

# Coding Challenge Java

## Hospital Management System

### Output Screenshots

Database before doing changes:

Table Patient

	patientId	firstName	lastName	dateOfBirth	gender	contactNumber	address
▶	1	Arun	Kumar	1990-05-12	male	9876543210	Chennai
	2	Meera	Sundar	1985-08-23	female	9876543211	Madurai
	3	Ravi	Sharma	2000-01-15	male	9876543212	Coimbatore
	4	Priya	Raj	1993-11-20	female	9876543213	Salem
	5	Ashwin	Kumar	1978-07-02	male	9876543214	Trichy
	6	Anita	Joshi	1988-04-18	female	9876543215	Erode
	7	Vinod	Das	1995-09-30	male	9876543216	Tirunelveli
*	NULL	NULL	NULL	NULL	NULL	NULL	NULL

Table Doctor

	doctorId	firstName	lastName	specialization	contactNumber
▶	1	Suresh	Babu	Cardiologist	9000000001
	2	Lakshmi	Menon	Dermatologist	9000000002
	3	Ramesh	Kumar	Pediatrician	9000000003
	4	Divya	Nair	Neurologist	9000000004
	5	Ganesh	Mohan	Orthopedic	9000000005
	6	Anjali	Iyer	ENT	9000000006
	7	Vikram	Patel	General Medicine	9000000007
*	NULL	NULL	NULL	NULL	NULL

Table Appointment

	appointmentId	patientId	doctorId	appointmentDate	description
▶	1	1	1	2025-04-10 09:30:00	Regular heart check-up
	2	2	2	2025-04-11 10:00:00	Skin rash consultation
	3	3	3	2025-04-12 11:00:00	Child vaccination
	4	4	4	2025-04-13 14:30:00	Migraine follow-up
	5	5	5	2025-04-14 15:00:00	Knee pain consultation
	6	6	6	2025-04-15 09:00:00	Ear infection
	7	7	7	2025-04-16 10:30:00	General health check-up
	*****	*****	*****	*****	*****

## 1) Get Appointment by ID

```
Database connected successfully.

----- Hospital Appointment System -----
1. Get appointment by ID
2. Get all appointments for a patient
3. Get all appointments for a doctor
4. Schedule an appointment
5. Update an appointment
6. Cancel an appointment
0. Exit
Enter your choice: 1
Enter Appointment ID: 2
Appointment{appointmentId=2, patientId=2, doctorId=2, appointmentDate='2025-04-11T15:30', description='Skin rash consultation'}
```

## 2) Get all appointments for a patient

```
----- Hospital Appointment System -----
1. Get appointment by ID
2. Get all appointments for a patient
3. Get all appointments for a doctor
4. Schedule an appointment
5. Update an appointment
6. Cancel an appointment
0. Exit
Enter your choice: 2
Enter Patient ID: 4
Appointment{appointmentId=4, patientId=4, doctorId=4, appointmentDate='2025-04-13T20:00', description='Migraine follow-up'}
```

## 3) Get all appointments for a doctor

```
----- Hospital Appointment System -----
1. Get appointment by ID
2. Get all appointments for a patient
3. Get all appointments for a doctor
4. Schedule an appointment
5. Update an appointment
6. Cancel an appointment
0. Exit
Enter your choice: 3
Enter Doctor ID: 7
Appointment{appointmentId=7, patientId=7, doctorId=7, appointmentDate='2025-04-16T16:00', description='General health check-up'}
```

#### 4) Schedule an appointment

```
----- Hospital Appointment System -----
1. Get appointment by ID
2. Get all appointments for a patient
3. Get all appointments for a doctor
4. Schedule an appointment
5. Update an appointment
6. Cancel an appointment
0. Exit
Enter your choice: 4
Enter Patient ID: 6
Enter Doctor ID: 5
Enter Appointment DateTime (YYYY-MM-DDTHH:MM): 2025-04-13T14:40:00
Enter Description: Follow-up consultation for blood test
Appointment scheduled successfully.
```

#### 5) Update an appointment

```
----- Hospital Appointment System -----
1. Get appointment by ID
2. Get all appointments for a patient
3. Get all appointments for a doctor
4. Schedule an appointment
5. Update an appointment
6. Cancel an appointment
0. Exit
Enter your choice: 5
Enter Appointment ID to update: 4
Enter Patient ID: 5
Enter Doctor ID: 6
Enter new Appointment DateTime (YYYY-MM-DDTHH:MM): 2025-04-18T15:00:00
Enter new Description: Diabetes medication adjustment
Appointment updated.
```

#### 6) Cancel an appointment

```
----- Hospital Appointment System -----
1. Get appointment by ID
2. Get all appointments for a patient
3. Get all appointments for a doctor
4. Schedule an appointment
5. Update an appointment
6. Cancel an appointment
0. Exit
Enter your choice: 6
Enter Appointment ID to cancel: 4
Appointment canceled.
```

Database after performing the above changes

Table Appointment

	appointmentId	patientId	doctorId	appointmentDate	description
►	1	1	1	2025-04-10 09:30:00	Regular heart check-up
	2	2	2	2025-04-11 10:00:00	Skin rash consultation
	3	3	3	2025-04-12 11:00:00	Child vaccination
	5	5	5	2025-04-14 15:00:00	Knee pain consultation
	6	6	6	2025-04-15 09:00:00	Ear infection
	7	7	7	2025-04-16 10:30:00	General health check-up
	8	6	5	2025-04-13 09:10:00	Follow-up consultation for blood test

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