BCS2143 OBJECT ORIENTED PROGRAMMING

SEMESTER I SESSION 2020/2021

HOSPITAL MANAGEMENT SYSTEM

ASSIGNMENT PART 2

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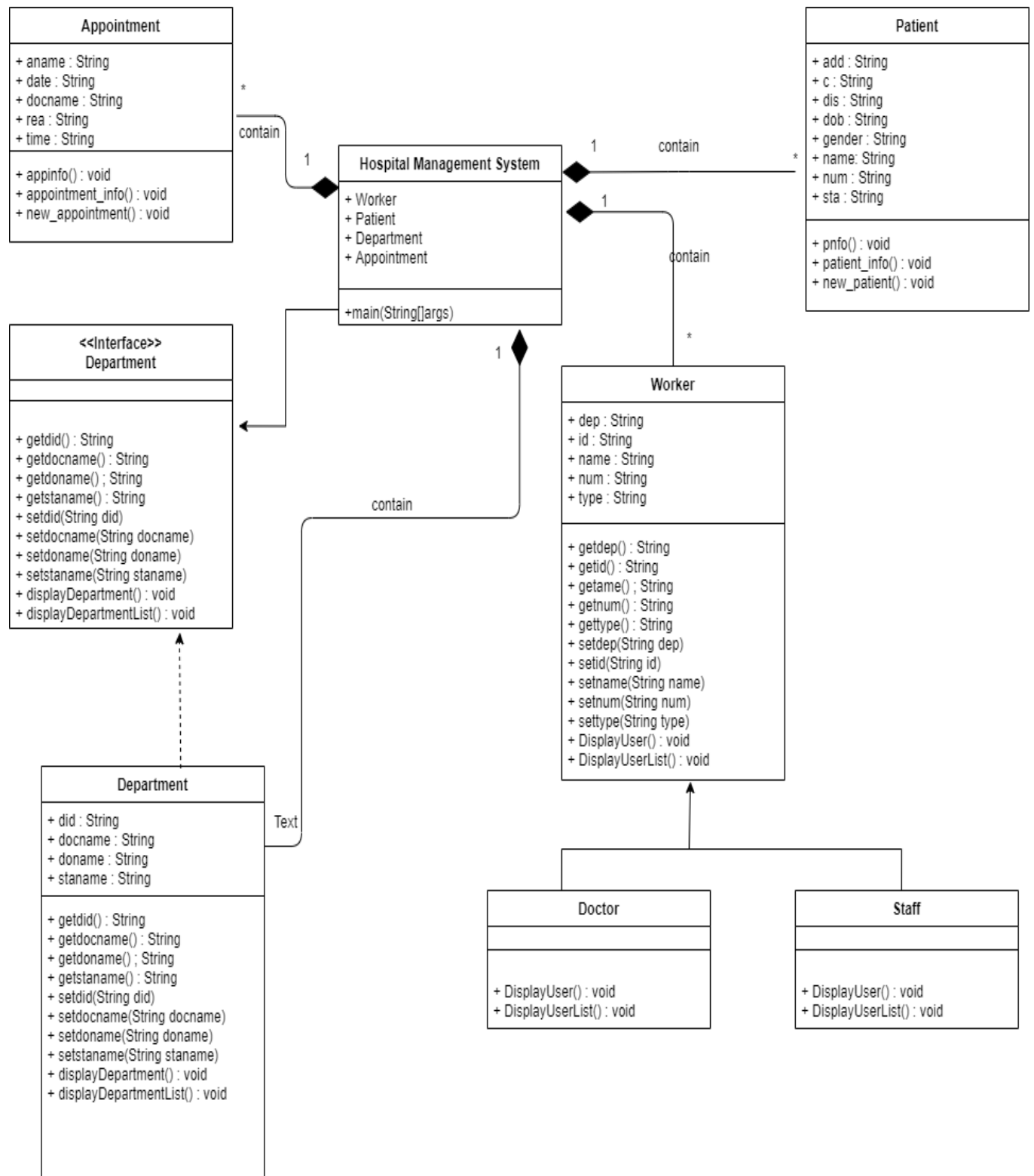
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FLOW OF SYSTEM

The system that we are focusing in is the Hospital Management System. This system manages tasks like adding new patient, doctor, staff, department and appointment. Also manages viewing the records of patient, doctor, staff, department and appointment. The main objective of this project is to develop a simple program for Hospital Management System which is still outdated and also the complexity in using the current manual recording details.

In this we have implement many concepts for our projects like Inheritance, Polymorphism, Array, Abstract and Interface Class with appropriate control and repetition statement. Hence it provides the complete solution for the current management system.

The users involved in this system are the hospital admins. When the user logins into the system, he/she will give 5 types of task option and in that each 5 options will 2 tasks to do. The 5 tasks option are patient, doctor, staff, department and appointment. In that each task options there will 2 options which are adding new records and viewing the records. Admins can choose tasks options key in the records and view the key in records.

Hence this is the whole flow of the Hospital Management System.

UML DIAGRAM

Appointment

+ aname : String
+ date : String
+ docname : String
+ rea : String
+ time : String

+ appinfo() : void
+ appointment_info() : void
+ new_appointment() : void

Patient

+ add : String
+ c : String
+ dis : String
+ dob : String
+ gender : String
+ name: String
+ num : String
+ sta : String

+ pnfo() : void
+ patient_info() : void
+ new_patient() : void

Hospital Management System

+ Worker
+ Patient
+ Department
+ Appointment

+main(String[]args)

contain

1

1   contain

*

1

contain

*

**<<Interface>>
Department**

+ getdid() : String
+ getdocname() : String
+ getdoname() ; String
+ getstaname() : String
+ setdid(String did)
+ setdocname(String docname)
+ setdoname(String doname)
+ setstaname(String staname)
+ displayDepartment() : void
+ displayDepartmentList() : void

Worker

+ dep : String
+ id : String
+ name : String
+ num : String
+ type : String

+ getdep() : String
+ getid() : String
+ getame() ; String
+ getnum() : String
+ gettype() : String
+ setdep(String dep)
+ setid(String id)
+ setname(String name)
+ setnum(String num)
+ settype(String type)
+ DisplayUser() : void
+ DisplayUserList() : void

1

contain

Department

+ did : String
+ docname : String
+ doname : String
+ staname : String

+ getdid() : String
+ getdocname() : String
+ getdoname() ; String
+ getstaname() : String
+ setdid(String did)
+ setdocname(String docname)
+ setdoname(String doname)
+ setstaname(String staname)
+ displayDepartment() : void
+ displayDepartmentList() : void

Text

Doctor

+ DisplayUser() : void
+ DisplayUserList() : void

Staff

+ DisplayUser() : void
+ DisplayUserList() : void

SOURCE CODE

MAIN CLASS

```java
package HMS;
import java.util.*;

public class HMS {

public static void main(String[] args) {

  Scanner input = new Scanner(System.in);
  int choice, opt,b,age;
  String name,num,type, dep,id,docname,did, staname, doname,n;
  int doct=0, staf=0 , dept=0;
  int i = 0;
  int l;
  int m=3;

   Patient[] p = new Patient[10];
   for (l = 0; l < 10; l++)
   p[l] = new Patient();
   p[0].name = "Dars";p[0].age = 20;p[0].dob = "12 Feb 2000";p[0].add= "22 Permai";p[0].gender =
"M";p[0].dis = "Fever";p[0].sta="Discharged";p[0].num="0193938748";
   p[1].name = "Raju";p[1].age = 36;p[1].dob = "14 Mac 1984";p[1].add= "2345 Okland";p[1].gender =
"M";p[1].dis = "Medical Checkup";p[1].sta="Discharged";p[1].num="0134356423";
   p[2].name = "Siti";p[2].age = 67;p[2].dob = "9 Dec 1857";p[2].add= "344 Anggerik";p[2].gender =
"F";p[2].dis = "Blood Pressure";p[2].sta="Admitted";p[2].num="0193933575";


  Worker Doctor[]  = new Doctor[10];
  Doctor[0] = new Doctor("Lim Wei","Surgeon","General Surgeory","CB192830","0192937364");
  Doctor[1] = new Doctor("Loga","Cardiologists","Cardiology","CB19083","01123415482");
  Doctor[2] = new Doctor("Abu Bakar","Neurologists","Neurology","CD18273","01929390765");

  Worker Staff[] = new Staff[10];
  Staff[0] = new Staff("Siti","Nurse","General Surgeory","CB19246","0115489643");
  Staff[1] = new Staff("Mala","Receptionist","Patient Service","CB19234","0193682953");
  Staff[2] = new Staff("Lee","Manager","Human Resources","CD14683","01293440184");

  Appointment[] a = new Appointment[10];
  for (l = 0; l < 10; l++)
  a[l] = new Appointment();
  a[0].aname="Mail";a[0].date="20 Dec 2020";a[0].docname="Loga";a[0].rea="Heart
Problem";a[0].time="11.30am";
  a[1].aname="Leeye";a[1].date="25 Dec
2020";a[1].docname="Abu";a[1].rea="Medical";a[1].time="9.30am";
  a[2].aname="Siti";a[2].date="29 Dec 2020";a[2].docname="Lim";a[2].rea="High
Fever";a[2].time="2.00pm";
```

```java
Department Department[]= new Department[10];
Department[0] = new Department("General Surgeory","GK23","Rajan","Lim Wei");
Department[1] = new Department("Cardiology","CAR68","Abu","Loga");
Department[2] = new Department("Neurology","N24","Lim","Abu Bakar");


System.out.println("\n\t\t----------------------------------------------------------------------");
System.out.println("\t\t\t\tWELCOME HOSPITAL MANAGEMENT SYSTEM");
System.out.println("\t\t----------------------------------------------------------------");
System.out.println("\n\n\t\t------------------------------------------------------------------");
System.out.println("\t\t\t\t\tMAIN MENU");
System.out.println("\n\t\t\t 1.Patient  \n\t\t\t 2.Doctor  \n\t\t\t 3.Satff  \n\t\t\t 4.Appoinment  \n\t\t\t
5.Department");
System.out.println("\t\t----------------------------------------------------------------");

System.out.println("\n\nEnter Your Choice : ");
choice = input.nextInt();

switch(choice)
{
    case 1 :
        {
        b = 1;
        while (b == 1)
        {
        p[m].pinfo();
        opt = input.nextInt();

                if (opt == 1)
                 {

                  p[m].new_patient();m++;

                 }
                else if (opt ==2)
                 {
                  System.out.println("\n\n----------------------------------------------------------------------------
---------------------------------------------------------------------------");
                  System.out.println("Name  \t\t Age  \t\t DOB  \t\t\t Address  \t\t Number  \t\t Gender  \t
Disease  \t\t Status");
                  System.out.println("----------------------------------------------------------------------------
--------------------------------------------------------------------");
                  for (int j = 0; j < m; j++)
                    {
                      p[j].patient_info();
                    }

                 }
                else
                 {
```

```java
                System.out.println("INVALID PIN");
              }
      System.out.println("\nReturn to Back Press 1 and for Exit Press 0 :");
      b = input.nextInt();
      }
      break;
      }
    case 2 :
      {
      b = 1;
      while (b == 1)
      {
      Doctor[i].displayUserList();
      opt = input.nextInt();

              if (opt == 1)
               {
                 for(int x=4 + doct; x < Doctor.length; x++)
                 {
                   n=input.nextLine();
                   System.out.println("Enter Doctor Name:");
                   name=input.nextLine();
                   System.out.println("Enter Doctor ID:");
                   id=input.nextLine();
                   System.out.println("Enter Doctor Type:");
                   type=input.nextLine();
                   System.out.println("Enter Department");
                   dep=input.nextLine();
                   System.out.println("Enter Doctor Phone Number");
                   num=input.nextLine();
                   Doctor[x] = new Doctor(name,type,dep, id, num);
                   doct += 1;
                   break;
                 }
               }
              else if (opt ==2)
               {
                System.out.println("\n\n----------------------------------------------------------------------------------------------------------------------------");
                System.out.println("Name  \t\t\t ID  \t\t\t TYPE  \t\t\t DEPARMENT  \t\t NUMBER");
                System.out.println("----------------------------------------------------------------------------------------------------------------------------");
                  for(int x = 0; x < Doctor.length; x++)
                  {
                    if(Doctor[x] != null)
                      {
                       Doctor[x].DisplayUser();
                      }
                  }
               }
              else
```

```
                    {
                      System.out.println("INVALID PIN");
                    }
                System.out.println("\nReturn to Back Press 1 and for Exit Press 0 :");
                b = input.nextInt();
                }
                break;
                }
            case 3 :
             {
              b = 1;
              while (b == 1)
              {
              Staff[i].displayUserList();
              opt = input.nextInt();

                    if (opt == 1)
                     {
                        for(int x=4 + staf; x < Staff.length; x++)
                       {
                          n=input.nextLine();
                          System.out.println("Enter Staff Name:");
                          name=input.nextLine();
                          System.out.println("Enter Staff ID:");
                          id=input.nextLine();
                          System.out.println("Enter Staff Type:");
                          type=input.nextLine();
                          System.out.println("Enter Department");
                          dep=input.nextLine();
                          System.out.println("Enter Staff Phone Number");
                          num=input.nextLine();
                          Staff[x] = new Staff(name,type,dep, id, num);
                          staf += 1;
                          break;
                       }
                     }
                   else if (opt ==2)
                    {
                     System.out.println("\n\n-------------------------------------------------------------------------
--------------------------------------");
                     System.out.println("Name \t\t ID \t\t\t TYPE \t\t\t DEPARMENT \t\t\tNUMBER");
                     System.out.println("-------------------------------------------------------------------------------
-----------------------------");
                     for(int x = 0; x < Doctor.length; x++)
                       {
                          if(Staff[x] != null)
                            {
                             Staff[x].DisplayUser();
                            }
                       }
                    }
```

```java
                else
                 {
                   System.out.println("INVALID PIN");
                 }
          System.out.println("\nReturn to Back Press 1 and for Exit Press 0 :");
          b = input.nextInt();
          }
          break;
          }
    case 4 :
          {
          b = 1;
           while (b == 1)
           {
           a[m].appinfo();
           opt = input.nextInt();

                 if (opt == 1)
                  {
                    a[m].new_appointment();m++;
                  }
                 else if (opt == 2)
                  {
                   System.out.println("\n\n------------------------------------------------------------------------------
--------------------------------------------------");
                   System.out.println("Name  \t\t DATE  \t\t\t TIME  \t\t\t DOC.NAME  \t PURPOSE");
                   System.out.println("------------------------------------------------------------------------------
--------------------------------------------");
                    for (int j = 0; j < m; j++)
                     {
                       a[j].appointment_info();
                     }
                  }
                 else
                  {
                    System.out.println("INVALID PIN");
                  }
          System.out.println("\nReturn to Back Press 1 and for Exit Press 0 :");
          b = input.nextInt();
          }
          break;
          }
    case 5 :
          {
          b = 1;
          while (b == 1)
          {
          Department[i].diplayDepartment();
          opt = input.nextInt();

                 if (opt == 1)
```

```java
                                {
                                    for(int x=4 + dept; x < Department.length; x++)
                                    {
                                    n=input.nextLine();
                                    System.out.println("Enter Department Name:");
                                    doname=input.nextLine();
                                    System.out.println("Enter Department ID:");
                                    did=input.nextLine();
                                    System.out.println("Enter Staff Name:");
                                    staname=input.nextLine();
                                    System.out.println("Enter Doctor Name");
                                    docname=input.nextLine();
                                    Department[x] = new Department(doname,did,staname,docname);
                                    dept += 1;
                                    break;
                                    }
                                }
                            else if (opt ==2)
                            {
                             System.out.println("\n\n--------------------------------------------------------------------------------
------");
                                System.out.println("DEPARMENT NAME  \t DEPARMENT ID  \t\t STAFF.NAME  \t
DOC.NAME");
                                System.out.println("---------------------------------------------------------------------------------
-");

                                for(int x = 0; x < Department.length; x++)
                                  {
                                     if(Department[x] != null)
                                        {
                                         Department[x].displayDepartmentList();
                                        }
                                  }
                            }
                          else
                          {
                           System.out.println("INVALID PIN");
                          }
            System.out.println("\nReturn to Back Press 1 and for Exit Press 0 :");
            b = input.nextInt();
            }
            break;
            }

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


}
}
```

WORKER ABSTRACT CLASS

```java
package HMS;

abstract public class Worker {

public String name, type, dep,id,num;

public Worker(String name,String type,String dep,String id,String num)
{
    this.name = name;
    this.type = type;
    this.dep = dep;
    this.id = id;
    this.num = num;
}

public Worker()
{

}

public String getname(){
    return name;
}
public String gettype(){
    return type;
}
public String getdep(){
    return dep;
}
public String getid(){
    return id;
}
public String getnum(){
    return num;
}

public void setname(String name1){
    this.name=name;
}
public void settype(String type){
    this.type=type;
}
public void setdep(String dep){
    this.dep=dep;
}
public void setid(String id){
    this.id=id;
}
public void setnum1(String num1){
```

```
        this.num=num;
    }


    public abstract void DisplayUser();
    public abstract void displayUserList();
}
```

DOCTOR CLASS

```java
package HMS;

public class Doctor extends Worker {

    public Doctor(String name,String type,String dep,String id,String num)
    {
        super(name,type,dep, id, num) ;
    }
    Doctor()
    {

    }
    @Override
    public void DisplayUser()
    {
     System.out.println(getname()+"  \t\t "+getid()+"  \t\t "+gettype()+"  \t\t "+getdep()+"  \t\t "+getnum());
    }
    @Override
    public void displayUserList()
    {
        System.out.println("\n\t\t----------------------------------------------------------------");
        System.out.println("\t\t\t\tWELCOME DOCTOR SECTION");
        System.out.println("\t\t----------------------------------------------------------------");
        System.out.println("\n\t\t\t 1.Add New Doctor Profile  \n\t\t\t 2.Doctor Records  \nYour Choice:");
    }
}
```

STAFF CLASS

```java
package HMS;

public class Staff extends Worker {

    public Staff(String name,String type,String dep,String id,String num)
    {
        super(name,type,dep, id, num) ;
    }

    Staff()
    {

    }

    @Override
    public void DisplayUser() {
        System.out.println(getname()+" \t\t "+getid()+" \t\t "+gettype()+" \t\t "+getdep()+" \t\t "+getnum());
    }

    @Override
    public void displayUserList() {
        System.out.println("\n\t\t----------------------------------------------------------------");
        System.out.println("\t\t\t\tWELCOME STAFF SECTION");
        System.out.println("\t\t----------------------------------------------------------------");
        System.out.println("\n\t\t\t 1.Add New Staff Profile  \n\t\t\t 2.Staff Records  \nYour Choice:");
    }

}
```

PATIENT CLASS

```java
package HMS;

import java.util.Scanner;

public class Patient
{

    public String name, dob, add, num, gender,sta,dis,c;
    public int age;


    void new_patient()
    {
        Scanner input = new Scanner(System.in);
        System.out.println("Enter Patient Name:");
        name=input.nextLine();
        System.out.println("Enter Patient Age:");
        age=input.nextInt();
        c=input.nextLine();
        System.out.println("Enter Patient Date of Birth:");
        dob=input.nextLine();
        System.out.println("Enter Patient Address");
        add=input.nextLine();
        System.out.println("Enter Patient Phone Number");
        num=input.nextLine();
        System.out.println("Enter Gender");
        gender=input.nextLine();
        System.out.println("Enter Disease");
        dis=input.nextLine();
        System.out.println("Enter Status");
        sta=input.nextLine();
    }
    void patient_info()
    {
        System.out.println(name+"  \t\t "+age+"  \t\t "+dob+"  \t\t "+add+"  \t\t "+num+"  \t\t "+gender+"  \t\t
"+dis+"  \t\t "+sta);

    }
    void pinfo()
    {
        System.out.println("\n\t\t----------------------------------------------------------------");
        System.out.println("\t\t\t\tWELCOME PATIENT SECTION");
        System.out.println("\t\t----------------------------------------------------------------");
        System.out.println("\n\t\t\t 1.Add New Patient Profile  \n\t\t\t 2.Patient Records  \nYour Choice:");
    }
}
```

APPOINTMENT CLASS

```java
package HMS;

import java.util.Scanner;

public class Appointment {

  public String aname, date, time, docname, rea;

  void new_appointment()
  {
    Scanner input = new Scanner(System.in);
    System.out.println("Enter Name:");
    aname=input.nextLine();
    System.out.println("Enter Date:");
    date=input.nextLine();
    System.out.println("Enter Time:");
    time=input.nextLine();
    System.out.println("Enter Doctor Name");
    docname=input.nextLine();
    System.out.println("Enter Purpose");
    rea=input.nextLine();
  }
  void appointment_info()
  {
    System.out.println(aname+" \t\t "+date+" \t\t "+time+" \t\t "+docname+" \t\t "+rea);


  }
  void appinfo()
  {
     System.out.println("\n\t\t----------------------------------------------------------------");
     System.out.println("\t\t\t\tWELCOME APPOINTMENT SECTION");
     System.out.println("\t\t----------------------------------------------------------------");
     System.out.println("\n\t\t\t 1.Add New Appointment   \n\t\t\t 2.Appointment Records   \nYour Choice:");
  }

}
```

DEPARTMENTINTERFACE CLASS

```java
package HMS;

public interface DepartmentInterface {

    public String getdoname();
    public String getdid();
    public String getstaname();
    public String getdocname();
    public void setdoname(String doname);
    public void setdid(String did);
    public void setstaname(String staname);
    public void setdocname(String docname);
    public void displayDepartmentList();
    public void diplayDepartment();

}
```

DEPARTMENT CLASS

```
package HMS;

public class Department implements DepartmentInterface{

    public String doname, did, staname, docname;

    public Department (String doname,String did,String staname,String docname)
    {
        this.doname = doname;
        this.did = did;
        this.staname = staname;
        this.docname = docname;
    }

    public Department()
    {

    }

    @Override
    public String getdoname()
    {
        return doname;
    }

    @Override
    public String getdid()
    {
        return did;
    }

    @Override
    public String getstaname()
    {
        return staname;
    }

    @Override
    public String getdocname()
    {
        return docname;
    }

    @Override
    public void setdoname(String doname)
    {
        this.doname = doname;
    }
```

```java
    @Override
    public void setdid(String did)
    {
        this.did = did;
    }

    @Override
    public void setstaname(String staname)
    {
        this.staname = staname;
    }


    @Override
    public void setdocname(String docname)
    {
        this.docname = docname;
    }


    @Override
    public void displayDepartmentList()
    {
        System.out.println(getdoname()+" \t\t "+getdid()+" \t\t "+getstaname()+" \t\t "+getdocname());
    }

    @Override
    public void diplayDepartment() {
        System.out.println("\n\t\t----------------------------------------------------------------");
        System.out.println("\t\t\t\tWELCOME DEPARTMENT SECTION");
        System.out.println("\t\t----------------------------------------------------------------");
        System.out.println("\n\t\t\t 1.Add Department Details   \n\t\t\t 2.Department Records   \nYour
Choice:");
    }
}
```

OUTPUT

```
------------------------------------------------------------------
                WELCOME HOSPITAL MANAGEMENT SYSTEM
------------------------------------------------------------------



------------------------------------------------------------------
                           MAIN MENU

                    1.Patient
                    2.Doctor
                    3.Satff
                    4.Appoinment
                    5.Department
------------------------------------------------------------------


Enter Your Choice :
```

This statement appears once the user runs the program. The user can choose the type of options he or she prefers.

PATIENT

```
                ----------------------------------------------------------
                                WELCOME PATIENT SECTION
                ----------------------------------------------------------

                       1.Add New Patient Profile
                       2.Patient Records
Your Choice:
1
Enter Patient Name:
loga
Enter Patient Age:
23
Enter Patient Date of Birth:
12 Apr 2004
Enter Patient Address
65 Permai
Enter Patient Phone Number
01922984756
Enter Gender
M
Enter Disease
Fever
Enter Status
Discharged

Return to Back Press 1 and for Exit Press 0 :
1

                ----------------------------------------------------------
                                WELCOME PATIENT SECTION
                ----------------------------------------------------------

                       1.Add New Patient Profile
                       2.Patient Records
Your Choice:
2


----------------------------------------------------------------------------------------------------------------------------
Name         Age        DOB            Address         Number          Gender     Disease             Status
----------------------------------------------------------------------------------------------------------------------------
Dars         20         12 Feb 2000    22 Permai       0193938748      M          Fever               Discharged
Raju         36         14 Mac 1984    2345 Okland     0134356423      M          Medical Checkup          Discharged
Siti         67         9 Dec 1857     344 Anggerik    0193933575      F          Blood Pressure           Admitted
loga         23         12 Apr 2004    65 Permai       01922984756     M          Fever               Discharged

Return to Back Press 1 and for Exit Press 0 :
```

When the user selects '1' he or she can add new patient list. While, the user selects '2'he or she can view patient existing records as show above.

DOCTOR

```
----------------------------------------------------------------
                    WELCOME DOCTOR SECTION
----------------------------------------------------------------

                1.Add New Doctor Profile
                2.Doctor Records
Your Choice:
1
Enter Doctor Name:
Ali
Enter Doctor ID:
CD18293
Enter Doctor Type:
Dermatologists
Enter Department
Dermatolgy
Enter Doctor Phone Number
0183848576

Return to Back Press 1 and for Exit Press 0 :
1


            ----------------------------------------------------------------
                        WELCOME DOCTOR SECTION
            ----------------------------------------------------------------

                    1.Add New Doctor Profile
                    2.Doctor Records
    Your Choice:
    2


    -----------------------------------------------------------------------------------------------------------
    Name                ID                  TYPE                DEPARMENT               NUMBER
    -----------------------------------------------------------------------------------------------------------
    Lim Wei             CB192830            Surgeon             General Surgeory            0192937364
    Loga        CB19083             Cardiologists       Cardiology              01123415482
    Abu Bakar           CD18273             Neurologists        Neurology               01929390765
    Ali         CD18293             Dermatologists      Dermatolgy              0183848576

    Return to Back Press 1 and for Exit Press 0 :
```

When the user selects '1' he or she can add new doctor list. While, the user selects '2'he or she can view doctor existing records as show above.

STAFF

```
            ----------------------------------------------------------------
                        WELCOME STAFF SECTION
            ----------------------------------------------------------------

                    1.Add New Staff Profile
                    2.Staff Records
    Your Choice:
    1
    Enter Staff Name:
    Siva
    Enter Staff ID:
    CF17263
    Enter Staff Type:
    Security
    Enter Department
    Safety
    Enter Staff Phone Number
    0129373736

    Return to Back Press 1 and for Exit Press 0 :
    1


                ----------------------------------------------------------------
                            WELCOME STAFF SECTION
                ----------------------------------------------------------------

                        1.Add New Staff Profile
                        2.Staff Records
        Your Choice:
        2


        -----------------------------------------------------------------------------------------------------------
        Name                ID                  TYPE                DEPARMENT               NUMBER
        -----------------------------------------------------------------------------------------------------------
        Siti                CB19246             Nurse               General Surgeory            0115489643
        Mala                CB19234             Receptionist        Patient Service         0193682953
        Lee                 CD14683             Manager             Human Resources         01293440184
        Siva                CF17263             Security            Safety              0129373736

        Return to Back Press 1 and for Exit Press 0 :
```

When the user selects '1' he or she can add new staff list. While, the user selects '2'he or she can view staff existing records as show above.

APPOINTMENT

```
                  ----------------------------------------------------------------
                            WELCOME APPOINTMENT SECTION
                  ----------------------------------------------------------------

                          1.Add New Appointment
                          2.Appointment Records
       Your Choice:
       1
       Enter Name:
       Sing
       Enter Date:
       30 Dec 2020
       Enter Time:
       4.15pm
       Enter Doctor Name
       Amir
       Enter Purpose
       Check-up

       Return to Back Press 1 and for Exit Press 0 :
       1

                  ----------------------------------------------------------------
                            WELCOME APPOINTMENT SECTION
                  ----------------------------------------------------------------

                          1.Add New Appointment
                          2.Appointment Records
       Your Choice:
       2


       --------------------------------------------------------------------------------------
       Name            DATE              TIME            DOC.NAME          PURPOSE
       --------------------------------------------------------------------------------------
       Mail            20 Dec 2020       11.30am         Loga              Heart Problem
       Leeye           25 Dec 2020       9.30am          Abu               Medical
       Siti            29 Dec 2020       2.00pm          Lim               High Fever
       Sing            30 Dec 2020       4.15pm          Amir              Check-up

       Return to Back Press 1 and for Exit Press 0 :
```

When the user selects '1' he or she can add new appointment list. While, the user selects '2'he or she can view appointment existing records as show above.

DEPARTMENT

```
                  --------------------------------------------------------------------
                            WELCOME DEPARMENT SECTION
                  --------------------------------------------------------------------

                          1.Add Department Details
                          2.Department Records
       Your Choice:
       1
       Enter Department Name:
       Hematology
       Enter Department ID:
       HM96
       Enter Staff Name:
       Ajay
       Enter Doctor Name
       Aisah

       Return to Back Press 1 and for Exit Press 0 :
       1

                  --------------------------------------------------------------------
                            WELCOME DEPARMENT SECTION
                  --------------------------------------------------------------------

                          1.Add Department Details
                          2.Department Records
       Your Choice:
       2


       --------------------------------------------------------------------------------------
       DEPARMENT NAME           DEPARMENT ID           STAFF.NAME        DOC.NAME
       --------------------------------------------------------------------------------------
       General Surgeory               GK23              Rajan                     Lim Wei
       Cardiology               CAR68                   Abu               Loga
       Neurology                N24             Lim               Abu Bakar
       Hematology               HM96            Ajay              Aisah

       Return to Back Press 1 and for Exit Press 0 :
```

When the user selects '1' he or she can add new department list. While, the user selects '2'he or she can view department existing records as show above.

```
-----------------------------------------------------------------
                WELCOME HOSPITAL MANAGEMENT SYSTEM
-----------------------------------------------------------------




-----------------------------------------------------------------
                           MAIN MENU

                    1.Patient
                    2.Doctor
                    3.Satff
                    4.Appoinment
                    5.Department
-----------------------------------------------------------------


 Enter Your Choice :
 9
  You Have Enter Wrong Choice!!!
 BUILD SUCCESSFUL (total time: 6 seconds)
```

This statement appears once the user enters invalid number.