



NITTE
EDUCATION TRUST

N.M.A.M. INSTITUTE OF TECHNOLOGY

(An Autonomous Institution affiliated to Visvesvaraya Technological University, Belagavi)

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Department of Electronics and Communication Engineering

Object-Oriented programming with C++

HOSPITAL MANAGEMENT SYSTEM USING INHERITANCE

MINI PROJECT REPORT BY

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HOSPITAL MANAGEMENT SYSTEM USING INHERITANCE

SOURCE CODE:-

```
#include<iostream>

using namespace std;

class hosp
{
protected:
char hn[20],to[20],dn[20];
public:
void get()
{
cout<<"\n Hospital's Details";
cout<<"\n\n Enter the hospital's name:";
cin>>hn;
cout<<"\n Enter the town's name:";
cin>>to;
cout<<"\n Enter the Doctor's name:";
cin>>dn;
}
void put()
{
cout<<"Hospital Management System\n";
```

```

cout<<"*****\n";
cout<<"\n\t\t\t"<<hn;
cout<<"\n\t\t\t"<<to;
cout<<"\n\t\t\t"<<dn<<" MBBS";
}
};
class inpt:virtual public hosp
{
protected:
char pn[10][20],dis[10][20];
int n,i,rom[10],d[10];
public:
void getpat()
{
cout<<"\n In-Patient's Details";
cout<<"\n _____";
cout<<"\n\n Enter the no.of.patient's admitted:\n";
cin>>n;
for(i=0;i<n;i++)
{
cout<<(1+i)<<"Patient's name:";
cin>>pn[i];
cout<<"\n Affected by:";

```

```

cin>>dis[i];
cout<<"\n Room no:";
cin>>rom[i];
cout<<"\n No.of.days stayed:";
cin>>d[i];
}
}
void putpat()
{
cout<<"\n In-patient's Details";
cout<<"\n _____";
cout<<"\n\n No.of.patient's:"<<n;
for(int i=0;i<n;i++)
{
cout<<"\n name:"<<pn[i];
cout<<"\n Affected by:"<<dis[i];
cout<<"\n No.of.days admitted:"<<d[i];
cout<<"\n The amount to be paid:Rs."<<d[i]*250;
}
}
};
class outpt:virtual public hosp
{

```

protected:

```
char name[10][20],odis[10][20];
```

```
int n1,j,t[10];
```

public:

```
void getpt()
```

```
{
```

```
cout<<"\n Outpatient's Details";
```

```
cout<<"\n ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^";
```

```
cout<<"\n\n Enter the no.of.outpatient's:\n";
```

```
cin>>n1;
```

```
for(j=0;j<n1;j++)
```

```
{
```

```
cout<<(1+j)<<" Patient's name:";
```

```
cin>>name[j];
```

```
cout<<"\n Token no:";
```

```
cin>>t[j];
```

```
cout<<"\n Affected by:";
```

```
cin>>odis[j];
```

```
}
```

```
}
```

```
void putpt()
```

```
{
```

```
cout<<"\n Outpatient's Details";
```

```

cout<<"\n ^^^^^^^^^^^^^^^^^^^^^^^^^";
cout<<"\n\n No.of.outpatient's:"<<n1;
for(int j=0;j<n1;j++)
{
cout<<"\n Name:"<<name[j];
cout<<"\n Token no:"<<t[j];
cout<<"\n Affected by:"<<odis[j];
cout<<"\n Amount to be paid Rs.100";
}
}
};

class display:public outpt,public inpt
{
public:
void result()
{
put();
putpat();
putpt();
}
};

```

```

int main()

{

cout<<"\n Hospital Management Using Hybrid Inheritance";

cout<<"\n *****";

display x; //Object declaration for the derived class "display"

x.get(); //Get the details of Doctors

x.getpat(); // Get In-Patient Details

x.getpt(); // Get Out-Patient Details

x.result(); //Display All details about the Hospital

return 0;

}

```

```

1 #include<iostream>
2 using namespace std;
3 class hosp
4 {
5     protected:
6     char hn[20],to[20],dn[20];
7     public:
8     void get()
9     {
10         cout<<"\n Hospital's Details";
11         cout<<"\n\n Enter the hospital's name:";
12         cin>>hn;
13         cout<<"\n Enter the town's name:";
14         cin>>to;
15         cout<<"\n Enter the Doctor's name:";
16         cin>>dn;
17     }
18     void put()
19     {
20         cout<<"Hospital Management System\n";
21         cout<<"*****\n";
22         cout<<"\n\t\t"<<hn;
23         cout<<"\n\t\t"<<to;
24         cout<<"\n\t\t"<<dn<<" MBBS";
25     }
26 };
27 class inpt:virtual public hosp
28 {
29     protected:
30     char pn[10][20],dis[10][20];
31     int n,i,rom[10],d[10];
32     public:
33     void getpat()
34     {
35         cout<<"\n In-Patient's Details";
36         cout<<"\n _____";
37         cout<<"\n\n Enter the no.of.patient's admitted:\n";
38         cin>>n;

```

helloproject.c - Code::Blocks 20.03

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inpt: putpat():void

Management Projects Files FSy Workspace

```
39 for(i=0;i<n;i++)
40 {
41     cout<<(i+1)<<"Patient's name:";
42     cin>>pn[i];
43     cout<<"\n Affected by:";
44     cin>>dis[i];
45     cout<<"\n Room no:";
46     cin>>rom[i];
47     cout<<"\n No.of.days stayed:";
48     cin>>d[i];
49 }
50
51 void putpat()
52 {
53     cout<<"\n In-patient's Details";
54     cout<<"\n _____";
55     cout<<"\n\n No.of.patient's:"<n;
56     for(int i=0;i<n;i++)
57     {
58         cout<<"\n name:"<<pn[i];
59         cout<<"\n Affected by:"<<dis[i];
60         cout<<"\n No.of.days admitted:"<<d[i];
61         cout<<"\n The amount to be paid:Rs."<<d[i]*250;
62     }
63 }
64
65 class outpt:virtual public hosp
66 {
67 protected:
68     char name[10][20],odis[10][20];
69     int n1,j,t[10];
70 public:
71     void getpt()
72     {
73         cout<<"\n Outpatient's Details";
74         cout<<"\n _____";
75         cout<<"\n\n Enter the no.of.outpatient's:";
76         cin>>n1;
```

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management system cpp mini project.cpp - Code::Blocks 20.03

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display:

Management Projects Files FSy Workspace

```
77 cin>>n1;
78 for(j=0;j<n1;j++)
79 {
80     cout<<(j+1)<<" Patient's name:";
81     cin>>name[j];
82     cout<<"\n Token no:";
83     cin>>t[j];
84     cout<<"\n Affected by:";
85     cin>>odis[j];
86 }
87
88 void putpt()
89 {
90     cout<<"\n Outpatient's Details";
91     cout<<"\n _____";
92     cout<<"\n\n No.of.outpatient's:"<n1;
93     for(int j=0;j<n1;j++)
94     {
95         cout<<"\n Name:"<<name[j];
96         cout<<"\n Token no:"<<t[j];
97         cout<<"\n Affected by:"<<odis[j];
98         cout<<"\n Amount to be paid Rs.100";
99     }
100 }
101
102 class display:public outpt,public inpt
103 {
104 public:
105     void result()
106     {
107         put();
108         putpat();
109         putpt();
110     }
111 }
112
113 int main()
114 {
115     cout<<"\n Hospital Management Using Hybrid Inheritance";
```

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management system cpp mini project.cpp - Code::Blocks 20.03

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<global>

Management

Projects Files FSy Workspace

```
87 }
88 void putpt()
89 {
90     cout<<"\n Outpatient's Details";
91     cout<<"\n *****";
92     cout<<"\n\n No.of.outpatient's:"<<"\n\n";
93     for(int j=0;j<n1;j++)
94     {
95         cout<<"\n Name:"<<name[j];
96         cout<<"\n Token no:"<<t[j];
97         cout<<"\n Affected by:"<<odis[j];
98         cout<<"\n Amount to be paid Rs.100";
99     }
100 }
101
102 class display:public outpt,public inpt
103 {
104     public:
105     void result()
106     {
107         put();
108         putpat();
109         putpt();
110     }
111 };
112
113 int main()
114 {
115     cout<<"\n Hospital Management Using Hybrid Inheritance";
116     cout<<"\n *****";
117     display x; //Object declaration for the derived class "display"
118     x.get(); //Get the details of Doctors
119     x.getpat(); // Get In-Patient Details
120     x.getpt(); // Get Out-Patient Details
121     x.result(); //Display All details about the Hospital
122     return 0;
123 }
```

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OUTPUT RESULT

```
"E:\management system cpp mini project.exe"

Hospital Management Using Hybrid Inheritance
*****
Hospital's Details

Enter the hospital's name:McGANN

Enter the town's name:SHIVAMOGGA

Enter the Doctor's name:GANESH

In-Patient's Details

Enter the no.of.patient's admitted:
2
1 Patient's name:SUNIL

Affected by:DEHYDRATION

Room no:004

No.of.days stayed:5
2 Patient's name:VIKRANT

Affected by:VIRALINFECTION

Room no:008

No.of.days stayed:9

Outpatient's Details
*****
Enter the no.of.outpatient's:
2
1 Patient's name:SAGAR

Token no:02

Affected by:FEVER
2 Patient's name:SAVRUDH

Token no:06

Affected by:COLD&COUGH
Hospital Management System
*****

McGANN
```

```
"E:\management system cpp mini project.exe"

Affected by:COLD&COUGH
Hospital Management System
*****

                McGANN
                SHIVAMOGGA
                GANESH MBBS

In-patient's Details

No.of.patient's:2
name:SUNIL
Affected by:DEHYDRATION
No.of.days admitted:5
The amount to be paid:Rs.1250
name:VIKRANT
Affected by:VIRALINFECTION
No.of.days admitted:9
The amount to be paid:Rs.2250
Outpatient's Details
*****

No.of.outpatient's:2
Name:SAGAR
Token no:2
Affected by:FEVER
Amount to be paid Rs.100
Name:SAVRUDH
Token no:6
Affected by:COLD&COUGH
Amount to be paid Rs.100
Process returned 0 (0x0)   execution time : 184.046 s
Press any key to continue.
```

