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import mysql.connector

# Database connection
def connect_to_database():
    return mysql.connector.connect(
        host="localhost",
        user="your_username",
        password="your_password",
        database="railway_reservation"
    )

# Create tables if they don't exist
def create_tables():
    conn = connect_to_database()
    cursor = conn.cursor()

    cursor.execute("""
        CREATE TABLE IF NOT EXISTS trains (
            train_id INT AUTO_INCREMENT PRIMARY KEY,
            train_name VARCHAR(100) NOT NULL,
            total_seats INT NOT NULL
        )
    """)

    cursor.execute("""
        CREATE TABLE IF NOT EXISTS passengers (
            passenger_id INT AUTO_INCREMENT PRIMARY KEY,
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        name VARCHAR(100) NOT NULL,
        train_id INT,
        seat_number INT,
        FOREIGN KEY (train_id) REFERENCES trains(train_id)
    )
    """)

    conn.commit()
    cursor.close()
    conn.close()

# Check seat availability
def check_availability(train_id):
    conn = connect_to_database()
    cursor = conn.cursor()

    cursor.execute("SELECT total_seats FROM trains WHERE train_id = %s", (train_id,))
    total_seats = cursor.fetchone()[0]

    cursor.execute("SELECT COUNT(*) FROM passengers WHERE train_id = %s",
(train_id,))
    booked_seats = cursor.fetchone()[0]

    available_seats = total_seats - booked_seats
    print(f"Available seats on train {train_id}: {available_seats}")

    cursor.close()
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    conn.close()

# Book a ticket
def book_ticket(train_id, passenger_name):
    conn = connect_to_database()
    cursor = conn.cursor()

    cursor.execute("SELECT total_seats FROM trains WHERE train_id = %s", (train_id,))
    total_seats = cursor.fetchone()[0]

    cursor.execute("SELECT COUNT(*) FROM passengers WHERE train_id = %s",
(train_id,))
    booked_seats = cursor.fetchone()[0]

    if booked_seats < total_seats:
        seat_number = booked_seats + 1
        cursor.execute("INSERT INTO passengers (name, train_id, seat_number) VALUES
(%s, %s, %s)",
                       (passenger_name, train_id, seat_number))
        conn.commit()
        print(f"Ticket booked successfully! Seat number: {seat_number}")
    else:
        print("No available seats on this train.")

    cursor.close()
    conn.close()

# Cancel a ticket
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def cancel_ticket(passenger_id):
    conn = connect_to_database()
    cursor = conn.cursor()

    cursor.execute("DELETE FROM passengers WHERE passenger_id = %s",
(passenger_id,))
    conn.commit()

    if cursor.rowcount > 0:
        print(f"Ticket for passenger ID {passenger_id} has been canceled.")
    else:
        print(f"No passenger found with ID {passenger_id}.")

    cursor.close()
    conn.close()

# Main menu
def main_menu():
    while True:
        print("\nRailway Reservation System")
        print("1. Check Seat Availability")
        print("2. Book a Ticket")
        print("3. Cancel a Ticket")
        print("4. Exit")

        choice = input("Enter your choice: ")
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        if choice == '1':
            train_id = int(input("Enter train ID: "))
            check_availability(train_id)
        elif choice == '2':
            train_id = int(input("Enter train ID: "))
            passenger_name = input("Enter passenger name: ")
            book_ticket(train_id, passenger_name)
        elif choice == '3':
            passenger_id = int(input("Enter passenger ID: "))
            cancel_ticket(passenger_id)
        elif choice == '4':
            print("Exiting the system. Goodbye!")
            break
        else:
            print("Invalid choice. Please try again.")

if __name__ == "__main__":
    create_tables()
    main_menu()
```