-07-09 12:00:00' WHERE room\_id = 1;

UPDATE private\_rooms SET created\_at = '2024-07-09 12:00:00' WHERE room\_id = 2;

UPDATE services SET service\_description = 'Access to all premium streaming content' WHERE service\_id = 1;

UPDATE services SET service\_price = 5.99 WHERE service\_id = 2;

UPDATE users\_services SET service\_id = 4 WHERE user\_service\_id = 1;

UPDATE users\_services SET purchase\_date = '2024-07-09 12:00:00' WHERE user\_service\_id = 2;

UPDATE payments SET amount = 24.99 WHERE payment\_id = 1;

UPDATE payments SET payment\_date = '2024-07-09 12:00:00' WHERE payment\_id = 2;

DELETE FROM users WHERE user\_id = 5;

DELETE FROM users WHERE user\_id = 6;

DELETE FROM chat\_rooms WHERE room\_id = 3;