Create CustomerServiceDB4;

USE CustomerServiceDB4;

-- Create Users Table (Stores Clients & Vendors)

CREATE TABLE users (

user\_id INT AUTO\_INCREMENT PRIMARY KEY,

name VARCHAR(100) NOT NULL,

username VARCHAR(50) UNIQUE NOT NULL,

password VARCHAR(50) NOT NULL,

role ENUM('client', 'vendor') NOT NULL

);

-- Create Tickets Table (Stores Service Requests)

CREATE TABLE tickets (

ticket\_id INT AUTO\_INCREMENT PRIMARY KEY,

client\_id INT NOT NULL,

vendor\_id INT DEFAULT NULL,

title VARCHAR(255) NOT NULL,

description TEXT NOT NULL,

urgency ENUM('Low', 'Medium', 'High') DEFAULT 'Medium',

status ENUM('Pending', 'In Process', 'Resolved') DEFAULT 'Pending',

created\_date TIMESTAMP DEFAULT CURRENT\_TIMESTAMP,

resolved\_date DATETIME NULL,

steps\_taken TEXT DEFAULT NULL,

solution\_description TEXT DEFAULT NULL,

FOREIGN KEY (client\_id) REFERENCES users(user\_id) ON DELETE CASCADE,

FOREIGN KEY (vendor\_id) REFERENCES users(user\_id) ON DELETE SET NULL

);

-- alter

ALTER TABLE tickets

ADD COLUMN assigned\_vendor\_id INT;

-- Create Clarifications Table (Stores Vendor Queries to Client)

CREATE TABLE clarifications (

clarification\_id INT AUTO\_INCREMENT PRIMARY KEY,

ticket\_id INT NOT NULL,

vendor\_id INT NOT NULL,

question TEXT NOT NULL,

answer TEXT DEFAULT NULL,

asked\_date TIMESTAMP DEFAULT CURRENT\_TIMESTAMP,

answered\_date TIMESTAMP NULL DEFAULT NULL,

FOREIGN KEY (ticket\_id) REFERENCES tickets(ticket\_id) ON DELETE CASCADE,

FOREIGN KEY (vendor\_id) REFERENCES users(user\_id) ON DELETE CASCADE

);

-- Create Solutions Table (Stores Solutions for Tickets)

CREATE TABLE solutions (

solution\_id INT AUTO\_INCREMENT PRIMARY KEY,

ticket\_id INT NOT NULL,

vendor\_id INT NOT NULL,

solution\_description TEXT NOT NULL,

solved\_date TIMESTAMP DEFAULT CURRENT\_TIMESTAMP,

FOREIGN KEY (ticket\_id) REFERENCES tickets(ticket\_id) ON DELETE CASCADE,

FOREIGN KEY (vendor\_id) REFERENCES users(user\_id) ON DELETE CASCADE

);

CREATE TABLE ticket\_solutions (

solution\_id INT AUTO\_INCREMENT PRIMARY KEY,

ticket\_id INT NOT NULL,

solution\_description TEXT NOT NULL,

steps\_taken TEXT,

solved\_date TIMESTAMP DEFAULT CURRENT\_TIMESTAMP,

FOREIGN KEY (ticket\_id) REFERENCES tickets(ticket\_id)

);

ALTER TABLE tickets CHANGE COLUMN vendor\_id assigned\_vendor\_id INT DEFAULT NULL;

ALTER TABLE tickets MODIFY status ENUM('Pending', 'In Progress', 'Resolved') DEFAULT 'Pending';

DESC users;

desc tickets;

DESC ticket\_solutions;

desc solutions;

DESC clarifications;