**HOME SERVICES SYSTEM**

**MILESTONE 2**

**Entity-Relationship Diagram:**

**A diagram of a company

Description automatically generated**

**Relational Model :**

**A screenshot of a computer

Description automatically generated**

**SQL queries:**

CREATE TABLE User (

UserID INT AUTO\_INCREMENT PRIMARY KEY,

Name VARCHAR(100) NOT NULL,

Email VARCHAR(150) UNIQUE NOT NULL,

Password VARCHAR(255) NOT NULL,

Role ENUM('Client', 'Admin', 'Worker') NOT NULL,

PhoneNumber VARCHAR(15),

Address TEXT,

DateCreated DATETIME DEFAULT CURRENT\_TIMESTAMP

);

CREATE TABLE Service (

ServiceID INT AUTO\_INCREMENT PRIMARY KEY,

ServiceName VARCHAR(100) NOT NULL,

Description TEXT,

Price DECIMAL(10, 2) NOT NULL,

Duration INT NOT NULL

);

CREATE TABLE Worker (

WorkerID INT AUTO\_INCREMENT PRIMARY KEY,

UserID INT NOT NULL,

ContactInfo VARCHAR(255),

AvailabilityStatus BOOLEAN DEFAULT TRUE,

VerificationStatus BOOLEAN DEFAULT FALSE,

FOREIGN KEY (UserID) REFERENCES User(UserID)

ON DELETE CASCADE

ON UPDATE CASCADE

);

CREATE TABLE Admin (

AdminID INT AUTO\_INCREMENT PRIMARY KEY,

UserID INT NOT NULL,

ContactInfo VARCHAR(255),

FOREIGN KEY (UserID) REFERENCES User(UserID)

ON DELETE CASCADE

ON UPDATE CASCADE

);

CREATE TABLE Client (

ClientID INT AUTO\_INCREMENT PRIMARY KEY,

UserID INT NOT NULL,

ContactInfo VARCHAR(255),

FOREIGN KEY (UserID) REFERENCES User(UserID)

ON DELETE CASCADE

ON UPDATE CASCADE

);

CREATE TABLE Booking (

BookingID INT AUTO\_INCREMENT PRIMARY KEY,

ClientID INT NOT NULL,

WorkerID INT NOT NULL,

ServiceID INT NOT NULL,

BookingDateTime DATETIME NOT NULL,

BookingStatus ENUM('Confirmed', 'Canceled', 'Pending') DEFAULT 'Pending',

PaymentStatus ENUM('Paid', 'Unpaid') DEFAULT 'Unpaid',

FOREIGN KEY (ClientID) REFERENCES Client(ClientID)

ON DELETE CASCADE

ON UPDATE CASCADE,

FOREIGN KEY (WorkerID) REFERENCES Worker(WorkerID)

ON DELETE CASCADE

ON UPDATE CASCADE,

FOREIGN KEY (ServiceID) REFERENCES Service(ServiceID)

ON DELETE CASCADE

ON UPDATE CASCADE

);

CREATE TABLE Review (

ReviewID INT AUTO\_INCREMENT PRIMARY KEY,

ClientID INT NOT NULL,

WorkerID INT NOT NULL,

Rating INT CHECK (Rating BETWEEN 1 AND 5),

Comments TEXT,

FOREIGN KEY (ClientID) REFERENCES Client(ClientID)

ON DELETE CASCADE

ON UPDATE CASCADE,

FOREIGN KEY (WorkerID) REFERENCES Worker(WorkerID)

ON DELETE CASCADE

ON UPDATE CASCADE

);

CREATE TABLE Payment (

PaymentID INT AUTO\_INCREMENT PRIMARY KEY,

BookingID INT NOT NULL,

PaymentMethod ENUM('CreditCard', 'DebitCard', 'DigitalWallet'),

PaymentStatus ENUM('Successful', 'Failed', 'Pending') DEFAULT 'Pending',

Amount DECIMAL(10, 2) NOT NULL,

FOREIGN KEY (BookingID) REFERENCES Booking(BookingID)

ON DELETE CASCADE

ON UPDATE CASCADE

);

CREATE TABLE Notification (

NotificationID INT AUTO\_INCREMENT PRIMARY KEY,

UserID INT NOT NULL,

Content TEXT NOT NULL,

Timestamp DATETIME DEFAULT CURRENT\_TIMESTAMP,

FOREIGN KEY (UserID) REFERENCES User(UserID)

ON DELETE CASCADE

ON UPDATE CASCADE

);