A Mini Project Report

On

HOSPITAL MANAGEMENT SYSTEM

Submitted in partial fulfillment of requirements for the Course
CSE18R272 - JAVA PROGRAMMING

Bachelor's of Technology

In

Computer Science and Engineering

Submitted By

M.SHAILESH

9918004109

S.SHREEKANTH

9918004111

Under the guidance of

Dr. R. RAMALAKSHMI

(Associate Professor)

Department of Computer Science and Engineering

Kalasalingam Academy of Research and Education

Anand Nagar, Krishnankoil-626126

APRIL 2020

ABSTRACT

HOSPITAL MANAGEMENT SYSTEM: This Project was designed mainly to help each and everyone in the hospital. It is mainly useful for the Doctors to check the Patient's room number where they admitted, what's their age and what disease was affected to them. And not only for doctors, as well as patients to know the arriving time of the doctors and to know wheather the doctor is being present today or not. It also helps the patient to know the rate of a treatment and labs before itself by the receptionist as these data is also being present. The cost of the medicines and their expiry date is also mentioned in the system. If any new medicine arrives at the medical shop means the details of that medicine can be entered easily by pressing 1 you can enter the new items in it. Mainly it was designed easily as it should be easily accessable to everyone.Hospital Management System includes registration of patients, storing their details into the system, and also computerized billing in the pharmacy, and labs. It has the facility to give a unique id for every patient and stores the details of every patient and the staff automatically. It includes a search facility to know the current status of each room. User can search availability of a doctor and the details of a patient using the id. The Hospital Management System can be entered using a username and password. It is accessible either by an administrator or receptionist. Only they can add data into the database. The data can be retrieved easily. The interface is very user-friendly.

DECLARATION

I hereby declare that the work presented in this report entitled "**HOSPITAL MANAGEMENT SYSTEM**", in partial fulfilment of the requirements for the course CSE18R272- Java Programming and submitted in **Department of Computer Science and Engineering, Kalasalingam Academy of Research and Education** (**Deemed to be University**) is an authentic record of our own work carried out during the period from **Jan 2020** under the guidance of Mr. **Dr. R. Ramalakshmi** (Associate Professor).

The work reported in this has not been submitted by me for the award of any other degree of this or any other institute.

M.SHAILESH
9918004109
S.SHREEKANTH
9918004111

ACKNOWLEDGEMENT

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First and foremost, I wish to thank the Almighty God for his grace and benediction tocomplete this Project work successfully. I would like to convey my special thanks from the bottom of my heart to my dear Parents and affectionate Family members for their honest support for the completion of this Project work.

I express deep sense of gratitude to "Kalvivallal" Thiru. T. Kalasalingam B.com., Founder Chairman, "Ilayavallal" Dr.K.Sridharan Ph.D., Chancellor, Dr.S.ShasiAnand, Ph.D., Vice President (Academic) , Mr.S.ArjunKalasalingam M.S., Vice President (Administration) , Dr.R.Nagaraj Vice-Chancellor, Dr.V.Vasudevan Ph.D., Registrar , Dr.P.Deepalakshmi Ph.D., Dean (School of Computing) . And also a special thanks to Dr. A. FRANCIS SAVIOUR DEVARAJ. Head Department of CSE, Kalasalingam Academy of Research and Education forgranting the permission and providing necessary facilities to carry out Project work.

I would like to express my special appreciation and profound thanks to my enthusiastic Project Supervisor Dr.R.Ramalakshmi Ph.D, Associate Professor at Kalasalingam Academy of Research and Education [KARE] for her inspiring guidance, constant encouragement with my work during all stages. I am extremely glad that I had a chance to do my Project under my Guide, who truly practices and appreciates deep thinking. I will be forever indebted to my Guide for all the time he has spent with me in discussions. And during the most difficult times when writing this report, he gave me the moral support and the freedom I needed to move on. .

M.SHAILESH
9918004109
S.SHREEKANTH
9918004111

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Chapter 1

INTRODUCTION

This is a project which can be used in the Hospital to store the data of a Patient details, Doctor details, and the Medical Products details such as Labs Details, Medicine Information..ext.

1.0.1 Objectives

List the objectives of the project work...

1. To develop a code..
2. To implement a project to know the information about the Hospital in a quick manner.

Chapter 2

PROJECT DESCRIPTION

In this project, I cover 1. DOCTOR, 2. PATIENT, 3. MEDICAL, 4. LAB, 5. FACILITY, 6. STAFF tables. Now take an example of Doctor table, I already saved some doctor details, when you select option 1. The doctor than 2 option will occur and 1.new entry or 2.doctor list Here you can save the details of New Doctor.This Hospital management application offers the following operations.

1. Register a patient with records such as name, age, sex, address, illness, hospital charges 2. Update patient details 3. Display patient details 4. Remove inactive patients. A patient is treated as inactive if he has been admitted to the hospital for more than 15 days.

The main objective to develop Hospital management system in java is to manage the hospital activity online. There will be Three main Actors or Users of the application 1) doctor 2) Admin 3) Receptionist. This project is only for college students who want to complete their Semester projects.

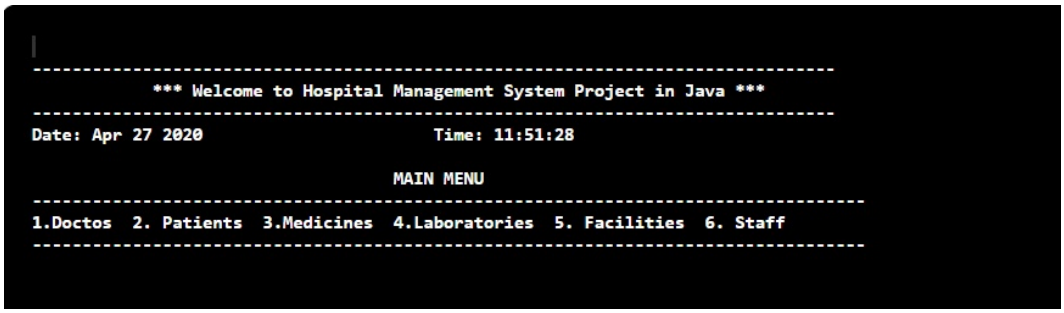

Figure 2.1: HOSPITAL DETAILS

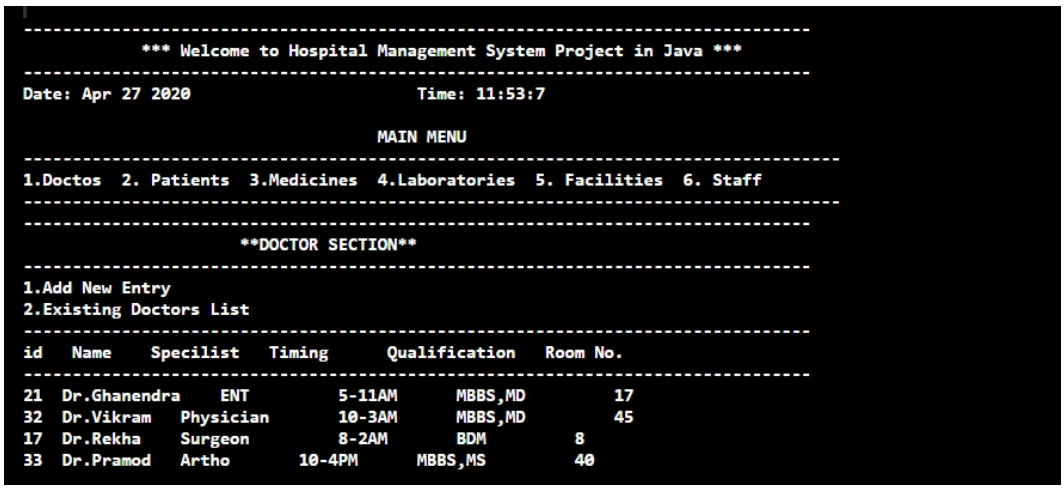

Figure 2.2: DOCTOR DETAILS

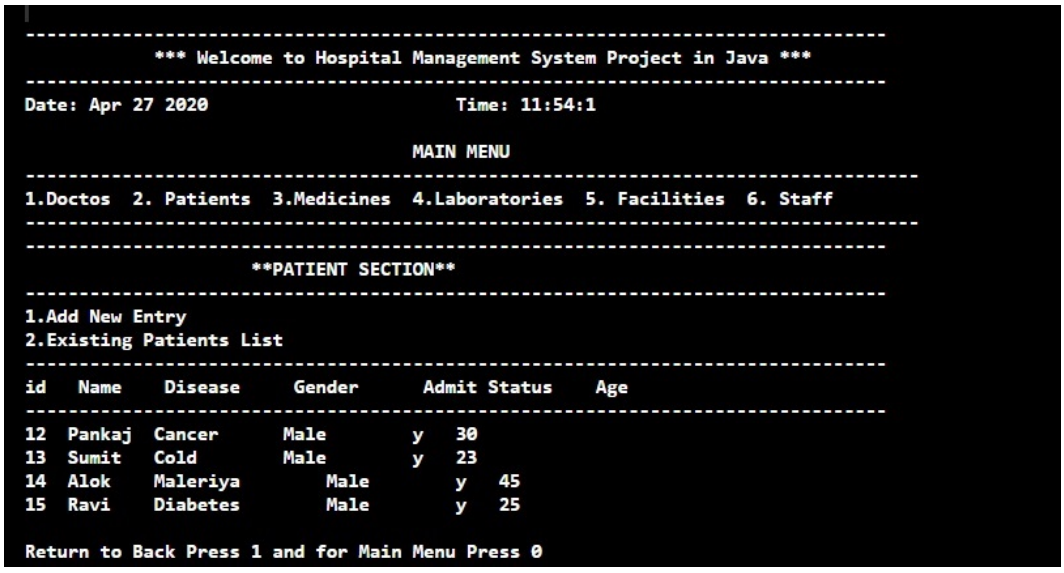

Figure 2.3: PATIENT DETAILS

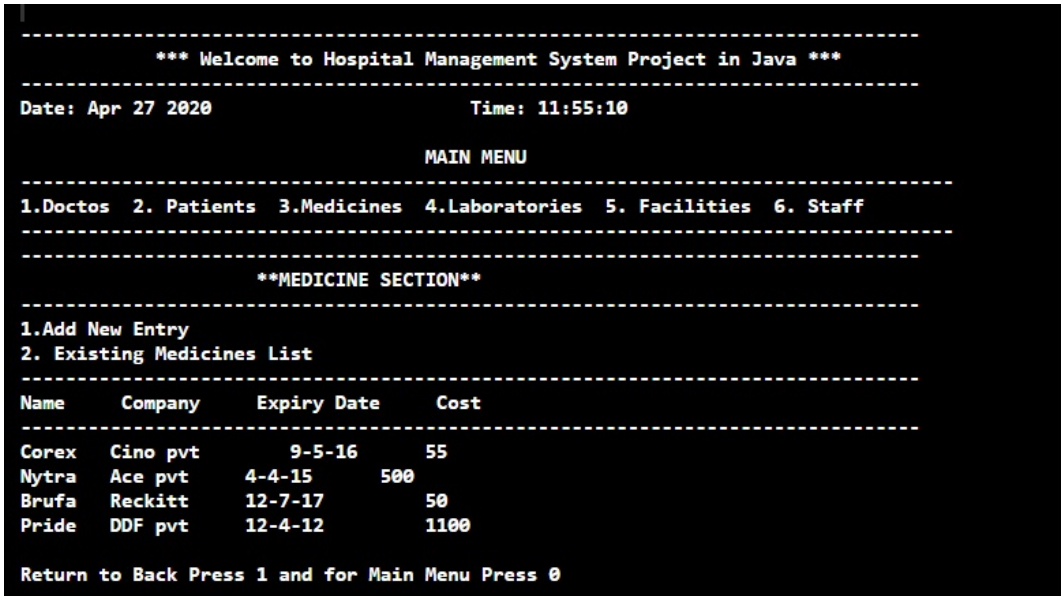

Figure 2.4: MEDICINE DETAILS

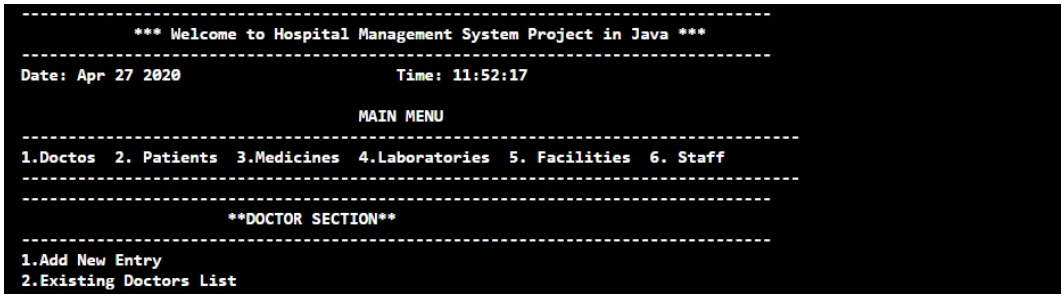

Figure 2.5: ADDITION OF DOCTOR DETAILS

Chapter 3

CONCLUSION

Implementation of hospital management system project helps to store all the kinds of records, provide coordination and user communication, implement policies, improve day-to-day operations, arrange the supply chain, manage financial and human resources, and market hospital services.

SOURCE CODE

```
import java.io.*;
import java.util.*;
import java.util.Calendar;


class staff
{
    String sid, sname, desg, sex;
    int salary;
    void new_staff()
    {
        Scanner input = new Scanner(System.in);

        System.out.print("id:-");
        sid = input.nextLine();

        System.out.print("name:-");
        sname = input.nextLine();

        System.out.print("desigination:-");
        desg = input.nextLine();

        System.out.print("sex:-");
        sex = input.nextLine();

        System.out.print("salary:-");
        salary = input.nextInt();
    }

    void staff_info()

    {
        System.out.println(sid + "\t" + sname + "\t" +
            ↪ sex + "\t" + salary);
    }

}
```

```
class doctor

{
    String did, dname, specilist, appoint, doc_qual;
    int droom;
    void new_doctor()

    {
        Scanner input = new Scanner(System.in);

        System.out.print("id:-");
        did = input.nextLine();

        System.out.print("name:-");
        dname = input.nextLine();

        System.out.print("specilization:-");
        specilist = input.nextLine();

        System.out.print("work time:-");
        appoint = input.nextLine();

        System.out.print("qualification:-");
        doc_qual = input.nextLine();

        System.out.print("room no.:-");
        droom = input.nextInt();

    }

    void doctor_info()

    {
        System.out.println(did + "\t" + dname + "  \t"
            ↪ + specilist + "     \t" + appoint + "    
            ↪ \t" + doc_qual + "       \t" + droom);

    }
}
```

```
class patient

{
    String pid, pname, disease, sex, admit_status;
    int age;
    void new_patient()

    {
        Scanner input = new Scanner(System.in);

        System.out.print("id:-");
        pid = input.nextLine();

        System.out.print("name:-");
        pname = input.nextLine();

        System.out.print("disease:-");
        disease = input.nextLine();

        System.out.print("sex:-");
        sex = input.nextLine();

        System.out.print("admit_status:-");
        admit_status = input.nextLine();

        System.out.print("age:-");
        age = input.nextInt();

    }

    void patient_info()
    {
        System.out.println(pid + "\t" + pname + "␣\t" +
            ↪ disease + "␣␣␣␣␣\t" + sex + "␣␣␣␣␣␣\t" +
            ↪ admit_status + "\t" + age);
    }
}

class medical
```

```
{
    String med_name, med_comp, exp_date;
    int med_cost, count;
    void new_medi()
    {

        Scanner input = new Scanner(System.in);

        System.out.print("name:-");
        med_name = input.nextLine();

        System.out.print("comp:-");
        med_comp = input.nextLine();

        System.out.print("exp_date:-");
        exp_date = input.nextLine();

        System.out.print("cost:-");
        med_cost = input.nextInt();

        System.out.print("no␣of␣unit:-");
        count = input.nextInt();

    }

    void find_medi()
    {
        System.out.println(med_name + "␣␣\t" + med_comp
            ↪  + "␣␣␣␣\t" + exp_date + "␣␣␣␣␣\t" +
            ↪ med_cost);
    }
}

class lab

{
    String fecility;
    int lab_cost;
    void new_feci()
    {
```

```
        Scanner input = new Scanner(System.in);

        System.out.print("fecility:-");
        fecility = input.nextLine();

        System.out.print("cost:-");
        lab_cost = input.nextInt();

    }

    void feci_list()
    {
        System.out.println(fecility + "\t\t" + lab_cost
            ↪ );

    }
}

class fecility //Sorry Facility but do not change the
    ↪ name

{
    String fec_name;
    void add_feci()

    {
        Scanner input = new Scanner(System.in);

        System.out.print("fecility:-");
        fec_name = input.nextLine();
    }

    void show_feci()
    {
        System.out.println(fec_name);
    }
}

public class HospitalManagement
```

```
{
    public static void main(String args[])
    {
        String months[] = {

            "Jan",
            "Feb",
            "Mar",
            "Apr",

            "May",
            "Jun",
            "Jul",
            "Aug",

            "Sep",
            "Oct",
            "Nov",
            "Dec"
        };

        Calendar calendar = Calendar.getInstance();
        //System.out.println
            ↪ ("————————————————————————————————————————————————————————————
            ↪ ;
        int count1 = 4, count2 = 4, count3 = 4, count4
            ↪ = 4, count5 = 4, count6 = 4;

        System.out.println("\n
            ↪ ————————————————————————————————————————————————————————————
            ↪ ");
        System.out.println("␣␣␣␣␣␣␣␣␣␣␣␣***␣Welcome␣to␣
            ↪ Hospital␣Management␣System␣Project␣in␣
            ↪ Java␣***");
        System.out.println("
            ↪ ————————————————————————————————————————————————————————————
            ↪ ");

        System.out.print("Date:␣" + months[calendar.get
            ↪ (Calendar.MONTH)] + "␣" + calendar.get(
```

```
    ↪ Calendar.DATE) + "␣" + calendar.get(
    ↪ Calendar.YEAR));

System.out.println("\t\t\t\t\tTime:␣" +
    ↪ calendar.get(Calendar.HOUR) + ":" +
    ↪ calendar.get(Calendar.MINUTE) + ":" +
    ↪ calendar.get(Calendar.SECOND));

doctor[] d = new doctor[25];

patient[] p = new patient[100];

lab[] l = new lab[20];

fecility[] f = new fecility[20];

medical[] m = new medical[100];

staff[] s = new staff[100];

int i;

for (i = 0; i < 25; i++)

    d[i] = new doctor();

for (i = 0; i < 100; i++)

    p[i] = new patient();

for (i = 0; i < 20; i++)

    l[i] = new lab();

for (i = 0; i < 20; i++)

    f[i] = new fecility();

for (i = 0; i < 100; i++)
```

```
        m[i] = new medical();

    for (i = 0; i < 100; i++)

        s[i] = new staff();


    d[0].did = "21";
    d[0].dname = "Dr.Ghanendra";
    d[0].specilist = "ENT";
    d[0].appoint = "5-11AM";
    d[0].doc_qual = "MBBS,MD";
    d[0].droom = 17;

    d[1].did = "32";
    d[1].dname = "Dr.Vikram";
    d[1].specilist = "Physician";
    d[1].appoint = "10-3AM";
    d[1].doc_qual = "MBBS,MD";
    d[1].droom = 45;

    d[2].did = "17";
    d[2].dname = "Dr.Rekha";
    d[2].specilist = "Surgeon";
    d[2].appoint = "8-2AM";
    d[2].doc_qual = "BDM";
    d[2].droom = 8;

    d[3].did = "33";
    d[3].dname = "Dr.Pramod";
    d[3].specilist = "Artho";
    d[3].appoint = "10-4PM";
    d[3].doc_qual = "MBBS,MS";
    d[3].droom = 40;


    p[0].pid = "12";
    p[0].pname = "Pankaj";
    p[0].disease = "Cancer";
    p[0].sex = "Male";
```

```
p[0].admit_status = "y";
p[0].age = 30;

p[1].pid = "13";
p[1].pname = "Sumit";
p[1].disease = "Cold";
p[1].sex = "Male";
p[1].admit_status = "y";
p[1].age = 23;

p[2].pid = "14";
p[2].pname = "Alok";
p[2].disease = "Maleriya";
p[2].sex = "Male";
p[2].admit_status = "y";
p[2].age = 45;

p[3].pid = "15";
p[3].pname = "Ravi";
p[3].disease = "Diabetes";
p[3].sex = "Male";
p[3].admit_status = "y";
p[3].age = 25;


m[0].med_name = "Corex";
m[0].med_comp = "Cino pvt";
m[0].exp_date = "9-5-16";
m[0].med_cost = 55;
m[0].count = 8;

m[1].med_name = "Nytra";
m[1].med_comp = "Ace pvt";
m[1].exp_date = "4-4-15";
m[1].med_cost = 500;
m[1].count = 5;

m[2].med_name = "Brufa";
m[2].med_comp = "Reckitt";
m[2].exp_date = "12-7-17";
```

```
        m[2].med_cost = 50;
        m[2].count = 56;

        m[3].med_name = "Pride";
        m[3].med_comp = "DDF pvt";
        m[3].exp_date = "12-4-12";
        m[3].med_cost = 1100;
        m[3].count = 100;


        l[0].fecility = "X-ray     ";
        l[0].lab_cost = 800;

        l[1].fecility = "CT Scan    ";
        l[1].lab_cost = 1200;

        l[2].fecility = "OR Scan    ";
        l[2].lab_cost = 500;

        l[3].fecility = "Blood Bank";
        l[3].lab_cost = 50;


        f[0].fec_name = "Ambulance";

        f[1].fec_name = "Admit Facility ";

        f[2].fec_name = "Canteen";

        f[3].fec_name = "Emergency";


        s[0].sid = "22";
        s[0].sname = "Prakash";
        s[0].desg = "Worker";
        s[0].sex = "Male";
        s[0].salary = 5000;

        s[1].sid = "23";
        s[1].sname = "Komal";
```

```
        s[1].desg = "Nurse";
        s[1].sex = "Female";
        s[1].salary = 2000;

        s[2].sid = "24";
        s[2].sname = "Raju";
        s[2].desg = "Worker";
        s[2].sex = "Male";
        s[2].salary = 5000;

        s[3].sid = "25";
        s[3].sname = "Rani";
        s[3].desg = "Nurse";
        s[3].sex = "Female";
        s[3].salary = 20000;


        Scanner input = new Scanner(System.in);

        int choice, j, c1, status = 1, s1 = 1, s2 = 1,
            ↪ s3 = 1, s4 = 1, s5 = 1, s6 = 1;

        while (status == 1)

        {
            System.out.println("\n                    
                ↪                MAIN MENU");
            System.out.println("
                ↪ ------------------------------------------------
                ↪ ");
            System.out.println("1.Doctos  2. Patients  
                ↪ 3.Medicines  4.Laboratories  5. 
                ↪ Facilities  6. Staff ");
            System.out.println("
                ↪ ------------------------------------------------
                ↪ ");

            choice = input.nextInt();
            switch (choice)
```

```
{

    case 1:

        {
 System.out.println("
    ↪ ------------------------------------------------------------
    ↪ ");
 System.out.println("                    **DOCTOR SECTION**");
 System.out.println("
    ↪ ------------------------------------------------------------
    ↪ ");

 s1 = 1;

while (s1 == 1)
{
 System.out.println("1.Add New Entry\n2.
    ↪ Existing Doctors List");
  c1 = input.nextInt();
 switch (c1)

 {
  case 1:
 {
   d[count1].new_doctor();count1++;
   break;
 }
 case 2:
{
System.out.println("
    ↪ ------------------------------------------------------------
    ↪ ");
 System.out.println("id \t Name\t Specilist
    ↪ \t Timing \t Qualification \t Room
    ↪ No.");
System.out.println("
    ↪ ------------------------------------------------------------
    ↪ ");
```

```
            for (j = 0; j < count1; j++)
            {
            d[j].doctor_info();
            }
            break;
            }
            }
           System.out.println("\nReturn to Back Press
              ↪ 1 and for Main Menu Press 0");
           s1 = input.nextInt();
           }
          break;
           }

            case 2:

           {
          System.out.println("
              ↪ ----------------------------------------------------------------------
              ↪ ");
           System.out.println("                    **PATIENT SECTION**");
          System.out.println("
              ↪ ----------------------------------------------------------------------
              ↪ ");

           s2 = 1;

           while (s2 == 1)
          {
          System.out.println("1.Add New Entry\n2.
              ↪ Existing Patients List");
          c1 = input.nextInt();
          switch (c1)
         {
           case 1:
         {
        p[count2].new_patient();count2++;
        break;
       }
```

```
 case 2:
 {
System.out.println("
    ↪ ------------------------------------------------------------------------
    ↪ ");
 System.out.println("id \t Name \t Disease \t
    ↪ Gender \t Admit Status \t Age");
System.out.println("
    ↪ ------------------------------------------------------------------------
    ↪ ");
 for (j = 0; j < count2; j++) {
  p[j].patient_info();
 }
  break;
 }
  }

  System.out.println("\nReturn to Back Press 1
     ↪ and for Main Menu Press 0");
  s2 = input.nextInt();
  }
 break;
 }

 case 3:
{
s3 = 1;

System.out.println("
    ↪ ------------------------------------------------------------------------
    ↪ ");
System.out.println("                    **
    ↪ MEDICINE SECTION**");
System.out.println("
    ↪ ------------------------------------------------------------------------
    ↪ ");

while (s3 == 1)
 {
```

```
   System.out.println("1.Add New Entry\n2. Existing Medicines List");
   c1 = input.nextInt();

   switch (c1)
  {

  case 1:
  {
 m[count3].new_medi();count3++;
  break;
}

case 2:
{
System.out.println("
    ↪ ------------------------------------------------------------------
    ↪ ");
System.out.println("Name \t Company \t Expiry
    ↪ Date \t Cost");
System.out.println("
    ↪ ------------------------------------------------------------------
    ↪ ");

  for (j = 0; j < count3; j++) {
 m[j].find_medi();
  }
   break;
}

}
System.out.println("\nReturn to Back Press 1
    ↪ and for Main Menu Press 0");
s3 = input.nextInt();
}
break;
}

  case 4:
```

```
{
 s4 = 1;

System.out.println("
    ↪ ------------------------------------------------------------------------
    ↪ ");
System.out.println("                    **
    ↪ LABORATORY SECTION**");
System.out.println("
    ↪ ------------------------------------------------------------------------
    ↪ ");

while (s4 == 1)

{
System.out.println("1.Add New Entry \n2.
    ↪ Existing Laboratories List");
c1 = input.nextInt();

switch (c1)

{
case 1:
{
l[count4].new_feci();count4++;
break;
}

case 2:

{
System.out.println("
    ↪ ------------------------------------------------------------------------
    ↪ ");
System.out.println("Fecilities\t\t Cost");
System.out.println("
    ↪ ------------------------------------------------------------------------
    ↪ ");

for (j = 0; j < count4; j++) {
```

```
l[j].feci_list();
}
break;
}
}

System.out.println("\nReturn to Back Press 1
    ↪ and for Main Menu Press 0");
s4 = input.nextInt();
}
break;
}

case 5:

{
s5 = 1;

System.out.println("
    ↪ ------------------------------------------------------------------------
    ↪ ");
System.out.println("          **HOSPITAL
    ↪ FACILITY SECTION**");
System.out.println("
    ↪ ------------------------------------------------------------------------
    ↪ ");

while (s5 == 1)

{
System.out.println("1.Add New Facility\n2.
    ↪ Existing Fecilities List");
c1 = input.nextInt();

switch (c1)

{
case 1:
{
f[count5].add_feci();count5++;
```

```
        break;
        }

        case 2:
        {

        System.out.println("
            ↪ ------------------------------------------------------------
            ↪ ");
        System.out.println("Hospital  Facility are:");
        System.out.println("
            ↪ ------------------------------------------------------------
            ↪ ");

        for (j = 0; j < count5; j++) {
        f[j].show_feci();
        }
        break;
         }
         }
        System.out.println("\nReturn to Back Press 1
            ↪ and for Main Menu Press 0");
        s5 = input.nextInt();
        }
        break;
        }
        case 6:

        {
         s6 = 1;

        System.out.println("
            ↪ ------------------------------------------------------------
            ↪ ");
        System.out.println("                        **
            ↪ STAFF SECTION**");
        System.out.println("
            ↪ ------------------------------------------------------------
            ↪ ");
```

```
while (s6 == 1)

{
String a = "nurse", b = "worker", c = "security
   ↪ ";
System.out.println("1.Add␣New␣Entry␣\n2.
   ↪ Existing␣Nurses␣List\n3.Existing␣Workers␣
   ↪ List␣\n4.Existing␣Security␣List");
 c1 = input.nextInt();

 switch (c1)

 {
 case 1:
 {
  s[count6].new_staff();count6++;
  break;
  }

  case 2:
  {
  System.out.println("
     ↪ ----------------------------------------------------------------------
     ↪ ");
  System.out.println("id␣\t␣Name␣\t␣Gender␣\t␣
     ↪ Salary");
  System.out.println("
     ↪ ----------------------------------------------------------------------
     ↪ ");

    for (j = 0; j < count6; j++)
    {
    if (a.equals(s[j].desg))
    s[j].staff_info();
    }
    break;
    }

    case 3:
    {
```

```
System.out.println("
    ↪ ------------------------------------------------------------------------
    ↪ ");
System.out.println("id \t Name \t Gender \t
    ↪ Salary");
System.out.println("
    ↪ ------------------------------------------------------------------------
    ↪ ");

for (j = 0; j < count6; j++)
{
if (b.equals(s[j].desg))
 s[j].staff_info();
 }
  break;
 }
case 4:
 {
 System.out.println("
     ↪ ------------------------------------------------------------------------
     ↪ ");
 System.out.println("id \t Name \t Gender \t
     ↪ Salary");
 System.out.println("
     ↪ ------------------------------------------------------------------------
     ↪ ");

  for (j = 0; j < count6; j++)
   {
 if (c.equals(s[j].desg))
  s[j].staff_info();
  }
  break;
 }
 }
 System.out.println("\nReturn to Back Press
     ↪ 1 and for Main Menu Press 0");
  s6 = input.nextInt();
 }
  break;
```

```
                }
                default:
                {
                System.out.println("␣You␣Have␣Enter␣Wrong␣
                    ↪ Choice!!!");
                 }
                }

                System.out.println("\nReturn␣to␣MAIN␣MENU␣
                    ↪ Press␣1");

                status = input.nextInt();
            }
        }
}
```