

Lab Final

Submitted to:

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Faculty

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Department of CSE
Summer'24

Course code: CSE 2104

Course Title: Object Oriented Programming Lab

Section: 01

University of Liberal Arts Bangladesh

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Problem 01

Class Explanation :

A number of essential classes make up the Doctor's Appointment Management System, which functions as a user-friendly and practical application for scheduling medical appointments. All doctors use the Doctor class as a template, which includes their name, area of expertise, and schedule of appointments.

The Doctor class is expanded upon by the General Practitioner and Specialist classes, which offer particular behaviors for each category of physician, such as accepting walk-in patients or demanding appointment confirmations.

The Patient class, which keeps track of appointments, name, and contact details, depicts people in need of medical attention.

Each appointment's specifics, such as the patient, doctor, date, and diagnosis, are contained in the Appointment class, which also manages file storing of this data.

Last but not least, the ClinicManagementSystem class serves as the primary controller, overseeing patient and physician interactions and enabling users to register new patients, make appointments, view available doctors, and monitor existing appointments. The integration of these classes results in a unified system that streamlines the administration of patient-doctor interactions in a clinical context.

OOP concepts used:

The Doctor's Appointment Management System uses Object-Oriented Programming (OOP) concepts to create a user-friendly application that feels intuitive. It features classes that act as templates for doctors, patients, and appointments, allowing us to create specific objects for each entity. Inheritance lets us define specialized doctor types, like General Practitioners and Specialists, that share common attributes while having unique behaviors. Polymorphism allows these doctors to implement the same method, 'displayAvailability()', in different ways, reflecting their practices. Encapsulation keeps sensitive data secure by bundling attributes and methods within classes, while abstraction simplifies user interactions by hiding complex details, such as file handling. Together, these concepts create a cohesive system that efficiently manages the relationships between doctors, patients, and their appointments, making the process smooth and organized.

Code Screenshots:

Input:

ClinicManagementSystem.java

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```

1  /*
2   * Click nbfs://nbhost/SystemFileSystem/Templates/Licenses/license-default.txt to change this licens
3   */
4
5  package clinic;
6  import java.util.ArrayList;
7  import java.util.List;
8  import java.util.Scanner;
9  /**
10   *
11   * @author ANIK
12   */
13  public class ClinicManagementSystem {
14      private List<Doctor> doctors = new ArrayList<>();
15      private List<Patient> patients = new ArrayList<>();
16
17      public ClinicManagementSystem() {
18          // Sample doctors
19          doctors.add(new GeneralPractitioner("Dr. Smith"));
20          doctors.add(new Specialist("Dr. Johnson"));
21      }
22
23      public void registerPatient(String name, String contact) {
24          patients.add(new Patient(name, contact));
25          System.out.println("Patient registered successfully: " + name);
26      }
27
28      public void addDoctor(String name, String specialization) {
29          doctors.add(new Specialist(name)); // You can modify to add different types of doctors
30          System.out.println("Doctor added successfully: " + name);
31      }
32
33      public void viewDoctors() {
34          System.out.println("Available Doctors:");
35          for (Doctor doctor : doctors) {
36              System.out.println("- " + doctor.getName() + " (" + doctor.getSpecialization() + ")");
37              doctor.displayAvailability();
38          }
39      }
40
41      public void bookAppointment() {
42          Scanner scanner = new Scanner(System.in);
43
44          System.out.print("Enter patient name: ");
45          String patientName = scanner.nextLine();
46
47          System.out.print("Enter patient contact: ");
48          String patientContact = scanner.nextLine();

```

```

49
50 // Check if the patient already exists
51 Patient patient = null;
52 for (Patient p : patients) {
53     if (p.getName().equalsIgnoreCase(patientName)) {
54         patient = p; // Reuse existing patient
55         break;
56     }
57 }
58
59 // If the patient does not exist, register them
60 if (patient == null) {
61     patient = new Patient(patientName, patientContact);
62     registerPatient(patientName, patientContact);
63 }
64
65 System.out.print("Enter doctor name: ");
66 String doctorName = scanner.nextLine();
67
68 System.out.print("Enter appointment date (YYYY-MM-DD): ");
69 String appointmentDate = scanner.nextLine();
70
71 System.out.print("Enter diagnosis: ");
72 String diagnosis = scanner.nextLine();
73
74 Doctor selectedDoctor = null;
75 for (Doctor doctor : doctors) {
76     if (doctor.getName().equalsIgnoreCase(doctorName)) {
77         selectedDoctor = doctor;
78         break;
79     }
80 }
81
82 if (selectedDoctor != null) {
83     Appointment appointment = new Appointment(selectedDoctor, patient, appointmentDate, diagnosis);
84     appointment.saveAppointment();
85     patient.addAppointment(appointment); // Add appointment to patient's list
86     selectedDoctor.addAppointment(appointment); // Add appointment to doctor's list
87     System.out.println("Appointment booked for " + patientName + " with " + doctorName + " on " + appointmentDate);
88 } else {
89     System.out.println("Doctor not found.");
90 }
91
92
93 public void showAppointments() {
94     Scanner scanner = new Scanner(System.in);
95     System.out.print("Enter your name to view appointments: ");

```

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```

96 String patientName = scanner.nextLine();
97
98 Patient selectedPatient = null;
99 for (Patient patient : patients) {
100     if (patient.getName().equalsIgnoreCase(patientName)) {
101         selectedPatient = patient;
102         break;
103     }
104 }
105
106 if (selectedPatient != null) {
107     System.out.println("Appointments for " + selectedPatient.getName() + ":");
108     for (Appointment appointment : selectedPatient.getAppointments()) {
109         System.out.println("Date: " + appointment.getDate() + ", Doctor: " + appointment.getDoctor().getName() + ", Diagnosis: " + appointment.getDiagnosis());
110     }
111 } else {
112     System.out.println("Patient not found.");
113 }
114
115
116 public void showDoctorAppointments() {
117     Scanner scanner = new Scanner(System.in);
118     System.out.print("Enter doctor's name to view their appointments: ");
119     String doctorName = scanner.nextLine();
120
121     Doctor selectedDoctor = null;
122     for (Doctor doctor : doctors) {
123         if (doctor.getName().equalsIgnoreCase(doctorName)) {
124             selectedDoctor = doctor;
125             break;
126         }
127     }
128
129     if (selectedDoctor != null) {
130         System.out.println("Appointments for " + selectedDoctor.getName() + ":");
131         for (Appointment appointment : selectedDoctor.getAppointments()) {
132             System.out.println("Date: " + appointment.getDate() + ", Patient: " + appointment.getPatient().getName() + ", Diagnosis: " + appointment.getDiagnosis());
133         }
134     } else {
135         System.out.println("Doctor not found.");
136     }
137 }
138
139 public static void main(String[] args) {
140     ClinicManagementSystem system = new ClinicManagementSystem();
141     Scanner scanner = new Scanner(System.in);
142     int choice;

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```

```

do {
    System.out.println("\n--- Clinic Management System ---");
    System.out.println("1. View Available Doctors");
    System.out.println("2. Book an Appointment");
    System.out.println("3. Show Patient Appointments");
    System.out.println("4. Show Doctor Appointments");
    System.out.println("5. Add a Doctor");
    System.out.println("6. Exit");
    System.out.print("Enter your choice: ");
    choice = scanner.nextInt();
    scanner.nextLine(); // Consume newline

    switch (choice) {
        case 1:
            system.viewDoctors();
            break;
        case 2:
            system.bookAppointment();
            break;
        case 3:
            system.showAppointments();
            break;
        case 4:
            system.showDoctorAppointments();
            break;
        case 5:
            System.out.print("Enter doctor name: ");
            String doctorName = scanner.nextLine();
            System.out.print("Enter doctor specialization: ");
            String specialization = scanner.nextLine();
            system.addDoctor(doctorName, specialization);
            break;
        case 6:
            System.out.println("Exiting the system. Goodbye!");
            break;
        default:
            System.out.println("Invalid choice. Please try again.");
    }
} while (choice != 6);

scanner.close();
}

```

Doctor.java

```

1  /*
2   * Click nbfs://nbhost/SystemFileSystem/Templates/Licenses/license-default.tx
3   * Click nbfs://nbhost/SystemFileSystem/Templates/Classes/Class.java to edit
4   */
5  package clinic;
6  import java.util.ArrayList;
7  import java.util.List;
8  /**
9   *
10   * @author ANIK
11   */
12  public abstract class Doctor {
13      private String name;
14      private String specialization;
15      private List<Appointment> appointments; // List to store appointments
16
17      public Doctor(String name, String specialization) {
18          this.name = name;
19          this.specialization = specialization;
20          this.appointments = new ArrayList<>();
21      }
22
23      public String getName() {
24          return name;
25      }
26
27      public String getSpecialization() {
28          return specialization;
29      }
30
31      public List<Appointment> getAppointments() {
32          return appointments;
33      }
34
35      public void addAppointment(Appointment appointment) {
36          appointments.add(appointment);
37      }
38
39      public abstract void displayAvailability();
40  }

```

GeneralPractitioner.java

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```

1  /*
2   * Click nbfs://nbhost/SystemFileSystem/Templates/Licenses/license-default.txt to change this license
3   * Click nbfs://nbhost/SystemFileSystem/Templates/Classes/Class.java to edit this template
4   */
5  package clinic;
6
7  /**
8   *
9   * @author ANIK
10  */
11  public class GeneralPractitioner extends Doctor {
12      public GeneralPractitioner(String name) {
13          super(name, "General Practitioner");
14      }
15
16      @Override
17      public void displayAvailability() {
18          System.out.println(getName() + " is available for walk-in patients.");
19      }
20  }

```

Specialist.java

```

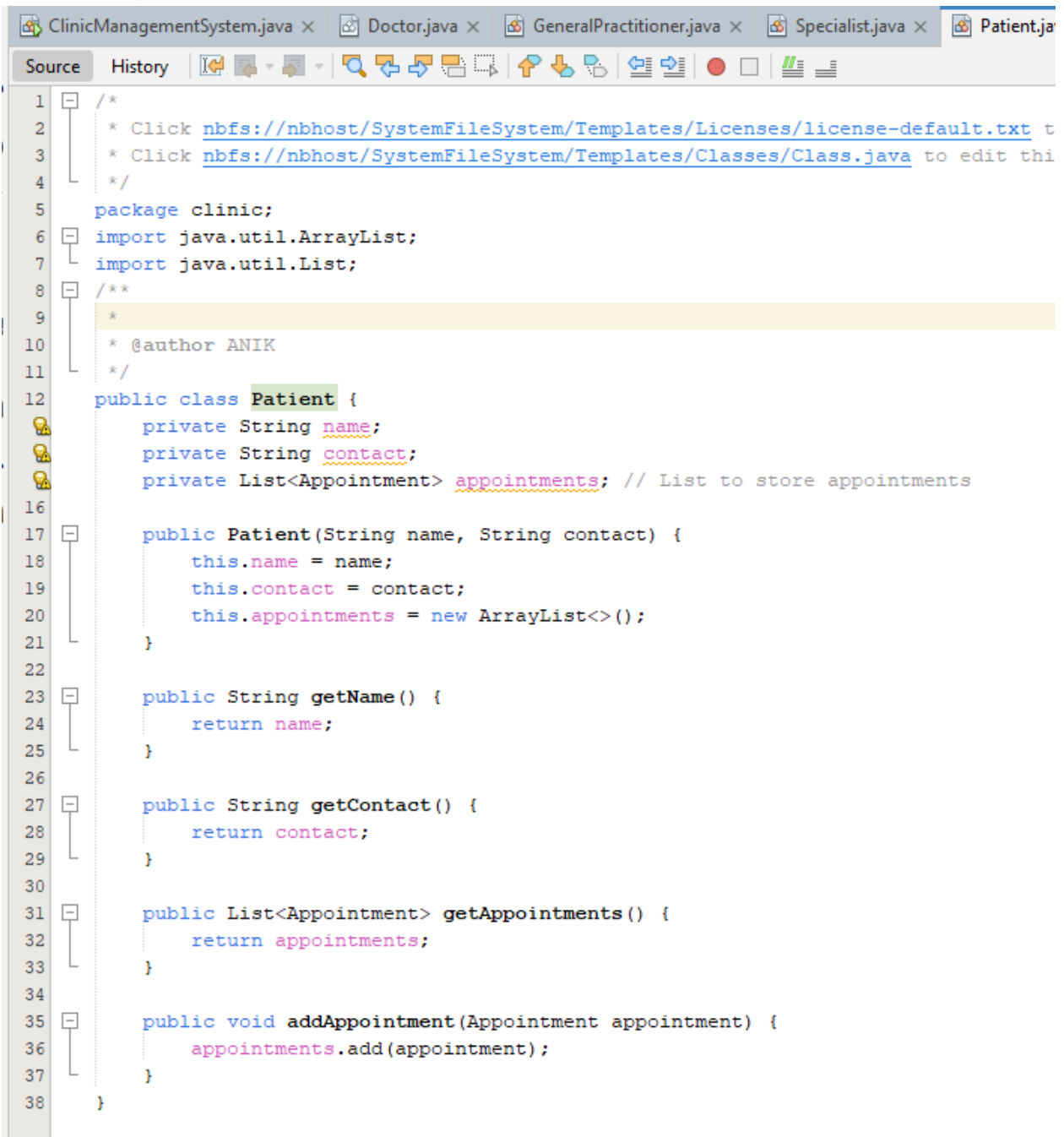
1  /*
2   * Click nbfs://nbhost/SystemFileSystem/Templates/Licenses/license-default.txt to change this license
3   * Click nbfs://nbhost/SystemFileSystem/Templates/Classes/Class.java to edit this
4   */
5  package clinic;
6
7  /**
8   *
9   * @author ANIK
10  */
11  public class Specialist extends Doctor {
12      public Specialist(String name) {
13          super(name, "Specialist");
14      }
15
16      @Override
17      public void displayAvailability() {
18          System.out.println(getName() + " requires appointment confirmation.");
19      }
20  }

```

Patient.java

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```

1  /*
2   * Click nbfs://nbhost/SystemFileSystem/Templates/Licenses/license-default.txt to
3   * Click nbfs://nbhost/SystemFileSystem/Templates/Classes/Class.java to edit this
4   */
5   package clinic;
6   import java.util.ArrayList;
7   import java.util.List;
8   /**
9    *
10   * @author ANIK
11   */
12  public class Patient {
13      private String name;
14      private String contact;
15      private List<Appointment> appointments; // List to store appointments
16
17      public Patient(String name, String contact) {
18          this.name = name;
19          this.contact = contact;
20          this.appointments = new ArrayList<>();
21      }
22
23      public String getName() {
24          return name;
25      }
26
27      public String getContact() {
28          return contact;
29      }
30
31      public List<Appointment> getAppointments() {
32          return appointments;
33      }
34
35      public void addAppointment(Appointment appointment) {
36          appointments.add(appointment);
37      }
38  }

```

Appointment.java

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```

ClinicManagementSystem.java x Doctor.java x GeneralPractitioner.java x Specialist.java x Patient.java x Appointment.java x
Source History
1  /*
2  * Click nbfs://nbhost/SystemFileSystem/Templates/Licenses/license-default.txt to change this license
3  * Click nbfs://nbhost/SystemFileSystem/Templates/Classes/Class.java to edit this template
4  */
5  package clinic;
6  import java.io.BufferedWriter;
7  import java.io.FileWriter;
8  import java.io.IOException;
9
10 /**
11  *
12  * @author ANIK
13  */
14 public class Appointment {
15     private Doctor doctor;
16     private Patient patient;
17     private String date;
18     private String diagnosis; // Added diagnosis field
19
20     public Appointment(Doctor doctor, Patient patient, String date, String diagnosis) {
21         this.doctor = doctor;
22         this.patient = patient;
23         this.date = date;
24         this.diagnosis = diagnosis;
25     }
26
27     public Doctor getDoctor() {
28         return doctor;
29     }
30
31     public Patient getPatient() {
32         return patient;
33     }
34
35     public String getDate() {
36         return date;
37     }
38
39     public String getDiagnosis() {
40         return diagnosis;
41     }
42
43     public void saveAppointment() {
44         String appointmentDetails = "Doctor: " + doctor.getName() + ", Patient: " + patient.getName() + ", Date: " + date + ", Diagnosis: " + diagnosis;
45
46         // Specify the relative path to the appointments.txt file
47         String filePath = "appointments.txt";
48
49         try (BufferedWriter writer = new BufferedWriter(new FileWriter(filePath, true))) {
50             writer.write(appointmentDetails);
51             writer.newLine();
52             System.out.println("Appointment saved successfully."); // Confirmation message
53         } catch (IOException e) {
54             e.printStackTrace(); // Print stack trace for debugging
55             System.out.println("Error saving appointment: " + e.getMessage());
56         }
57     }
58 }

```

Output:

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```

Output - Run (ClinicManagementSystem)
cd F:\sumaiya the V.I.P\sem 14\OOP\assignments\final 2\ClinicManagementSystem; "JAVA_HOME=C:\\Program Files\\Java\\jdk-21" cmd /c "\"C:\\
Scanning for projects...

-----< com.mycompany:ClinicManagementSystem >-----
Building ClinicManagementSystem 1.0-SNAPSHOT
from pom.xml
-----[ jar ]-----

--- resources:3.3.1:resources (default-resources) @ ClinicManagementSystem ---
skip non existing resourceDirectory F:\sumaiya the V.I.P\sem 14\OOP\assignments\final 2\ClinicManagementSystem\src\main\resources

--- compiler:3.11.0:compile (default-compile) @ ClinicManagementSystem ---
Nothing to compile - all classes are up to date

--- exec:3.1.0:exec (default-cli) @ ClinicManagementSystem ---

--- Clinic Management System ---
1. View Available Doctors
2. Book an Appointment
3. Show Patient Appointments
4. Show Doctor Appointments
5. Add a Doctor
6. Exit
Enter your choice: |

```

```

Output - Run (ClinicManagementSystem) x
cd F:\sumaiya the V.I.P\sem 14\OOP\assignments\final 2\ClinicManagementSystem; "JAVA_HOME=C:\\Program Files\\Java\\jdk-21" cmd /c "\"C:\\
Scanning for projects...

-----< com.mycompany:ClinicManagementSystem >-----
Building ClinicManagementSystem 1.0-SNAPSHOT
from pom.xml
-----[ jar ]-----

--- resources:3.3.1:resources (default-resources) @ ClinicManagementSystem ---
skip non existing resourceDirectory F:\sumaiya the V.I.P\sem 14\OOP\assignments\final 2\ClinicManagementSystem\src\main\resources

--- compiler:3.11.0:compile (default-compile) @ ClinicManagementSystem ---
Nothing to compile - all classes are up to date

--- exec:3.1.0:exec (default-cli) @ ClinicManagementSystem ---

--- Clinic Management System ---
1. View Available Doctors
2. Book an Appointment
3. Show Patient Appointments
4. Show Doctor Appointments
5. Add a Doctor
6. Exit
Enter your choice: 1
Available Doctors:
- Dr. Smith (General Practitioner)
Dr. Smith is available for walk-in patients.
- Dr. Johnson (Specialist)
Dr. Johnson requires appointment confirmation.

--- Clinic Management System ---
1. View Available Doctors
2. Book an Appointment
3. Show Patient Appointments
4. Show Doctor Appointments
5. Add a Doctor
6. Exit
Enter your choice: |

```

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```

Output - Run (ClinicManagementSystem) x
cd F:\sumaiya the V.I.P\sem 14\OOP\assignments\final 2\ClinicManagementSystem; "JAVA_HOME=C:\\Program Files\\Java\\jdk-21" cmd /c "%C
Scanning for projects...

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Building ClinicManagementSystem 1.0-SNAPSHOT
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--- Clinic Management System ---
1. View Available Doctors
2. Book an Appointment
3. Show Patient Appointments
4. Show Doctor Appointments
5. Add a Doctor
6. Exit
Enter your choice: 1
Available Doctors:
- Dr. Smith (General Practitioner)
Dr. Smith is available for walk-in patients.
- Dr. Johnson (Specialist)
Dr. Johnson requires appointment confirmation.

--- Clinic Management System ---
1. View Available Doctors
2. Book an Appointment
3. Show Patient Appointments
4. Show Doctor Appointments
5. Add a Doctor
6. Exit
Enter your choice: 2
Enter patient name: |

```

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```

Output - Run (ClinicManagementSystem) x
od F:\sumaiya the V.I.P\sem 14\OOP\assignments\final 2\ClinicManagementSystem; "JAVA_HOME=C:\\Program Files\\Java\\jdk-21" cmd /c "\"
Scanning for projects...

-----< com.mycompany:ClinicManagementSystem >-----
Building ClinicManagementSystem 1.0-SNAPSHOT
from pom.xml
-----[ jar ]-----

--- resources:3.3.1:resources (default-resources) @ ClinicManagementSystem ---
skip non existing resourceDirectory F:\sumaiya the V.I.P\sem 14\OOP\assignments\final 2\ClinicManagementSystem\src\main\resources

--- compiler:3.11.0:compile (default-compile) @ ClinicManagementSystem ---
Nothing to compile - all classes are up to date

--- exec:3.1.0:exec (default-cli) @ ClinicManagementSystem ---

--- Clinic Management System ---
1. View Available Doctors
2. Book an Appointment
3. Show Patient Appointments
4. Show Doctor Appointments
5. Add a Doctor
6. Exit
Enter your choice: 1
Available Doctors:
- Dr. Smith (General Practitioner)
Dr. Smith is available for walk-in patients.
- Dr. Johnson (Specialist)
Dr. Johnson requires appointment confirmation.

--- Clinic Management System ---
1. View Available Doctors
2. Book an Appointment
3. Show Patient Appointments
4. Show Doctor Appointments
5. Add a Doctor
6. Exit
Enter your choice: 2
Enter patient name: sumaiya
Enter patient contact: |

```

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```

Output - Run (ClinicManagementSystem) x
cd F:\sumaiya the V.I.P\sem 14\OOP\assignments\final 2\ClinicManagementSystem; "JAVA_HOME=C:\Program Files\Java\jdk-21" cmd /c "%C:\Prog
Scanning for projects...

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Building ClinicManagementSystem 1.0-SNAPSHOT
from pom.xml
-----[ jar ]-----

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Nothing to compile - all classes are up to date

--- exec:3.1.0:exec (default-cli) @ ClinicManagementSystem ---

--- Clinic Management System ---
1. View Available Doctors
2. Book an Appointment
3. Show Patient Appointments
4. Show Doctor Appointments
5. Add a Doctor
6. Exit
Enter your choice: 1
Available Doctors:
- Dr. Smith (General Practitioner)
Dr. Smith is available for walk-in patients.
- Dr. Johnson (Specialist)
Dr. Johnson requires appointment confirmation.

--- Clinic Management System ---
1. View Available Doctors
2. Book an Appointment
3. Show Patient Appointments
4. Show Doctor Appointments
5. Add a Doctor
6. Exit
Enter your choice: 2
Enter patient name: sumaiya
Enter patient contact: 01905493032
Patient registered successfully: sumaiya
Enter doctor name: |

```

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Output - Run (ClinicManagementSystem) x

```
cd F:\sumaiya the V.I.P\sem 14\OOP\assignments\final 2\ClinicManagementSystem; "JAVA_HOME=C:\Program Files\Java\jdk-21" cmd /c "%C
Scanning for projects...

-----< com.mycompany:ClinicManagementSystem >-----
Building ClinicManagementSystem 1.0-SNAPSHOT
  from pom.xml
-----[ jar ]-----

--- resources:3.3.1:resources (default-resources) @ ClinicManagementSystem ---
skip non existing resourceDirectory F:\sumaiya the V.I.P\sem 14\OOP\assignments\final 2\ClinicManagementSystem\src\main\resources

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Nothing to compile - all classes are up to date

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1. View Available Doctors
2. Book an Appointment
3. Show Patient Appointments
4. Show Doctor Appointments
5. Add a Doctor
6. Exit
Enter your choice: 1
Available Doctors:
- Dr. Smith (General Practitioner)
  Dr. Smith is available for walk-in patients.
- Dr. Johnson (Specialist)
  Dr. Johnson requires appointment confirmation.

--- Clinic Management System ---
1. View Available Doctors
2. Book an Appointment
3. Show Patient Appointments
4. Show Doctor Appointments
5. Add a Doctor
6. Exit
Enter your choice: 2
Enter patient name: sumaiya
Enter patient contact: 01905493032
Patient registered successfully: sumaiya
Enter doctor name: Dr. Smith
Enter appointment date (YYYY-MM-DD): |
```

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```

Output - Run (ClinicManagementSystem) x
-----< com.mycompany:ClinicManagementSystem >-----
Building ClinicManagementSystem 1.0-SNAPSHOT
from pom.xml
-----[ jar ]-----
--- resources:3.3.1:resources (default-resources) @ ClinicManagementSystem ---
skip non existing resourceDirectory F:\sumaiya the V.I.P\sem 14\OOP\assignments\final 2\ClinicManagementSystem\src\main\resources
--- compiler:3.11.0:compile (default-compile) @ ClinicManagementSystem ---
Nothing to compile - all classes are up to date
--- exec:3.1.0:exec (default-cli) @ ClinicManagementSystem ---

--- Clinic Management System ---
1. View Available Doctors
2. Book an Appointment
3. Show Patient Appointments
4. Show Doctor Appointments
5. Add a Doctor
6. Exit
Enter your choice: 1
Available Doctors:
- Dr. Smith (General Practitioner)
Dr. Smith is available for walk-in patients.
- Dr. Johnson (Specialist)
Dr. Johnson requires appointment confirmation.

--- Clinic Management System ---
1. View Available Doctors
2. Book an Appointment
3. Show Patient Appointments
4. Show Doctor Appointments
5. Add a Doctor
6. Exit
Enter your choice: 2
Enter patient name: sumaiya
Enter patient contact: 01905493032
Patient registered successfully: sumaiya
Enter doctor name: Dr. Smith
Enter appointment date (YYYY-MM-DD): 2024.09.12
Enter diagnosis: Flue
Appointment saved successfully.
Appointment booked for sumaiya with Dr. Smith on 2024.09.12

--- Clinic Management System ---
1. View Available Doctors
2. Book an Appointment
3. Show Patient Appointments
4. Show Doctor Appointments
5. Add a Doctor
6. Exit
Enter your choice: |

```


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```

Output - Run (ClinicManagementSystem) x
-----< com.mycompany:ClinicManagementSystem >-----
Building ClinicManagementSystem 1.0-SNAPSHOT
  from pom.xml
-----[ jar ]-----

--- resources:3.3.1:resources (default-resources) @ ClinicManagementSystem ---
skip non existing resourceDirectory F:\sumaiya the V.I.P\sem 14\OOP\assignments\final 2\ClinicManagementSystem\src\main\

--- compiler:3.11.0:compile (default-compile) @ ClinicManagementSystem ---
Nothing to compile - all classes are up to date

--- exec:3.1.0:exec (default-cli) @ ClinicManagementSystem ---

--- Clinic Management System ---
1. View Available Doctors
2. Book an Appointment
3. Show Patient Appointments
4. Show Doctor Appointments
5. Add a Doctor
6. Exit
Enter your choice: 1
Available Doctors:
- Dr. Smith (General Practitioner)
Dr. Smith is available for walk-in patients.
- Dr. Johnson (Specialist)
Dr. Johnson requires appointment confirmation.

--- Clinic Management System ---
1. View Available Doctors
2. Book an Appointment
3. Show Patient Appointments
4. Show Doctor Appointments
5. Add a Doctor
6. Exit
Enter your choice: 2
Enter patient name: sumaiya
Enter patient contact: 01905493032
Patient registered successfully: sumaiya
Enter doctor name: Dr. Smith
Enter appointment date (YYYY-MM-DD): 2024.09.12
Enter diagnosis: Flu
Appointment saved successfully.
Appointment booked for sumaiya with Dr. Smith on 2024.09.12

--- Clinic Management System ---
1. View Available Doctors
2. Book an Appointment
3. Show Patient Appointments
4. Show Doctor Appointments
5. Add a Doctor
6. Exit
Enter your choice: 3
Enter your name to view appointments: |

```

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```

Output - Run (ClinicManagementSystem) x
- Dr. Smith (General Practitioner)
Dr. Smith is available for walk-in patients.
- Dr. Johnson (Specialist)
Dr. Johnson requires appointment confirmation.

--- Clinic Management System ---
1. View Available Doctors
2. Book an Appointment
3. Show Patient Appointments
4. Show Doctor Appointments
5. Add a Doctor
6. Exit
Enter your choice: 2
Enter patient name: sumaiya
Enter patient contact: 01905493032
Patient registered successfully: sumaiya
Enter doctor name: Dr. Smith
Enter appointment date (YYYY-MM-DD): 2024.09.12
Enter diagnosis: Flu
Appointment saved successfully.
Appointment booked for sumaiya with Dr. Smith on 2024.09.12

--- Clinic Management System ---
1. View Available Doctors
2. Book an Appointment
3. Show Patient Appointments
4. Show Doctor Appointments
5. Add a Doctor
6. Exit
Enter your choice: 3
Enter your name to view appointments: sumaiya
Appointments for sumaiya:

--- Clinic Management System ---
1. View Available Doctors
2. Book an Appointment
3. Show Patient Appointments
4. Show Doctor Appointments
5. Add a Doctor
6. Exit
Enter your choice: 4
Enter doctor's name to view their appointments: Dr. Smith
Appointments for Dr. Smith:
Date: 2024.09.12, Patient: sumaiya, Diagnosis: Flu

--- Clinic Management System ---
1. View Available Doctors
2. Book an Appointment
3. Show Patient Appointments
4. Show Doctor Appointments
5. Add a Doctor
6. Exit
Enter your choice: |

```

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```
Output - Run (ClinicManagementSystem) x
Enter your choice: 2
Enter patient name: sumaiya
Enter patient contact: 01905493032
Patient registered successfully: sumaiya
Enter doctor name: Dr. Smith
Enter appointment date (YYYY-MM-DD): 2024.09.12
Enter diagnosis: Flu
Appointment saved successfully.
Appointment booked for sumaiya with Dr. Smith on 2024.09.12

--- Clinic Management System ---
1. View Available Doctors
2. Book an Appointment
3. Show Patient Appointments
4. Show Doctor Appointments
5. Add a Doctor
6. Exit
Enter your choice: 3
Enter your name to view appointments: sumaiya
Appointments for sumaiya:

--- Clinic Management System ---
1. View Available Doctors
2. Book an Appointment
3. Show Patient Appointments
4. Show Doctor Appointments
5. Add a Doctor
6. Exit
Enter your choice: 4
Enter doctor's name to view their appointments: Dr. Smith
Appointments for Dr. Smith:
Date: 2024.09.12, Patient: sumaiya, Diagnosis: Flu

--- Clinic Management System ---
1. View Available Doctors
2. Book an Appointment
3. Show Patient Appointments
4. Show Doctor Appointments
5. Add a Doctor
6. Exit
Enter your choice: 5
Enter doctor name: Dr.Mim
Enter doctor specialization: neurologist
Doctor added successfully: Dr.Mim

--- Clinic Management System ---
1. View Available Doctors
2. Book an Appointment
3. Show Patient Appointments
4. Show Doctor Appointments
5. Add a Doctor
6. Exit
Enter your choice: |
```

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Output - Run (ClinicManagementSystem) ×

Appointment booked for sumaiya with Dr. Smith on 2024.09.12

--- Clinic Management System ---

1. View Available Doctors
2. Book an Appointment
3. Show Patient Appointments
4. Show Doctor Appointments
5. Add a Doctor
6. Exit

Enter your choice: 3

Enter your name to view appointments: sumaiya

Appointments for sumaiya:

--- Clinic Management System ---

1. View Available Doctors
2. Book an Appointment
3. Show Patient Appointments
4. Show Doctor Appointments
5. Add a Doctor
6. Exit

Enter your choice: 4

Enter doctor's name to view their appointments: Dr. Smith

Appointments for Dr. Smith:

Date: 2024.09.12, Patient: sumaiya, Diagnosis: Flu

--- Clinic Management System ---

1. View Available Doctors
2. Book an Appointment
3. Show Patient Appointments
4. Show Doctor Appointments
5. Add a Doctor
6. Exit

Enter your choice: 5

Enter doctor name: Dr.Mim

Enter doctor specialization: neurologist

Doctor added successfully: Dr.Mim

--- Clinic Management System ---

1. View Available Doctors
2. Book an Appointment
3. Show Patient Appointments
4. Show Doctor Appointments
5. Add a Doctor
6. Exit

Enter your choice: 6

Exiting the system. Goodbye!

BUILD SUCCESS

Total time: 03:48 min

Finished at: 2024-09-12T16:15:07+06:00

Appointments.txt

```

Output - Run (ClinicManagementSystem) x
Appointment booked for sumaiya with Dr. Smith on 2024.09.12

--- Clinic Management System ---
1. View Available Doctors
2. Book an Appointment
3. Show Patient Appointments
4. Show Doctor Appointments
5. Add a Doctor
6. Exit
Enter your choice: 3
Enter your name to view appointments: sumaiya
Appointments for sumaiya:

--- Clinic Management System ---
1. View Available Doctors
2. Book an Appointment
3. Show Patient Appointments
4. Show Doctor Appointments
5. Add a Doctor
6. Exit
Enter your choice: 4
Enter doctor's name to view their appointments: Dr. Smith
Appointments for Dr. Smith:
Date: 2024.09.12, Patient: sumaiya, Diagnosis: Flu

--- Clinic Management System ---
1. View Available Doctors
2. Book an Appointment
3. Show Patient Appointments
4. Show Doctor Appointments
5. Add a Doctor
6. Exit
Enter your choice: 5
Enter doctor name: Dr.Mim
Enter doctor specialization: neurologist
Doctor added successfully: Dr.Mim

--- Clinic Management System ---
1. View Available Doctors
2. Book an Appointment
3. Show Patient Appointments
4. Show Doctor Appointments
5. Add a Doctor
6. Exit
Enter your choice: 6
Exiting the system. Goodbye!

BUILD SUCCESS

Total time: 03:48 min
Finished at: 2024-09-12T16:15:07+06:00

```

appointments - Notepad

File Edit Format View Help

Doctor: Dr. Smith, Patient: sumaiya, Date: 2024.9.9, Diagnosis: General Pra
 Doctor: Dr. Smith, Patient: sumaiya, Date: 2024.09.12, Diagnosis: Flue
 Doctor: Dr. Smith, Patient: sumaiya, Date: 2024.09.12, Diagnosis: Flu
 Doctor: Dr. Smith, Patient: sumaiya, Date: 2024.09.12, Diagnosis: Flu

Ln 1, Col 1 100% Windows (CRLF) UTF-8