Final-Hospital-Management-System

Due Dec 20, 2020 by 11:59pm **Points** 100 **Submitting** a file upload
Available after Dec 6, 2020 at 12am

Hospital Management System Project in Java Explanation

THIS PROJECT IS DUE ON December 20th 2020 at Midnight

This(Hospital Management System Project in Java) is a very popular projects among students. In this project, we'll cover **1. DOCTOR, 2. PATIENT, 3. MEDICAL, 4. LAB, 5. FACILITY, 6. STAFF** tables. Your job is to first create a new project and copy the code and make sure that the code runs. All the code is provided. I would like you to create multiple files; each for each concept as Patient, Doctor, Staff, etc. Once the project is created; run the project and get familiar with the code. (Make sure your put together code works before you attempting to make further changes). Run your application and observe existing doctors by selecting option 1 in your program and and then selecting option 2 to see further. Then look at the patients by selecting option 2 and then again option 2. Etc.

You can also save the details of New Doctor like Below.

1. ID:
2. Name:
3. Specialization:
4. Working Time:
5. Qualification:

You can see the newly updated list of the doctors and by pressing 2 you can see those details Check Below.

Doctors List

---

id Name Specilist Timing Qualification Room No.

---

21 Dr.Ghanendra ENT 5-11AM MBBS,MD 17
32 Dr.Vikram Physician 10-3AM MBBS,MD 45
17 Dr.Rekha Surgeon 8-2AM BDM 8
33 Dr.Pramod Artho 10-4PM MBBS,MS 40

Return to Back Press 1 and for Main Menu Press 0

You can also check the patient list or you can admit new patient same as Doctors List for that you have to go to the main menu and select patient than 2 option will occur 1. Add New Entry or 2. Existing Patients List and by pressing 2 you can check the patient details.

Patients List

---

id Name Disease Gender Admit Status Age

---

12 Pankaj Cancer Male y 30
13 Sumit Cold Male y 23
14 Alok Maleriya Male y 45
15 Ravi Diabetes Male y 25

Return to Back Press 1 and for Main Menu Press 0

You will also realize that you can add new doctors, or patients etc. via this program however the data is Transient meaning once you kill the application; all entered data is gone. You real job is to change this program such that all the defined data in the program lives in external files and not in your program. This way when you add new data such as a new doctor; it will stay in the system. Also, if you delete any data; it will be deleted completely from the file system.

What you need to do:

1) First Create a system class diagram using UML. You can use Visio or any other tool to create the class diagram.

2) You second job is to take all the hard coded data from this application and store that in text files. In other words all the Doctor data should be stored in a doctors.txt file, all patient data should be stored in patient.txt file etc. One file for each entity. (look at the provided program for reading and writing data to files: https://stthomas.instructure.com/courses/35352/pages/hint-on-reading-and-writing-data-from-the-file-csv?module_item_id=1210802)

3) Build the logic in your application to read the text files and create the necessary objects in the code. By doing this step you are liberating your code from being hard coded with strings.

4) Build the logic in your program to save the entered data to these files such that once the data is entered it stays as a permanent record.

5) Print out the results of all entities after adding at least one more record (Runtime screen shots) and add to project.

6) Make sure to include all the text files with you project.

7) Create a custom exceptions called DoctorNotFoundException and throw that exception when a doctor record is not found in the system.

8) Zip the whole project and send me the zipped version. THE WHOLE PROJECT such that I can simply run your project using eclipse.

Below you can find the Hospital Management System Project in Java with Source Code.

```
//Start of Code

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

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

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

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

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

Calendar calendar = Calendar.getInstance();

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\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();
}
}
}

/* Hospital Management System Project in Java with Source Code PDF Visit for more
https://www.programmingwithbasics.com/ */

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);
}
}

//End of Code
```

Reference and Credits: **https://www.programmingwithbasics.com/2017/11/hospital-management-system-project-in.html (https://www.programmingwithbasics.com/2017/11/hospital-management-system-project-in.html)**