SQL SCRIPTS

-- =============================================

-- 1. Users Table

-- Purpose: Stores information for all system users (Admin, Guest, FrontDesk, Housekeeping)

-- =============================================

CREATE TABLE Users (

UserID INT PRIMARY KEY AUTO\_INCREMENT,

FullName VARCHAR(255) NOT NULL,

Email VARCHAR(255) UNIQUE NOT NULL,

PasswordHash VARCHAR(255) NOT NULL,

Role ENUM('Admin', 'Guest', 'FrontDesk', 'Housekeeping') NOT NULL,

PhoneNumber VARCHAR(20),

PreferredLanguage VARCHAR(50),

CreatedAt DATETIME DEFAULT CURRENT\_TIMESTAMP

) ENGINE=InnoDB;

-- =============================================

-- 2. Rooms Table

-- Purpose: Manages hotel room details, categories, pricing, and status.

-- =============================================

CREATE TABLE Rooms (

RoomID INT PRIMARY KEY AUTO\_INCREMENT,

RoomNumber VARCHAR(20) UNIQUE NOT NULL,

RoomType ENUM('Standard', 'Deluxe', 'Suite') NOT NULL,

PricePerNight DECIMAL(10,2) NOT NULL,

Status ENUM('Vacant', 'Occupied', 'Under Maintenance') NOT NULL DEFAULT 'Vacant',

Description TEXT

) ENGINE=InnoDB;

-- =============================================

-- 3. Bookings Table

-- Purpose: Handles reservations, linking guests (Users) with Rooms, including check-in/out details.

-- =============================================

CREATE TABLE Bookings (

BookingID INT PRIMARY KEY AUTO\_INCREMENT,

UserID INT NOT NULL,

RoomID INT NOT NULL,

CheckInDate DATETIME NOT NULL,

CheckOutDate DATETIME NOT NULL,

TotalAmount DECIMAL(10,2) NOT NULL,

Status ENUM('Pending', 'Confirmed', 'Checked-In', 'Checked-Out', 'Cancelled') NOT NULL DEFAULT 'Pending',

PaymentStatus ENUM('Pending', 'Paid', 'Refunded') NOT NULL DEFAULT 'Pending',

CreatedAt DATETIME DEFAULT CURRENT\_TIMESTAMP,

FOREIGN KEY (UserID) REFERENCES Users(UserID),

FOREIGN KEY (RoomID) REFERENCES Rooms(RoomID)

) ENGINE=InnoDB;

-- =============================================

-- 4. Payments Table

-- Purpose: Records all payment transactions, linking them to Bookings and Users.

-- =============================================

CREATE TABLE Payments (

PaymentID INT PRIMARY KEY AUTO\_INCREMENT,

BookingID INT NOT NULL,

UserID INT NOT NULL,

AmountPaid DECIMAL(10,2) NOT NULL,

PaymentMethod ENUM('GCash', 'CreditCard', 'BankTransfer') NOT NULL,

TransactionID VARCHAR(255),

PaymentDate DATETIME DEFAULT CURRENT\_TIMESTAMP,

FOREIGN KEY (BookingID) REFERENCES Bookings(BookingID),

FOREIGN KEY (UserID) REFERENCES Users(UserID)

) ENGINE=InnoDB;

-- =============================================

-- 5. Housekeeping Table

-- Purpose: Manages housekeeping and maintenance tasks for rooms.

-- =============================================

CREATE TABLE Housekeeping (

TaskID INT PRIMARY KEY AUTO\_INCREMENT,

RoomID INT NOT NULL,

AssignedTo INT, -- References Users.UserID (housekeeping staff)

TaskType ENUM('Cleaning', 'Repair', 'Maintenance') NOT NULL,

Status ENUM('Pending', 'In Progress', 'Completed') NOT NULL DEFAULT 'Pending',

Notes TEXT,

CreatedAt DATETIME DEFAULT CURRENT\_TIMESTAMP,

FOREIGN KEY (RoomID) REFERENCES Rooms(RoomID),

FOREIGN KEY (AssignedTo) REFERENCES Users(UserID)

) ENGINE=InnoDB;

-- =============================================

-- 6. Reviews Table

-- Purpose: Collects guest feedback and ratings.

-- =============================================

CREATE TABLE Reviews (

ReviewID INT PRIMARY KEY AUTO\_INCREMENT,

UserID INT NOT NULL,

Rating INT NOT NULL CHECK (Rating BETWEEN 1 AND 5),

Comment TEXT,

CreatedAt DATETIME DEFAULT CURRENT\_TIMESTAMP,

FOREIGN KEY (UserID) REFERENCES Users(UserID)

) ENGINE=InnoDB;

-- =============================================

-- 7. Notifications Table

-- Purpose: Stores notifications for users (e.g., booking confirmations, reminders).

-- =============================================

CREATE TABLE Notifications (

NotificationID INT PRIMARY KEY AUTO\_INCREMENT,

UserID INT NOT NULL,

Message TEXT NOT NULL,

Status ENUM('Sent', 'Pending', 'Failed') NOT NULL DEFAULT 'Pending',

CreatedAt DATETIME DEFAULT CURRENT\_TIMESTAMP,

FOREIGN KEY (UserID) REFERENCES Users(UserID)

) ENGINE=InnoDB;

-- =============================================

-- 8. Promotions Table

-- Purpose: Stores discount codes, loyalty offers, and promotional packages.

-- =============================================

CREATE TABLE Promotions (

PromoID INT PRIMARY KEY AUTO\_INCREMENT,

PromoCode VARCHAR(50) UNIQUE NOT NULL,

DiscountAmount DECIMAL(10,2) NOT NULL,

ExpiryDate DATETIME,

Description TEXT,

CreatedAt DATETIME DEFAULT CURRENT\_TIMESTAMP

) ENGINE=InnoDB;

-- =============================================

-- 9. Services Table

-- Purpose: Manages additional services (e.g., spa, airport transfers, room service) linked to bookings.

-- =============================================

CREATE TABLE Services (

ServiceID INT PRIMARY KEY AUTO\_INCREMENT,

BookingID INT NOT NULL,

ServiceType ENUM('Spa', 'Airport Transfer', 'Room Service') NOT NULL,

ServicePrice DECIMAL(10,2) NOT NULL,

CreatedAt DATETIME DEFAULT CURRENT\_TIMESTAMP,

FOREIGN KEY (BookingID) REFERENCES Bookings(BookingID)

) ENGINE=InnoDB;