

IBM CAREER EDUCATION

MAIN PROJECT

DOMAIN NAME: JAVA

HOSPITAL MANAGEMENT SYSTEM

Submitted By,

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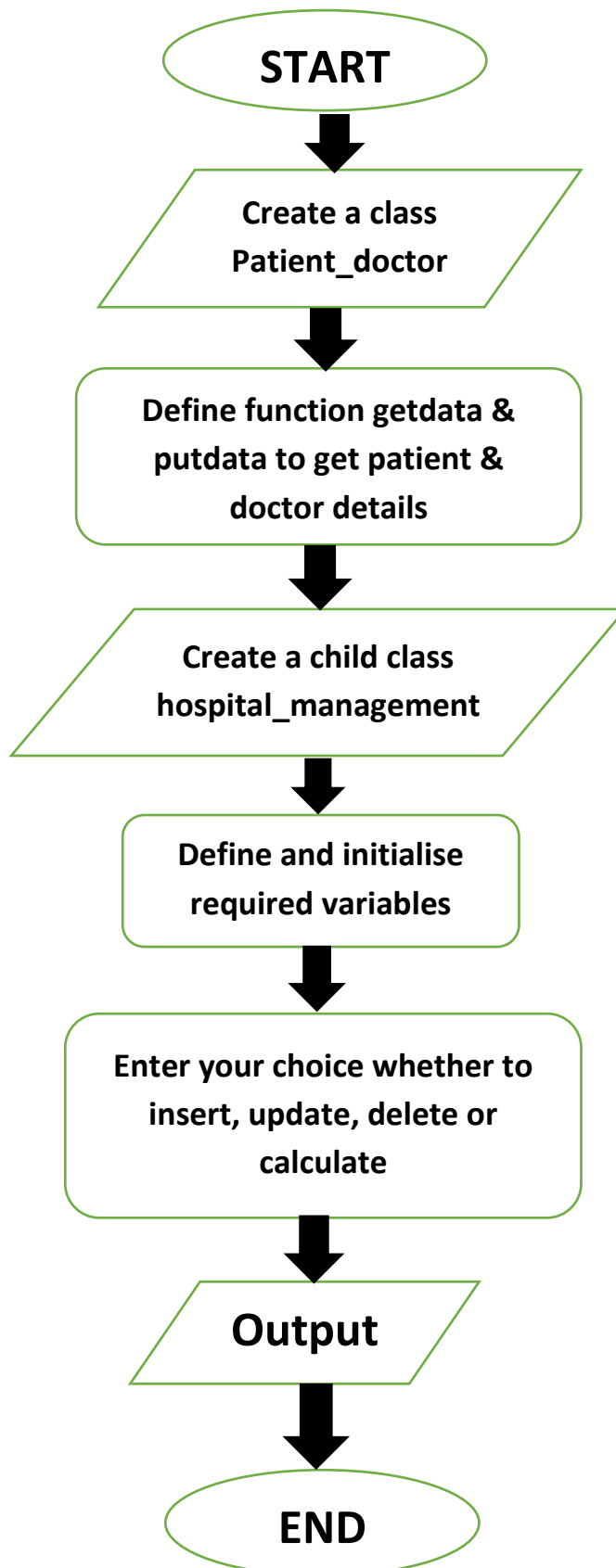
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Submitted To, A. Saai Sanjeev Achaarya

IBM Software Technical Trainer



FLOWCHART



SOFTWARE SPECIFICATIONS

- OPERATING SYSTEM : Linux
- ENVIRONMENT : IBM RAD Software

HARDWARE SPECIFICATIONS

- ☐ PROCESSOR : PENTIUM IV 2.8MHz
- ☐ RAM : 256 MB SD RAM
- ☐ MONITOR : 15" COLOR
- ☐ HARD DISK : 40 GB
- ☐ FLOPPY DRIVE : 1.44 MB

INTRODUCTION:

- Hospitals are key actors in national health systems, so it is necessary to promote efficient management of hospitals by implementing various strategies. Hospital Management System is designed for any hospital to replace their existing manual paper based system.
- This system can be used in Hospital, Clinic etc for maintaining the records of patients and doctors. It also helps in updating, deleting and displaying the records. It uses the concept of object oriented programming principles for the same.

DESCRIPTION:

- ▶ It stores the details of patients like patient ID, name, age, blood group, diagnosis, fees etc. and the doctor details like id, name, qualification, salary, contact number etc.
- ▶ Secondly, It helps in modifying the incorrect data or updating the patient details and doctor details.
- ▶ Furthermore, this system is useful in deleting a particular record. For e.g. if the patient's treatment is over and has to be discharged from the hospital, the patient's record can be deleted in this system.
- ▶ It can also be used to search a record of a patient or a doctor and display the details.

- ▶ It is also used to count the number of deaths of patient.

OVERALL Hospital Management System

- Stores the doctor details and patient information.
- Modfies or Updates the record.
- Deleting a particular record
- Searching a particular record
- Counting the number of deaths of a patient
- Displaying the details of doctors
- Displaying the details of patients

PROS:

- ▶ Minimize hand written work
- ▶ More efficient as it can search the record or count certain things faster than we can do in paper based system.
- ▶ Avoid errors and track every single detail: as a manual system can't assure foolproof and 100% accurate processing. But designing a computer based system like this removes the chances of error completely and avoid compliance issues and lawsuits, the 2 biggest hassles for medical centers and hospitals.
- ▶ Less time consuming.

CONS:

- ▶ COST: One of the biggest drawbacks of adding computer based systems to the hospitals is the cost. It costs money and a large hospital needs many computers to keep the system running smoothly.
- ▶ The process of software implementation is a tough task as it is important to learn everything regarding the software for utilizing it to the maximum.

HOSPITAL MANAGEMENT SYSTEM

PICTURES



HOSPITAL MANAGEMENT SYSTEM

AIM:

To implement a Hospital Management System which does the following:

- 1. Home Page/Login Page**
- 2. Insert, Updates, Deletes, Displays A Particular Record.**
- 3. Success Page**

PROGRAM:

Html Code:

HOME PAGE

HTML CODE:

```
<html>
<head>
    <title>Home Page</title>
    <link rel="stylesheet" type="text/css" href="style2.css">
    <link href="https://fonts.googleapis.com/css?family-Cinzel"
rel="stylesheet">
</head>
<body>
```


Hospitals are key actors in national health systems,so it is necessary to promote efficient management of hospitals by implementing various strategies.Hospital Management System is designed for any hospital to replace their existing manual paper based sytem.

This sytem can be used in Hospital,Clinic etc for maintaining the records of patients and their diagnosis.It also helps in

maintain the records of the doctors available and appointed to the patients.

It uses the concept of class,object oriented programming principles for the same.

ADVANTAGES

☐ It is fast, efficient and reliable

☐ Avoids data redundancy and inconsistency

☐ Very user-friendly

☐ Easy accessibility of data

☐ Number of personnel required is considerably less

☐ Provides more security and integrity to data

</p>

</body>

</html>

CSS CODE:

.bgimage{

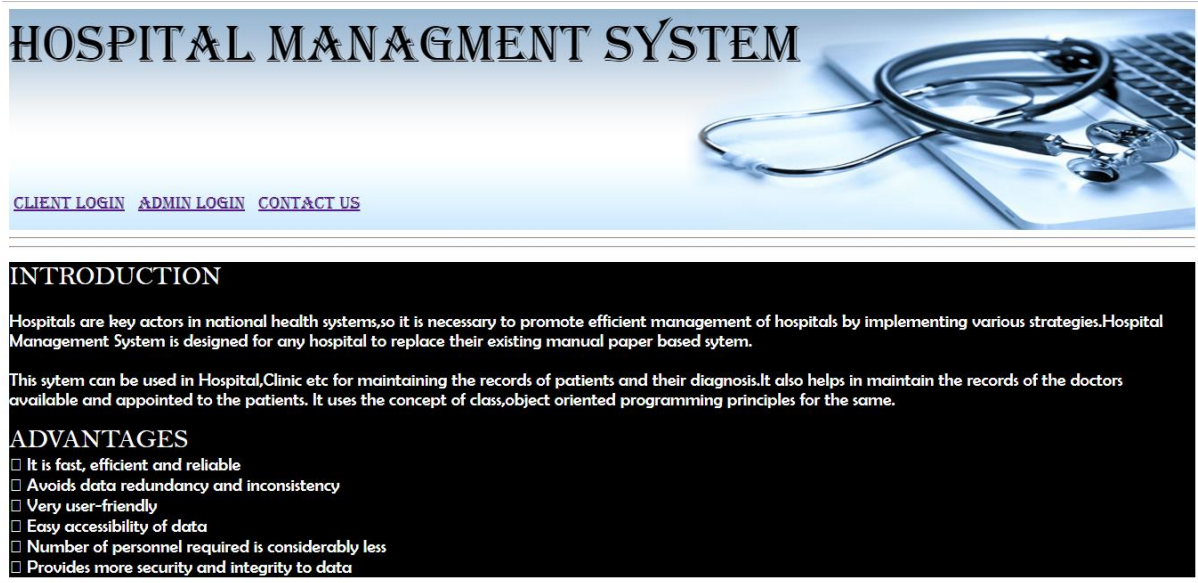
background-size:1450px 250px;

background-image:url("image.png");

```
        background-repeat:no-repeat;
    }
    .fonts{
        font-family:ALGERIAN;
        font-size:60px;
    }
    .names{
        font-family:ALGERIAN;
        font-size:20px;
    }
    p{
        background-image:url("black.png");
        background-size:1450px 700px;
    }

    .intro{
        font-family:Berlin Sans FB;
        font-size:20px;
    }
    .introname{
        font-family:Bell MT;
        font-size:30px;
    }
```

OUTPUT:



USER LOGIN

HTML CODE:

```
<html>
<head>
  <meta charset="UTF-8">
  <title>Login form</title>
  <link rel="stylesheet" type="text/css" href="style.css">
  <link href="https://fonts.googleapis.com/css?family-
Cinzel" rel="stylesheet">
</head>
<body>
  <div class="bgimage">
    <div class="centerdiv">
      
      <h2>USER LOGIN</h2>
      <form>
        <div>
```

```

        <input type="text" name=""
class="inputbox" placeholder="USERNAME">
        </div>
        <br>
        <div>
            <input type="password" name=""
class="inputbox" placeholder="PASSWORD">
        </div>
        <br>
        <div>
            <button type="Submit"> LOGIN
</button>
        </div>
    </form>
    <br>
    <div class="forget">
        <h4>Forget Password?</h4>
    </div>
</div>
</div>

</body>
</html>

```

CSS CODE:

```

*{
    margin:0;
    padding:0;
    font-family:'Cinzel',serif;
}

.bgimage{
    width:100%;

```

```
    height:100vh;
    background-image: linear-gradient(to bottom,#7b4397
0%,#dc2430 100%);
}

.centerdiv{
    width:350px;
    height:400px;
    position:absolute;
    top:50%;
    left:50%;
    background-color:yellow;
    transform: translate(-50%,-50%);
    background-image: linear-gradient(27deg,#fbd3e9 0%,#bb377d
100%);
    box-shadow:0 1px 6px rgb(0,0,0),0 1px 4px rgb(0,0,0);
}

#profile{
    width:120px;
    height:120px;
    border-radius:50%;
    position:relative;
    top:-60px;
    left:calc((350px - 120px)/2);
}

h2{
    text-align:center;
    color:white;
    text-transform:uppercase;
    font-size:2em;
    word-spacing:10px;
```

```
margin-top:-50px;
margin-bottom:50px;
text-shadow:-2px 2px 1px rgb(0,0,0);
}

.inputbox{
width:calc(100% - 40px);
height:30px;
display:block;
margin:auto;
padding:0 10px;
box-sizing:border-box;
}

::placeholder{
letter-spacing:2px;
color:black;
}

button{
width:calc(100% - 40px);
height:30px;
display:block;
margin:auto;
color:white;
background-color:rgb(0,0,90);
border:none;
}

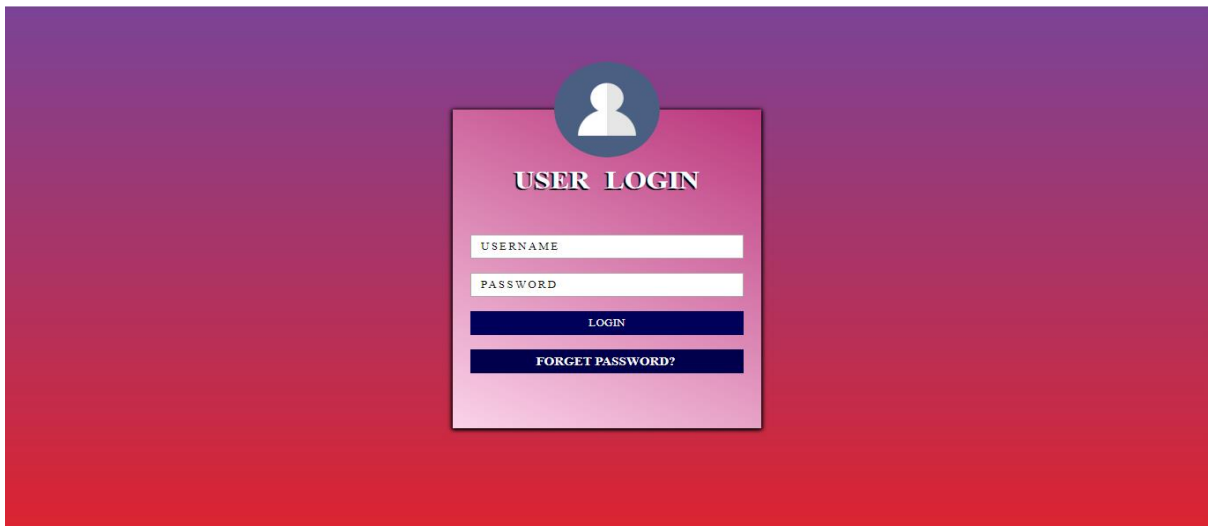
.forget{
width:calc(100% - 40px);
line-height:30px;
display:block;
```

```

margin:auto;
color:white;
background-color:rgb(0,0,75);
text-transform:uppercase;
font-size:15px;
text-align:center;
padding-right:3px;
box-sizing:border-box;
}

```

OUTPUT:



ADMIN LOGIN

HTML CODE:

```

<html>
<head>
  <meta charset="UTF-8">
  <title>Login form</title>
  <link rel="stylesheet" type="text/css" href="style1.css">
  <link href="https://fonts.googleapis.com/css?family-
Cinzel" rel="stylesheet">

```



```

</head>
<body>
  <div class="bgimage">
    <div class="centerdiv">
      
      <h2>ADMIN LOGIN</h2>
      <form>
        <div>
          <input type="text" name=""
class="inputbox" placeholder="USERNAME">
        </div>
        <br>
        <div>
          <input type="password" name=""
class="inputbox" placeholder="PASSWORD">
        </div>
        <br>
        <div>
          <button type="Submit"> SIGNIN
</button>
        </div>
      </form>
      <br>
      <div class="forget">
        <h4>Forget Password?</h4>
      </div>
    </div>
  </div>

</body>
</html>

```

CSS CODE:

```
*{
    margin:0;
    padding:0;
    font-family:'Cinzel',serif;
}

.bgimage{
    width:100%;
    height:100vh;
    background-image: linear-gradient(27deg,#00203FFF
30%,#ADEFD1FF 70%);
}

.centerdiv{
    width:350px;
    height:400px;
    position:absolute;
    top:50%;
    left:50%;
    background-color:yellow;
    transform: translate(-50%,-50%);
    background-image: linear-gradient(27deg,#ADEFD1FF
40%,#00203FFF 60%);
    box-shadow:0 1px 6px #0A84C6,0 1px 4px #0A84C6;
}

#profile{
    width:120px;
    height:120px;
    border-radius:50%;
    position:relative;
```

```
    top:-60px;
    left:calc((350px - 120px)/2);
}

h2{
    text-align:center;
    color:white;
    text-transform:uppercase;
    font-size:2em;
    word-spacing:10px;
    margin-top:-50px;
    margin-bottom:50px;
    text-shadow:-2px 2px 1px #0A84C6;
}

.inputbox{
    width:calc(100% - 40px);
    height:30px;
    display:block;
    margin:auto;
    padding:0 10px;
    box-sizing:border-box;
}

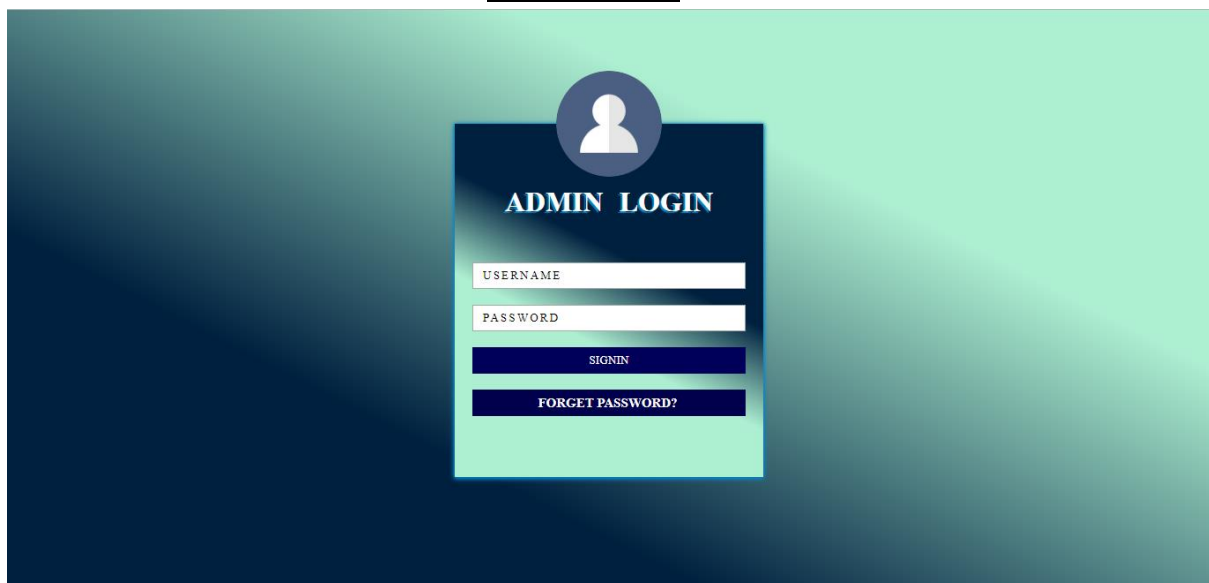
::placeholder{
    letter-spacing:2px;
    color:black;
}

button{
    width:calc(100% - 40px);
    height:30px;
    display:block;
```

```
margin:auto;
color:white;
background-color:rgb(0,0,90);
border:none;
}

.forget{
width:calc(100% - 40px);
line-height:30px;
display:block;
margin:auto;
color:white;
background-color:rgb(0,0,75);
text-transform:uppercase;
font-size:15px;
text-align:center;
padding-right:3px;
box-sizing:border-box;
}
```

OUTPUT:



CONTACT

HTML CODE:

```

<html>
<head>
    <title>Contact Page</title>
    <link rel="stylesheet" type="text/css" href="style3.css">
    <link href="https://fonts.googleapis.com/css?family-Cinzel"
rel="stylesheet">
</head>
<body>
    <div align="center">
        <p>
            <div class="contact">
                Contact Us:
            </div>
            <br>
            <div class="name1">
                Name:
            <div>
            <div class="name">
                H.S. Patel
            <div>
            <br>
            <div class="name1">
                Email:
            <div>
            <div class="name">
                ganpatuniversity@gmail.com
            <div>

            <br>
            <div class="name1">

```

Contact number:

<div>

<div class="name">

1233567100

</div>

</p>

<fieldset>

<legend>Email</legend>

<table>

<tr>

<td>To:</td>

<td><lable><input type="email" name="Enter email" id="Enter email" placeholder="Enter email" required></lable></td>

</tr>

<tr>

<td>Cc:</td>

<td><lable><input type="email" name="Enter email" id="Enter email" placeholder="Enter email" required></lable></td>

</tr>

<tr>

<td>Bcc:</td>

<td><lable><input type="email" name="Enter email" id="Enter email" placeholder="Enter email" required></lable></td>

</tr>

<tr>

<td>Subject:</td>

<td><lable><input type="text" name="Enter subject" id="Enter subject" placeholder="Enter subject" required></lable></td>

</tr>

<tr>

<td></td>

```

<td><textarea rows="6" cols="20"></textarea></td>
</tr>
<tr>
<td></td>
<td><input type="file" value="Choose file"></td>
</tr>
<tr>
<td></td>
<td><input type="submit" value="send"></td>
</fieldset>
</div>
</body>
<html>

```

CSS CODE:

```

body{
    background-image:linear-gradient(to bottom,#ed4264
0%,#ffedbc 100%);
}
.contact{
    font-family:ALGERIAN;
    font-size:40px;
}
.name1{
    font-family:Bahnschrift Light;
    font-size:30px;
}
.name{
    font-family:Bell MT;
    font-size:25px;
}

```

OUTPUT:

CONTACT US:

Name:
H.S. Patel

Email:
ganpatuniversity@gmail.com

Contact number:
1233567100

Email

To:

Cc:

Bcc:

Subject:

No file chosen

SUCCESS PAGE

HTML CODE:

```

<html>
<head>
    <title>Success Page</title>
    <link rel="stylesheet" type="text/css" href="style4.css">
    <link href="https://fonts.googleapis.com/css?family-Cinzel"
rel="stylesheet">
</head>
<body align="center">
    <br><br><br><br>
    
    <p class="thanks">
        Thank you !!
    </p>
    <p class="success">
        You have successfully created database of Hospital
Management System
    </p>
</body>

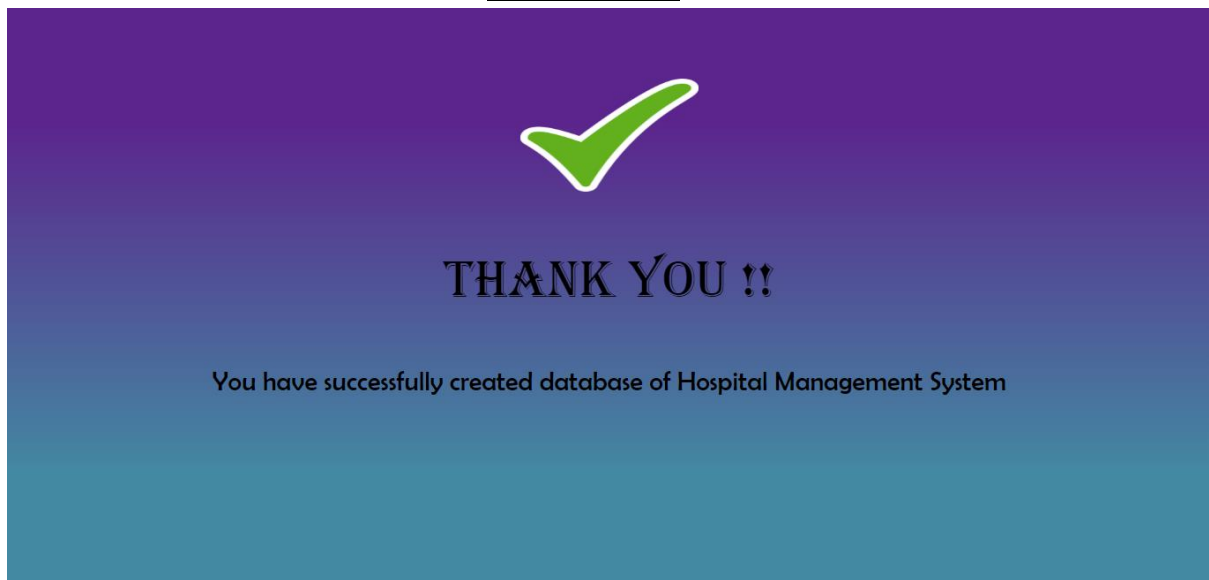
```


</html>

CSS CODE:

```
body{  
  
    background-image:linear-gradient(to bottom,#5c258d  
20%,#4389a2 80%);  
}  
  
.thanks{  
    font-family:ALGERIAN;  
    font-size:60px;  
}  
.success{  
    font-family:Berlin Sans FB;  
    font-size:30px;  
}
```

OUTPUT:



Java Code:

```

import java.util.*;
class patient_doctor
{
    String p_fname,p_lname,disease,outcome,blood_group;
    String qf,doc_fname,d_name,doc_lname;
    int i,p_id,p_age,advance_fee,treatment_fee,total_fee;
    int weight,d_id,d_age,salary;
    long p_contact,doc_contact;

    public void pat_setdata()
    {
        System.out.println("Enter id");
        Scanner sc= new Scanner(System.in);
        p_id=sc.nextInt();
        System.out.println("Enter first name");
        p_fname=sc.next();

        for(i=0;i<p_fname.length();i++)
        {
            char ch=p_fname.charAt(i);
            if(ch=='!' || ch=='@' || ch=='#' || ch=='$' || ch=='%' ||
ch=='^' || ch=='&' || ch=='*' || ch=='(' || ch=='))
            {
                System.out.println("Enter valid name");
                p_fname=sc.next();
            }
        }

        System.out.println("Enter last name");
        p_lname=sc.next();
        for(i=0;i<p_lname.length();i++)
        {
            char ch=p_lname.charAt(i);
            if(ch=='!' || ch=='@' || ch=='#' || ch=='$' || ch=='%' ||
ch=='^' || ch=='&' || ch=='*' || ch=='(' || ch=='))

```

```

        {
            System.out.println("Enter valid name");
            p_lname=sc.next();
        }
    }

    System.out.println("Enter Patient age");
    p_age=sc.nextInt();
    System.out.println("Enter diagnosis/disease patient is
suffering from");
    disease=sc.next();
    System.out.println("Enter Patient's Contact Number");
    p_contact=sc.nextLong();
    System.out.println("Enter Patient's Advance fee");
    advance_fee=sc.nextInt();
    System.out.println("Enter Patient's Treatment fee");
    treatment_fee=sc.nextInt();
    System.out.println("Enter Patient's Blood Group");
    blood_group=sc.next();
    System.out.println("Enter Patient's Weight");
    weight=sc.nextInt();
    System.out.println("Enter Doctor who is treating the
patient");
    d_name=sc.next();
    System.out.println("Enter Patient outcome(Under
treatment/Discharged/Death");
    outcome=sc.next();
    }

    public void pat_putdata()
    {
        System.out.println("Patient ID : "+p_id);
        System.out.println("Name of patient is "+p_fname+"
"+p_lname);
        System.out.println("Age is "+p_age+" years");
        System.out.println("Contact Number of the Patient is
"+p_contact);
    }

```

```

        System.out.println("Patient is suffering from "+disease);
        System.out.println("Patient is treated by Dr."+d_name);
        System.out.println("Patient's Blood Group is
"+blood_group);
        System.out.println("Patient's Weight is "+weight+"
kgs.");
        System.out.println("Patient's Advance Fee is
Rs."+advance_fee);
        System.out.println("Patient's Treatment Fee is
Rs."+treatment_fee);
        System.out.println("Outcome : "+outcome);
    }

    public void calculate_fee()
    {
        total_fee=advance_fee+treatment_fee;
        System.out.println("-----
");
        System.out.println("Patient's Total Fee is Rs."+total_fee);
        System.out.println("-----
");
    }

    public void doc_setdata()
    {
        System.out.println("Enter doctor id");
        Scanner sc= new Scanner(System.in);
        d_id=sc.nextInt();
        System.out.println("Enter Doctor's first name");
        doc_fname=sc.next();
        for(i=0;i<doc_fname.length();i++)
        {
            char ch=doc_fname.charAt(i);
            if(ch=='!' || ch=='@' || ch=='#' || ch=='$' || ch=='%' ||
ch=='^' || ch=='&' || ch=='*' || ch=='(' || ch==')')
            {
                System.out.println("Enter valid first name");

```

```

        doc_fname=sc.next();
    }
}
System.out.println("Enter Doctor's last name");
doc_lname=sc.next();

for(i=0;i<doc_lname.length();i++)
{
    char ch=doc_lname.charAt(i);
    if(ch=='!' || ch=='@' || ch=='#' || ch=='$' || ch=='%' ||
ch=='^' || ch=='&' || ch=='*' || ch=='(' || ch=='))
    {
        System.out.println("Enter valid last name");
        doc_lname=sc.next();
    }
}

System.out.println("Enter Doctor age");
d_age=sc.nextInt();
System.out.println("Enter Doctor's Contact Number");
doc_contact=sc.nextLong();
System.out.println("Enter Doctor's salary");
salary=sc.nextInt();
System.out.println("Enter Doctor's qualification");
qf=sc.next();
}

public void doc_putdata()
{
    System.out.println("id="+d_id);
    System.out.println("Name is Dr."+doc_fname+"
"+doc_lname);
    System.out.println("age="+d_age);
    System.out.println("Contact number is "+doc_contact);
    System.out.println("Doctor's Salary is "+salary);
    System.out.println("Doctor's Qualification : "+qf);
}

```

```

}

public class hospital_management extends patient_doctor
{
    static int count1=0;
    public static void main(String args[])
    {
        int i,ch,m,n,total,c1=0,c2=0;
        hospital_management[] patient=new
hospital_management[50];
        hospital_management[] doctor=new
hospital_management[50];
        Scanner scanner=new Scanner(System.in);
        System.out.println("-----
-----");
        System.out.println("WELCOME TO HOSPITAL
MANAGEMENT SYSTEM");
        System.out.println("-----
-----");
        System.out.println("How Many Patient Records You
Want To Enter?");
        n=scanner.nextInt();
        System.out.println("How Many Doctor Records You
Want To Enter?");
        m=scanner.nextInt();

        do
        {
            System.out.println("-----
-----");
            System.out.println("1.Insert Patient Details");
            System.out.println("2.Insert Doctor Details");
            System.out.println("3.Update Patient's Record");
            System.out.println("4.Update Doctor's Record");
            System.out.println("5.Delete Patient's Record");
            System.out.println("6.To Calculate Patient's Total Fee");

```

```

        System.out.println("7.Display the count of patients who
are discharged/admitted/died");
        System.out.println("8.Display all the patient
details/doctor details Or Retrieve all data");
        System.out.println("9.To exit from the system");
        System.out.println("Enter your choice");
        System.out.println("-----
-----");
        Scanner sc1=new Scanner(System.in);
        ch=sc1.nextInt();

        if(ch==5)
        {
            count1++;
        }

        switch(ch)
        {
            case 1:
                System.out.println("");
                System.out.println("-----
-----");
                System.out.println("Enter Patient details");
                for(i=0;i<n;i++)
                {
                    patient[i]=new
hospital_management();
                }
                for(i=0;i<n;i++)
                {
                    patient[i].pat_setdata();
                }
                System.out.println("-----
-----");
                break;

            case 2:

```

```

        System.out.println("-----
-----");
        System.out.println("Enter doctor details");
        for(i=0;i<m;i++)
        {
            doctor[i] = new
            hospital_management();
        }
        for(i=0;i<m;i++)
        {
            doctor[i].doc_setdata();
        }
        System.out.println("-----
-----");
        break;

    case 3:
        System.out.println("Enter id to search");
        int id2=sc1.nextInt();
        for(i=0;i<n;i++)
        {
            if(id2==patient[i].p_id)
            {
                System.out.println("What do you want
to update?");
                System.out.println("1.Age 2.Disease
3.Bill 4.Outcome 5.Weight");
                System.out.println("Enter your
choice");
                int ch2=sc1.nextInt();
                if(ch2==1)
                {
                    System.out.println("Enter age
you want to update");
                    int age2=sc1.nextInt();
                    patient[i].p_age=age2;
                }
            }
        }
    }
}

```



```

        if(ch2==2)
        {
            System.out.println("Enter
Disease");

            String dis2=sc1.next();
            patient[i].disease=dis2;
        }
        if(ch2==3)
        {
            System.out.println("Enter
patient's treatment fee");

            int new_fee=sc1.nextInt();

            patient[i].treatment_fee=new_fee;
        }
        if(ch2==4)
        {
            System.out.println("Enter
outcome");

            String
            new_outcome=sc1.next();

            patient[i].outcome=new_outcome;
        }
        if(ch2==5)
        {
            System.out.println("Enter
weight");

            int new_weight=sc1.nextInt();
            patient[i].weight=new_weight;
        }
        System.out.println("");
        System.out.println("-----
-----");
        System.out.println("Updated Record
:");

        patient[i].pat_putdata();

```

```

                                System.out.println("-----
-----");
                                }
                                }
                                break;

case 4:
    System.out.println("Enter doctor's id to
search");
    int id3=sc1.nextInt();
    for(i=0;i<m;i++)
    {
        if(id3==doctor[i].d_id)
        {
            System.out.println("What do you want
to update?");
            System.out.println("1.Age 2.Salary
3.Contact Number");
            System.out.println("Enter your
choice");
            int ch3=sc1.nextInt();
            if(ch3==1)
            {
                System.out.println("Enter age
you want to update");
                int age3=sc1.nextInt();
                doctor[i].d_age=age3;
            }
            if(ch3==2)
            {
                System.out.println("Enter
Doctor's new salary");
                int new_sal=sc1.nextInt();
                doctor[i].salary=new_sal;
            }
            if(ch3==3)
            {

```

```

                                System.out.println("Enter
Doctor's new contact number");
                                long
new_contact=sc1.nextLong();

doctor[i].doc_contact=new_contact;
                                }
                                System.out.println("");
                                System.out.println("-----
-----");
                                System.out.println("Updated record
:");
                                doctor[i].doc_putdata();
                                System.out.println("-----
-----");
                                }
                                }
                                break;

case 5:
    System.out.println("Enter record number to
delete");

    int pos=sc1.nextInt();
    if(pos>n)
    {
        System.out.println("Record does not
exist");
    }
    for(i=pos;i<n;i++)
    {
        patient[i-1].p_id=patient[i].p_id;
        patient[i-
1].p_fname=patient[i].p_fname;
        patient[i-
1].p_lname=patient[i].p_lname;
        patient[i-1].p_age=patient[i].p_age;

```

```

        patient[i-
1].advance_fee=patient[i].advance_fee;
        patient[i-
1].treatment_fee=patient[i].treatment_fee;
        patient[i-1].disease=patient[i].disease;
        patient[i-
1].d_name=patient[i].d_name;
        patient[i-
1].outcome=patient[i].outcome;
        n--;
    }
    System.out.println("-----
-----");
    System.out.println("Record deleted
successfully");
    System.out.println("Displaying all patient
details");
    for(i=0;i<n-1;i++)
    {
        System.out.println("-----
-----");
        patient[i].pat_putdata();
        System.out.println("-----
-----");
    }
    System.out.println("-----
-----");
    break;

    case 6:
        System.out.println("Enter patient ID whose
total fee you want to find??");
        int t1=sc1.nextInt();
        for(i=0;i<n;i++)
        {
            if(t1==patient[i].p_id)
            {

```

```

        patient[i].calculate_fee();
    }
}
break;

case 7:
    int count=0;
    String temp;
    for(i=0;i<n;i++)
    {
        temp=patient[i].outcome;
        if(temp.equals("death"))
        {
            count=count+1;
        }
    }
    System.out.println("-----
-----");
    System.out.println("Number of patients who
died are : "+count);
    System.out.println("-----
-----");
    break;

case 8:
    total=n-count1;
    for(i=0;i<total;i++)
    {
        int j=i+1;
        System.out.println("-----
-----");
        System.out.println("Displaying details
of Patient "+j);
        patient[i].pat_putdata();
        System.out.println("-----
-----");
    }

```

```

        System.out.println("");

        for(i=0;i<m;i++)
        {
            int j=i+1;
            System.out.println("-----
of Doctor "+j);
            System.out.println("Displaying details
            doctor[i].doc_putdata();
            System.out.println("-----
            ");
        }
        break;

        case 9:
            System.exit(0);
    }
}while(ch!=9);
}

```

EXPLANATION ABOUT PROJECT:

This project uses the concept of Inheritance where we have declared two classes: class patient_doctor and class hospital_management which extends the properties of class patient_doctor.

Functions used in this project are setdata and putdata to store the details of patients like patient ID, patient name, diagnosis, fee etc. and doctor details like doctor ID, doctor name, qualification, salary etc.

Secondly, It also helps in modifying the incorrect data or updating the patient details or doctor details or addition of new record.

Furthermore, this system is useful in deleting a particular record. For e.g. if the patient is discharged from the hospital, it is helpful in deleting the record.

It can also be used to search a record of a patient or a doctor and display the details.

It is also used to calculate the total bill for patient's treatment and count the number of deaths of patient.

OUTPUT SCREENSHOTS:

❖ Insert Patient's Record :

```

C:\Users\Admin\Desktop\OOP>javac hospital_management.java
C:\Users\Admin\Desktop\OOP>java hospital_management
-----
WELCOME TO HOSPITAL MANAGEMENT SYSTEM
-----
How Many Patient Records You Want To Enter?
3
How Many Doctor Records You Want To Enter?
3
-----
1.Insert Patient Details
2.Insert Doctor Details
3.Update Patient's Record
4.Update Doctor's Record
5.Delete Patient's Record
6.To Calculate Patient's Total Fee
7.Display the count of patients who are discharged/admitted/died
8.Display all the patient details/doctor details Or Retrieve all data
9.To exit from the system
Enter your choice
-----
1
-----
Enter Patient details
Enter id
1
Enter first name
Drishti#
Enter valid name
Drishti
Enter last name
Patel
Enter Patient age
18
Enter diagnosis/disease patient is suffering from
Flu
Enter Patient's Contact Number
9909942237
Enter Patient's Advance fee
300
-----

```



```

Enter Patient's Treatment fee
400
Enter Patient's Blood Group
B+
Enter Patient's Weight
58
Enter Doctor who is treating the patient
Sakshi
Enter Patient outcome(Under treatment/Discharged/Death)
Undertreatment
Enter id
2
Enter first name
Raj
Enter last name
Tripathi
Enter Patient age
36
Enter diagnosis/disease patient is suffering from
Malaria
Enter Patient's Contact Number
9428849013
Enter Patient's Advance fee
400
Enter Patient's Treatment fee
1200
Enter Patient's Blood Group
O+
Enter Patient's Weight
66
Enter Doctor who is treating the patient
Jayesh
Enter Patient outcome(Under treatment/Discharged/Death)
death
Enter id
3
Enter first name
Shloka
Enter last name
Patel
Enter Patient age
27
Enter diagnosis/disease patient is suffering from
Dengue

```

```

Dengue
Enter Patient's Contact Number
9428849023
Enter Patient's Advance fee
400
Enter Patient's Treatment fee
1300
Enter Patient's Blood Group
B+
Enter Patient's Weight
56
Enter Doctor who is treating the patient
Parth
Enter Patient outcome(Under treatment/Discharged/Death)
Undertreatment
-----
-----
-----

```

❖ Insert Doctor Details :

```

-----
1.Insert Patient Details
2.Insert Doctor Details
3.Update Patient's Record
4.Update Doctor's Record
5.Delete Patient's Record
6.To Calculate Patient's Total Fee
7.Display the count of patients who are discharged/admitted/died
8.Display all the patient details/doctor details Or Retrieve all data
9.To exit from the system
Enter your choice
-----

```

```

2
-----
Enter doctor details
Enter doctor id
101
Enter Doctor's first name
Sakshi
Enter Doctor's last name
Mishra
Enter Doctor age
45
Enter Doctor's Contact Number
9909978467
Enter Doctor's salary
68000
Enter Doctor's qualification
Gynec
Enter doctor id
102
Enter Doctor's first name
Jayesh
Enter Doctor's last name
Sharma
Enter Doctor age
43
Enter Doctor's Contact Number
9426678901
Enter Doctor's salary
80000
Enter Doctor's qualification
Surgeon

```

```

Enter doctor id
103
Enter Doctor's first name
Parth
Enter Doctor's last name
Panchal
Enter Doctor age
39
Enter Doctor's Contact Number
9428849045
Enter Doctor's salary
65000
Enter Doctor's qualification
Surgeon
-----

```

❖ Update Patient's Record :

```

-----
1.Insert Patient Details
2.Insert Doctor Details
3.Update Patient's Record
4.Update Doctor's Record
5.Delete Patient's Record
6.To Calculate Patient's Total Fee
7.Display the count of patients who are discharged/admitted/died
8.Display all the patient details/doctor details Or Retrieve all data
9.To exit from the system
Enter your choice
-----
3
Enter id to search
1
What do you want to update?
1.Age 2.Disease 3.Bill 4.Outcome 5.Weight
Enter your choice
5
Enter weight
60
-----
Updated Record :
Patient ID : 1
Name of patient is Drishti Patel
Age is 18 years
Contact Number of the Patient is 9909942237
Patient is suffering from Flu
Patient is treated by Dr.Sakshi
Patient's Blood Group is B+
Patient's Weight is 60 kgs.
Patient's Advance Fee is Rs.300
Patient's Treatment Fee is Rs.400
Outcome : Undertreatment
-----

```

(Here we update patient's weight)

```

-----
1.Insert Patient Details
2.Insert Doctor Details
3.Update Patient's Record
4.Update Doctor's Record
5.Delete Patient's Record
6.To Calculate Patient's Total Fee
7.Display the count of patients who are discharged/admitted/died
8.Display all the patient details/doctor details Or Retrieve all data
9.To exit from the system
Enter your choice
-----
3
Enter id to search
3
What do you want to update?
1.Age 2.Disease 3.Bill 4.Outcome 5.Weight
Enter your choice
1
Enter age you want to update
29
-----
Updated Record :
Patient ID : 3
Name of patient is Shloka Patel
Age is 29 years
Contact Number of the Patient is 9428849023
Patient is suffering from Dengue
Patient is treated by Dr.Parth
Patient's Blood Group is B+
Patient's Weight is 56 kgs.
Patient's Advance Fee is Rs.400
Patient's Treatment Fee is Rs.1300
Outcome : Undertreatment
-----
-----
1.Insert Patient Details

```

(Here we update patient's age)

❖ Update Doctor's Record :

```

-----
1.Insert Patient Details
2.Insert Doctor Details
3.Update Patient's Record
4.Update Doctor's Record
5.Delete Patient's Record
6.To Calculate Patient's Total Fee
7.Display the count of patients who are dischared/admitted/died
8.Display all the patient details/doctor details Or Retrieve all data
9.To exit from the system
Enter your choice
-----
4
Enter doctor's id to search
101
What do you want to update?
1.Age 2.Salary 3.Contact Number
Enter your choice
3
Enter Doctor's new contact number
978849012
-----
Updated record :
id=101
Name is Dr.Sakshi Mishra
age=45
Contact number is 978849012
Doctor's Salary is 68000
Doctor's Qualification : Gynec
-----

```

(Here we update doctor's contact)

❖ Delete Patient's Record :

❏ Command Prompt - java hospital_management

```

1.Insert Patient Details
2.Insert Doctor Details
3.Update Patient's Record
4.Update Doctor's Record
5.Delete Patient's Record
6.To Calculate Patient's Total Fee
7.Display the count of patients who are discharged/admitted/died
8.Display all the patient details/doctor details Or Retrieve all data
9.To exit from the system
Enter your choice
-----
5
Enter record number to delete
3
-----
Record deleted successfully
Displaying all patient details
-----
Patient ID : 1
Name of patient is Drishti Patel
Age is 18 years
Contact Number of the Patient is 9909942237
Patient is suffering from Flu
Patient is treated by Dr.Sakshi
Patient's Blood Group is B+
Patient's Weight is 60 kgs.
Patient's Advance Fee is Rs.300
Patient's Treatment Fee is Rs.400
Outcome : Undertreatment
-----
Patient ID : 2
Name of patient is Raj Tripathi
Age is 36 years
Contact Number of the Patient is 9428849013
Patient is suffering from Malaria
Patient is treated by Dr.Jayesh
Patient's Blood Group is O+
Patient's Weight is 66 kgs.
Patient's Advance Fee is Rs.400
Patient's Treatment Fee is Rs.1200
Outcome : death
-----
-----

```

❖ Calculating Patient's Total Fee :

```

--- Command Prompt java hospital_management ---
-----
1.Insert Patient Details
2.Insert Doctor Details
3.Update Patient's Record
4.Update Doctor's Record
5.Delete Patient's Record
6.To Calculate Patient's Total Fee
7.Display the count of patients who are discharged/admitted/died
8.Display all the patient details/doctor details Or Retrieve all data
9.To exit from the system
Enter your choice
-----
6
Enter patient ID whose total fee you want to find??
1
-----
Patient's Total Fee is Rs.700
-----
-----

```

❖ Displaying Count Of Patient's Who Died :

```

-----
1.Insert Patient Details
2.Insert Doctor Details
3.Update Patient's Record
4.Update Doctor's Record
5.Delete Patient's Record
6.To Calculate Patient's Total Fee
7.Display the count of patients who are discharged/admitted/died
8.Display all the patient details/doctor details Or Retrieve all data
9.To exit from the system
Enter your choice
-----
7
-----
Number of patients who died are : 1
-----
-----

```

❖ Displaying all patient details and doctor details

```

-----
8
-----
Displaying details of Patient 1
Patient ID : 1
Name of patient is Drishti Patel
Age is 18 years
Contact Number of the Patient is 9909942237
Patient is suffering from Flu
Patient is treated by Dr.Sakshi
Patient's Blood Group is B+
Patient's Weight is 60 kgs.
Patient's Advance Fee is Rs.300
Patient's Treatment Fee is Rs.400
Outcome : Undertreatment
-----

```

```

-----
Displaying details of Patient 2
Patient ID : 2
Name of patient is Raj Tripathi
Age is 36 years
Contact Number of the Patient is 9428849013
Patient is suffering from Malaria
Patient is treated by Dr.Jayesh
Patient's Blood Group is O+
Patient's Weight is 66 kgs.
Patient's Advance Fee is Rs.400
Patient's Treatment Fee is Rs.1200
Outcome : death
-----

```

```

-----
Displaying details of Doctor 1
id=101
Name is Dr.Sakshi Mishra
age=45
Contact number is 978849012
Doctor's Salary is 68000
Doctor's Qualification : Gynec
-----

```

```

-----
Displaying details of Doctor 2
id=102
Name is Dr.Jayesh Sharma
age=43
Contact number is 9426678901
Doctor's Salary is 80000
Doctor's Qualification : Surgeon
-----

```



```
Displaying details of Doctor 3
id=103
Name is Dr.Parth Panchal
age=39
Contact number is 9428849045
Doctor's Salary is 65000
Doctor's Qualification : Surgeon
-----
1.Insert Patient Details
2.Insert Doctor Details
3.Update Patient's Record
4.Update Doctor's Record
5.Delete Patient's Record
6.To Calculate Patient's Total Fee
7.Display the count of patients who are discharged/admitted/died
8.Display all the patient details/doctor details Or Retrieve all data
9.To exit from the system
Enter your choice
-----
9
```

REFERENCES:

1. <https://github.com>
2. <https://www.programmingwithbasics.com>
3. <http://programmer2programmer.net>

CONCLUSION:

Thus, we conclude that this system is useful for storing patient details and doctor details and updating, deleting, displaying records of patients and doctors respectively.