

# **PROJECT REPORT**

## **PROJECT NAME: HOSPITAL MANAGEMENT SYSTEM**

### **OBJECTIVES:**

- The project has been designed in python to display the information regarding the doctor's availability, fees, timings of 10 different departments of a hospital.
- The admin can book an appointment for the patient.
- The user can also view the appointment details.

The departments selected are:

1. Outpatient(OPD)
2. Inpatient\_Service(IP)
3. Psychology
4. Cardiology
5. ENT
6. Gastroenterology
7. Nutrition
8. Physiotherapy
9. Hematology
10. Neurology

**MAIN MENU** consists of the following options

**1. View Department Information**

- The user has to enter the department number as displayed in the menu.
- The information about doctors availability, fees, timings will be displayed automatically.
- The main information is stored in a Text file. This file is opened in Jupyter notebook through python code and all its contents are transformed into a list and the information is displayed through a function.

**2. Book an appointment**

- The admin has to enter the password
- Book an appointment by entering the department number, patient name, age, phone number, address.
- The details are stored in a list that will be transferred to a text file using file handling methods.

**3. View the appointment details**

- All the appointments will be displayed from a text file using file handling methods.

**Software Requirements:** Notepad, Python, Jupyter Notebook

```
In [1]: import random
#To print the Department information
class details:
    def _init_(self,list1,option1):
        self.list1=list1
        self.option1=option1

class show(details):
    def show1(self):
        for i in range(len(self.list1)):
            if self.option1==self.list1[i]:
                print("\nDepartment Name and Number:",self.list1[i-1]+" "+self.list1[i])
                print("Doctor's Available: ",self.list1[i+1])
                print("Fees: ",self.list1[i+2])
                print("Timings: ",self.list1[i+3])
                break
            elif self.option1=='11':
                print("\nEmergency contact details: 040-1231233, 789456123")
                break
            else:
                pass
        continuechoice()

var=open("C:/Users/Reena/Desktop/personal/python/Departments.txt",'r')
var1=var.read()
var2=var1.split()
input1=[]#to book the appointment

a1="HOSPITAL MANAGEMENT SYSTEM\n"
print(a1.center(100))
print("-"*100,"\n")

def departments():
    print("\nDepartment Number and Department name\n")
    print(" 1 Outpatient\n 2 Inpatient_Service(IP)\n 3 Psychology\n 4 Cardiology\n 5 Gastroenterology\n 6 Gastroenterology\n 7 Nutrition\n 8 Physiotherapy\n 9 Hematology\n")

def menu():
    print("MAIN MENU")
    print("1. View Department Information")
    print("2. Book an appointment")
    print("3. View the appointment details")
    print("4. Exit")
    opt=str(input("\n Enter the option number: "))
    return opt

def bookmenu1():
    departments()
    h=str(input("\nSelect the Department Number from the list:"))
    h1=""
    #department name
    for i in range(len(var2)):
        if h==var2[i]:
            h1=var2[i-1]
            input1.append(h1)
            break
```

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        else:
            pass
    if h1=='':
        print("\nINCORRECT DEPARTMENT NUMBER')
        bookmenu1()
    else:
        pass

def bookmenu2():
    h2=str(input("\n1. Enter Patient Name: "))
    h3=str(input("2. Enter Age: "))
    h4=str(input("3. Enter Phone Number: "))
    h5=str(input("4. Enter Home Address: "))
    if (h2=='') or (h3=='') or (h4=='') or (h5==''):
        print("\n ALL DETAILS ARE MANDATORY")
        bookmenu2()
    else:
        input1.append(h2)
        input1.append(h3)
        input1.append(h4)
        input1.append(h5)

def Timeslot():
    print("\nTime slots Available:",end=" ")
    time1=random.sample(range(9,18),3)
    print(sorted(time1))
    Timeslot1=str(input("Enter the time slot: "))
    if Timeslot1=='':
        print("\nENTER THE TIME SLOT')
        Timeslot()
    else:
        input1.append(Timeslot1)

def confirmation():
    bookmenu1()
    bookmenu2()
    Timeslot()
    print("\nAppointment Confirmed")
    Appid=random.randrange(1000,5000)
    input1.append(Appid)
    print("Appointment ID:", Appid)
    list(map(str,input1))
    appointment=open("C:/Users/Reena/Desktop/personal/python/Appointment.txt", 'a')
    write1="/" .join(map(str,input1))
    appointment.write("\n"+write1)
    appointment.close()
    print("\n")
    mainmenu()

def continuechoice():
    for m in range(100):
        continue1=str(input("\nDo you still want to continue with Department Men
        if continue1=='y':
            print("\n")
            dept_num=depchoice()
            break
        elif continue1=='n':

```

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        print("\n")
        mainmenu()
        break
    else:
        print("\n ENTER THE CORRECT CODE y/n")
        continuechoice()
        break

def password():
    password1=str(input("\nEnter Password: "))
    if password1=='1234':
        confirmation()
    else:
        print("\nWRONG PASSWORD")
        password()

def depchoice():
    departments()
    count=0
    dept_num=str(input("\nSelect the Department Number from the list:"))
    for i in range(len(var2)):
        if dept_num==var2[i]:
            obj1=show(var2,dept_num)
            obj1.show1()
            count+=1
            break
        else:
            pass

    if count==0:
        print("\nINCORRECT DEPARTMENT NUMBER")
        depchoice()
    else:
        pass

def userchoice(choice):
    if choice=='1':
        depchoice()
    elif choice=='2':
        #admin has to enter the password
        password()
    elif choice=='3':
        view1=open("C:/Users/Reena/Desktop/personal/python/Appointment.txt",'r')
        print("\n",view1.read(),"\n")
        view1.close()
        mainmenu()
    elif choice=='4':
        pass
    else:
        print("\nSELECT THE CORRECT OPTION\n")
        mainmenu()

def mainmenu():
    menuchoice=menu()
    userchoice(menuchoice)

mainmenu()

```

var.close()

## HOSPITAL MANAGEMENT SYSTEM

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### MAIN MENU

1. View Department Information
2. Book an appointment
3. View the appointment details
4. Exit

Enter the option number: 1

Department Number and Department name

- 1 Outpatient
- 2 Inpatient\_Service(IP)
- 3 Psychology
- 4 Cardiology
- 5 ENT
- 6 Gastroenterology
- 7 Nutrition
- 8 Physiotherapy
- 9 Hematology
- 10 Neurology
- 11 Emergency

Select the Department Number from the list: 1

Department Name and Number: Outpatient(OPD) 1

Doctor's Available: 5-Doctors

Fees: 2000/per/visit

Timings: 24/7

Do you **still** want to continue with Department Menu(y/n): n

### MAIN MENU

1. View Department Information
2. Book an appointment
3. View the appointment details
4. Exit

Enter the option number: 2

Enter Password: 1234

Department Number and Department name

- 1 Outpatient
- 2 Inpatient\_Service(IP)
- 3 Psychology
- 4 Cardiology
- 5 ENT
- 6 Gastroenterology

- 7 Nutrition
- 8 Physiotherapy
- 9 Hematology
- 10 Neurology
- 11 Emergency

Select the Department Number from the list:1

- 1. Enter Patient Name: Rina
- 2. Enter Age: 30
- 3. Enter Phone Number: 9912367616
- 4. Enter Home Address: Secunderabad

Time slots Available: [9, 10, 16]

Enter the time slot: 9

Appointment Confirmed  
Appointment ID: 1050

MAIN MENU

- 1. View Department Information
- 2. Book an appointment
- 3. View the appointment details
- 4. Exit

Enter the option number: 3

Department\_Name/Patient\_Name/Age/Phone\_Number/Home\_Address/Time\_slot/Appoint  
ment\_id  
Outpatient(OPD)/Rina/30/9912367616/Secunderabad/9/1050

MAIN MENU

- 1. View Department Information
- 2. Book an appointment
- 3. View the appointment details
- 4. Exit

Enter the option number: 4

In [ ]: