

A Project Report On "HOSPITAL MANAGEMENT"

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This is to certify that **Cdt.ABHISHEK KUMAR**, Roll No. 23 of Class XII has prepared the report on the Project entitled "HOSPITAL MANAGEMENT". The report is the result of his efforts & endeavors. The report is found worthy of acceptance as final project report for the subject Computer Science of Class XII.

Signature Signature (Internal Examiner) (External Examiner)



DECLARATION

I hereby declare that the project work entitled "HOSPITAL MANAGEMENT", submitted to Department of Computer Science, SAINIK SCHOOL KALIKIRI is prepared by me. All the coding is the result of my personal efforts.

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ACKNOWLEDGEMENT

I would like to express a deep sense of thanks & gratitude to my **project guide Mr. Anoop V S** Sir for guiding me immensely through the course of the project. He always evinced keen interest in my work. His constructive advice & **constant motivation** have been responsible for the **successful** completion of this project.

My sincere thanks go to Lt Col Susheel Kumar Mahapatro SM, our Offg Principal sir, for his co-ordination in extending every possible support for the completion of this project.

I also thanks to my **parents** for their **motivation & support**. I must thanks to my **classmates** for their timely help & support for **compilation** of this **project**.

Last but not the least, I would like to thank all those who had helped directly or indirectly towards the completion of this project.

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WORKING DESCRIPTION

This program is designed as an e-HOSPITAL

- ➤ It felicitates the user with the flexibility of maintaining all sorts of indexing required in order to maintain records of doctors, medicines, inpatients, out-patients and payments related information.
 - ➤ It automatically assigns doctors to the patients on the basis of avaiblity of doctor and their class of expertise.
 - ➤ It also manages salary of doctor and other staff working in the hospital.

HOW IT WORKS

- ➤ It actually stores all it's data in a database as table.
- ➤ This database is connected to python programming language by using which we can interpret data from database.
- > we can alter the data stored in database, we can delete old data and can also add new data to it.
- ➤ It displays the required content to user when the concerned commands are called off.

CODE OF THE PROGRAM

```
import mysql.connector as conn
from prettytable import PrettyTable
from texttable import Texttable
#from datetime import datetime
#import time, calender
#import csv
global data
from os import system
mydb=conn.connect(host='localhost',
           user='root',
           password='student',
           database='Hospital_Management')
if mydb.cursor:
   print('done')
#Function is for entering information into InPatient_Management table
def entryIPM():
   sl=input("Enter Slno:")
   pn=input("Enter the Patient Name:")
   pd=input("Enter Patient_ID:")
   se=input("Enter the Sex of the Patient:")
   ag=input("Enter the Age of the Patient:")
   il=input("Enter the Illness of the Patient:")
   cd=input("Enter the Name of the Doctor the Patient is Consulting:")
   rn=input("Enter the Room no of the Patient:")
```

```
da=input("Enter the Date of Admission of the Patient:")
   pa=input("Enter the Payment Amount:")
   data=(sl,pn,pd,se,ag,il,cd,rn,da,pa)
   sql='insert into InPatient_Management
values(%s,%s,%s,%s,%s,%s,%s,%s,%s);'
   c=mydb.cursor()
   c.execute(sql,data)
   mydb.commit()
   print("successfully entered....")
   system("cls")
#Fuction to show InPatient_Management table
def showIPM():
   sql='select * from InPatient_Management;'
   c=mydb.cursor()
   c.execute(sql)
   data=c.fetchall()
   system("cls")
   t=PrettyTable(['Slno','Patient_Name','Patient_ID','Sex','Age','Illness',
         'Consulting_Doctor','Room_No','Date_of_Admission','Payment'])
   for i in data:
           t.add_row(list(i))
   print(t)
#Function is for entering information into OutPatient_Management table
def entryOPM():
   sl=input("Enter Slno:")
   pn=input("Enter the Patient Name:")
   pd=input("Enter Patient_ID:")
   se=input("Enter the Sex of the Patient:")
   ag=input("Enter the Age of the Patient:")
   il=input("Enter the Illness of the Patient:")
```

```
dv=input("Enter the Date of Visit of the Patient:")
   pa=input("Enter the Payment Amount:")
   data=(sl,pn,pd,se,ag,il,dv,pa)
   sql='insert into OutPatient_Management
values(%s,%s,%s,%s,%s,%s,%s,%s);'
   c=mydb.cursor()
   c.execute(sql,data)
   mydb.commit()
   print("successfully entered....")
   system("cls")
#Function is to show OutPatient_Management table
def showOPM():
   sql='select * from OutPatient_Management;'
   c=mydb.cursor()
   c.execute(sql)
   data=c.fetchall()
   system("cls")
t=PrettyTable(['Slno','Patient_Name','Patient_ID','Sex','Age','Illness','Date_of
Visiting',
             'Payment'])
   for i in data:
           t.add_row(list(i))
   print(t)
#Function is to enter the information into the Doctor table
def entryDoctor():
   sl=input("Enter Slno:")
   dn=input("Enter the Doctor Name:")
   dd=input("Enter Doctor_ID:")
   se=input("Enter the Sex of the Doctor:")
   ag=input("Enter the Age of the Doctor:")
   da=input("Enter the Department of the Doctor:")
   ad=input("Enter the Days on which the Doctor is Available:")
   sa=input("Enter the Salary of the Doctor:")
```

```
data=(sl,dn,dd,se,ag,da,ad,sa)
   sql='insert into Doctor values(%s,%s,%s,%s,%s,%s,%s,%s,%s);'
   c=mydb.cursor()
   c.execute(sql,data)
   mydb.commit()
   print("successfully entered....")
   system("cls")
#Function to show Doctor table
def showDoctor():
   sql='select * from doctor;'
   c=mydb.cursor()
   c.execute(sql)
   data=c.fetchall()
   system("cls")
   t=PrettyTable(['Slno','Doctor_Name','Doctor_ID','Sex','Age','Department',
             'Available_Days','Salary'])
   for i in data:
           t.add_row(list(i))
   print(t)
#Fuction to enter information into pay table
def entrypay():
   sl=input("Enter SlNo:")
   PID=input("Enter patient ID:")
   Pn=input("Enter patient name:")
   kat=katta()
   ndo,SSC,med,ot,cost=kat
   data=(sl,PID,Pn,ndo,SSC,med,ot,cost)
   sql='insert into pay values(%s,%s,%s,%s,%s,%s,%s,%s,%s);'
   c=mydb.cursor()
   c.execute(sql,data)
   mydb.commit()
def showpay():
   sql='select*from pay;'
```

```
c=mydb.cursor()
   c.execute(sql)
   data=c.fetchall()
   system("cls")
t=PrettyTable(['SlNo','Patient_ID','Patient_Name','Room_Rent','Scanning_Bil
l', 'Medicine_Charges', 'Other_Charges', 'Total_Payments'])
   for i in data:
           t.add_row(list(i))
   print(t)
def entryMed():
   sl=input("Enter the SlNo:")
   mi=input("Enter medicine ID:")
   mn=input("Enter medicine name:")
   cost=input("Enter cost of medicine:")
   data=(sl,mi,mn,cost)
   sql='inset into medicine values(%s,%s,%s,%s);'
   c=mydb.cursor()
   c.execute(sql,data)
   mydb.commit()
def showmed():
   sql='select*from medicine;'
   c=mydb.cursor()
   c.execute(sql)
   data=c.fetchall()
   system("cls")
   t=PrettyTable(['SlNo','Medicine ID','Medicine Name','Cost'])
   for i in data:
           t.add_row(list(i))
   print(t)
def freakkan():
```

med=0

```
nm=int(input("Enter no. of medicine the patient has taken:"))
   1=0
   if (l<nm):
      mn=int(input("Enter the medicine code:"))
      cos=f'select cost from medicine where Medicine_ID = {mn}'
      c=mydb.cursor()
      c.execute(cos)
      zen=c.fetchall()
      cos=int(zen[0][0])
      med+=cos
      1+=1
   else:
      return med
def katta():
   global nd
   ad=input("Was the patient admitted (Y/N):")
   SC=input("Did the patient undergo scans(Y/N):")
   med=freakkan()
   cost=0
   if (ad.lower() == 'y'):
       nd=int(input("For how many days was the patient admitted:"))
       IC=input("Was the patient in ICU(Y/N):")
       if (IC.lower() =='y'):
          nc=int(input("For how days was the patient admitted in ICU:"))
          nco=nc*3000
       nd=nd-nc
       ndo=(nd*1500)+nco
       cost+=ndo
   else:
          cost = 0
   if (SC=='Y'):
       mr=input("Did the patient undergo MRI scan(Y/N):")
       ct=input("Did the patient undergo CT scan(Y/N):")
       us=input("Did the patient undergo Ultrasound scan(Y/N):")
       xr=input("Did the patient take X-Ray(Y/N):")
```

```
SSC=0
       if (mr.lower() =='y'):
          SSC+=9000
       if (ct.lower() =='y'):
          SSC+=4500
       if (us.lower() =='y'):
           SSC+=2000
       if (xr.lower() =='y'):
          SSC += 300
       cost+=SSC
   ot=int(input("Enter other charges:"))
   med = 0
   cont=0
   cont+=med
   ndo=(nd*1500)+nco
   SSC=0
   data=(ndo,SSC,med,ot,cost)
   return data
#__mainfunction__
def main():
   system("cls")
   while(True):
      print("HOSPITAL MANAGEMENT SYSTEM")
      print("1:Add patient details")
      print("2:Show Inpatient details")
      print("3:Add outpatient details")
      print("4:Show outpatient details")
      print("5:Add doctor details")
      print("6:Show doctor details")
      print("7:Add payment details")
      print("8:Show payment details")
```

```
print("9:show medicine")
      print("10:Exit")
      choice=int(input("\t Please select an above option:"))
      if (choice==1):
          entryIPM()
      elif (choice==2):
          showIPM()
      elif (choice==3):
          entryOPM()
      elif (choice==4):
          showOPM()
      elif (choice==5):
          entryDoctor()
      elif (choice==6):
          showDoctor()
      elif (choice==7):
          entrypay()
      elif (choice==8):
          showpay()
      elif (choice==9):
          showmed()
      elif (choice==10):
          break
      else:
           print("Wrong choice...")
main() #Main function call
```

OUTPUT SCREENS

```
###### WELCOME TO THE HOSPITAL DATABASE MANAGEMENT #######
HOSPITAL MANAGEMENT SYSTEM
1:Add patient details
2:Show Inpatient details
3:Add outpatient details
4:Show outpatient details
5:Add doctor details
6:Show doctor details
7:Add payment details
8:Show payment details
9:show medicine
10:Exit
          PLEASE SELECT AN ABOVE OPTION:
        PLEASE SELECT AN ABOVE OPTION: 1
Enter Slno:2
Enter the Patient Name: DINKAR
Enter Patient ID:0031
Enter the Sex of the Patient:M
Enter the Age of the Patient:18
Enter the Illness of the Patient: CORONA
Enter the Name of the Doctor the Patient is Consulting: RAMGOPAL VERMA
Enter the Room no of the Patient:31
Enter the Date of Admission of the Patient: 2020-12-13
Enter the Payment Amount: 1200
         -----SUCCESSFULLY ENTERED!!!!!!------
     PLEASE SELECT AN ABOVE OPTION: 2
 Slno | Patient Name | Patient ID | Sex | Age | Illness | Consulting Doctor | Room No | Date of Admission | Payment |
  | abhishek | 13003 | m | 18 | fever | ram | 23 | 2021-03-15 | 12000
     DINKAR | 0031 | M | 18 | CORONA | RAMGOPAL VERMA | 31 | 2020-12-13 | 1200
```

```
PLEASE SELECT AN ABOVE OPTION:5
```

Enter Slno:1

Enter the Doctor Name: RAJGOPAL VERMA

Enter Doctor ID:12005

Enter the Sex of the Doctor:M Enter the Age of the Doctor:48

Enter the Department of the Doctor: VIROLOGY

Enter the Days on which the Doctor is Available: ALL DAYS

Enter the Salary of the Doctor:80000

-----SUCCESSFULLY ENTERED!!!!!!-----

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