# Newlife Hospital Management System



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Class: 12A

Subject: Computer Science

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#### Department of Computer Science

## **Certificate**

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Certified that Miss/Master <u>Divyalakshmi V.P.</u>
of Grade <u>12</u> Section <u>A</u> has carried out project work in Computer Science prescribed by the Central Board of Secondary Education, New Delhi during the academic year <u>2021-2022</u>.

Teacher-in-charge	
Date:	
External Examiner	Internal Examiner

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## <u>Acknowledgements</u>

I would like to take this opportunity to express my heartfelt gratitude to my guiding light, my teacher - Ms. Monika Somadder- without whose constant guidance and encouragement, I would not have been able to successfully complete this project. Ms. Monika has helped me by providing me with valuable feedback and has helped in rectifying every single one of my errors in each crucial stage of my project.

Her motivation and encouragement have always fuelled me to think outside the box and experiment in coding, right from the start of the academic year. Her dedication to Computer Science and her interactive and simple style of teaching makes the subject easy to understand and also, instils in her students a sense of passion. Without her guidance and support this journey would not have been as successful and memorable as it is now.

## **Problem Definition**

With the exponential advancement of Information Technology and other allied fields over the past decade, the world has witnessed a rapid implementation of IT in all fields ranging from agriculture to health industry.

Hospitals and clinics hold an important place in the society in terms of human welfare. According to statistics, about 1,308,219 people visit their local hospitals/clinics daily and considering the current COVID-19 pandemic, the need for medical services and vaccinations has increased manifold.

Maintaining patient records precisely, accurately and swiftly is the need of the hour. Manual registering of details would be a tedious and redundant process as there is a greater chance of errors.

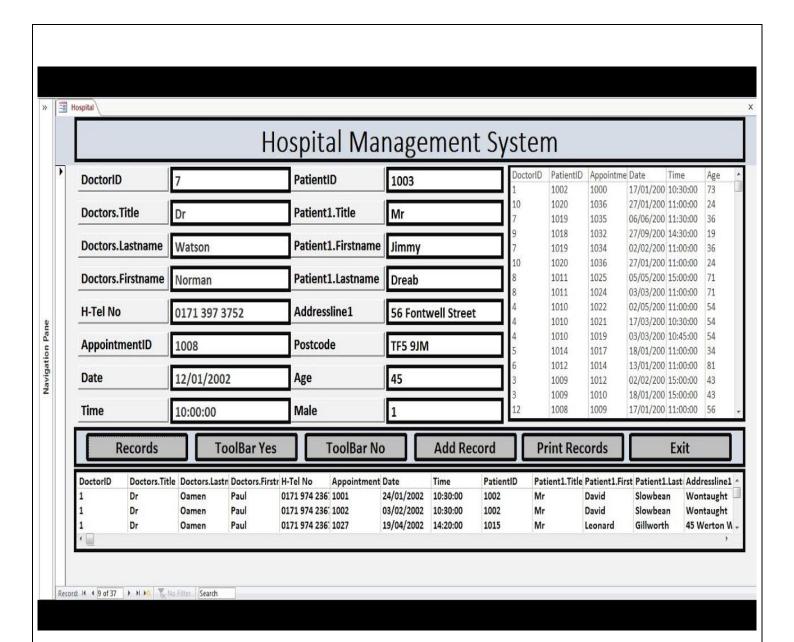
Therefore, in light of these points, we need an easily compatible and operatable menu-driven database management program for hospitals.

Newlife Hospitals' Database Management System is a basic menu structured python program that gives an easy solution to manage the large data associated with patient records, namely the Patient ID, Patient Name, Charge of the Bill, and the Patient's admittance status.

The following options can be used to manipulate Patient record data and help the staff maintain it updated at all times:-

- 1) View the existing records
- 2) Add a new record
- 3) Modify an existing record
- 4) Delete an existing record
- 5) Admit a new patient
- 6) Discharge a patient
- 7) Exit the database program

The data is stored in the form of binary files which makes it easy to amend at any instant. The simplicity and high utility of this Program makes it an efficient solution to maintain records.







## Hardware and Software Requirements

## 1) Hardware



Monitor



Keyboard



Mouse



Printer



Intel Core CPU (Used here – i7 10<sup>TH</sup> GEN CPU)



Hard Disk

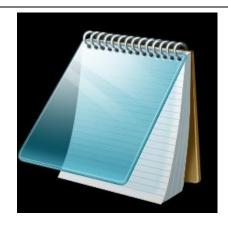
## 2) Software



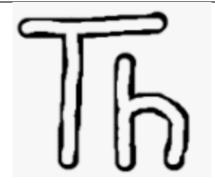
Microsoft Word 2019 in Office 365



Python 3.7.5



Notepad



Thonny IDE



**Snipping Tool** 



Grammarly

## Binary File Data

SNO.	PATIENT_ID	PATIENT_NAME	CHARGE	STATUS
1.	1001	Ramesh Raman	450	Admitted
2.	1002	Samuel Raj	560	Admitted
3.	1003	Adhavan Menon	800	Discharged
4.	1004	Harry Jackson	500	Admitted
5.	1005	Peter Jones	350	Discharged
6.	1006	Maxwell Smith	400	Discharged
7.	1007	Yash Chopra	500	Discharged
8.	1008	Suresh Gopal	450	Admitted
9.	1009	Krishna Sekhar	750	Admitted
10.	1010	Bindu Raj	400	Discharged

## Algorithm

Step 1: Open Thonny, click on the program file and run the program.

Step 2: Choose the appropriate option from the menu displayed.

```
NEWLIFE GROUP OF HOSPITALS
         Where Care Comes First.
 DATABASE MENU
Choose one of the following options to access Patient Records
               | **************
   MAINTENANCE
                   TRANSACTION
  1 - VIEW
  2 - ADD
                 6 - DISCHARGE
  3 - MODIFY
  4 - DELETE
 >>>>> By- Divyalakshmi(11A)
                      <<<<<<
```

Step 3: If 'VIEW' option is chosen,

Step 3.1: Enter the Patient's ID number.

Step 3.1.1: If the ID exists, the details are displayed

Step 3.1.2: If the ID doesn't exist, error message is shown.

Step 3.2: The menu reappears, and entry of choice is required.

#### Step 4: If 'ADD' option is chosen,

Step 4.1: Enter the Patient's ID number.

Step 4.1.1: If the Patient ID doesn't already exist in the database, then input

details.

Step 4.1.2: If the Patient's ID exists, then a warning message is displayed.

Step 4.3: The menu reappears, and entry of choice is required.

## Step 5: If 'MODIFY' option is chosen,

Step 5.1: Enter the Patient's ID number.

Step 5.2: Question on whether to modify the Patient's name appears with 'yes' and 'no' as the options.

Step 5.2.1: If 'yes' is selected, enter modified name.

Step 5.2.2: If 'no' is selected, next question appears.

Step 5.3: Question on whether to modify the charge appears with 'yes' and 'no' as the options.

Step 5.3.1: If 'yes' is selected, enter modified charge.

Step 5.3.2: If 'no' is selected, next question appears.

Step 5.4: Question on whether to modify the status appears with 'yes' and 'no' as the options.

Step 5.4.1: If 'yes' is selected, enter modified status. The message is displayed stating that the record is modified.

Step 5.4.2: If 'no' is selected, message stating that record is not modified is displayed.

Step 5.5: The menu reappears, and entry of choice is required.

Step 6: If 'DELETE' option is selected,

Step 6.1: Enter the Patient ID.

Step 6.2: If Patient ID exists, the patient record is deleted. The deleted record is also displayed for the user.

Step 6.3: The menu reappears, and entry of choice is required.

Step 7: If 'ADMIT' option is selected,

Step 7.1: Enter the Patient ID number.

Step 7.2: If the ID exists, the details are displayed.

Step 7.2.1: If the patient has already been admitted, then 'Patient is Already Admitted!' is displayed.

Step 7.2.2: If the patient has not yet been admitted, then question on whether to admit is displayed.

Step 7.2.2.1: If 'yes' is selected, then patient is admitted.

Step 7.2.2.2: If 'no' is selected, then patient is not admitted.

Step 7.3: The menu reappears, and entry of choice is required.

Step 8: If 'DISCHARGE' option is selected,

Step 8.1: Enter the Patient ID number.

Step 8.2: If the ID exists, the details are displayed.

Step 8.2.1: If the patient has already been discharged, then 'Patient is Already Discharged!' is displayed.

Step 8.2.2: If the patient has not yet been discharged, then question on whether to discharge is shown.

Step 8.2.2.1: If 'yes' is selected, then patient is discharged.

Step 8.2.2.2: If 'no' is selected, then patient is not discharged.

Step 8.3: The menu reappears, and entry of choice is required.

Step 9: If 'EXIT' option is selected, the program's execution control goes immediately out of the 14

## loop and stops the database program. Record doesn't exist Adding a new record VIEW Trying to add a record Record exists that already exists Record Modified ADD Record not modified MODIFY **Record Deleted Newlife Hospitals** DELETE **Database Patient** Management admitted **Program** Patient not ADMIT admitted Patient already admitted **Patient** discharged Patient not discharged Patient already **DISCHARGE EXIT** discharged 15

## **Program Listing**

```
1 #Holiday Homework Computer Science Project by Divyalakshmi (12A)
3
  #Topic- Hospital Management System Database
4 #The following is the program for the creation of the Menu Design and the functioning of the same.
6
 import pickle as pic
8 import os
10
 def ViewRecord(pt_ID):
      f = open("PatientRecords.dat", 'rb')
      found = 0
13
14
      try:
         while True:
            ptrec = pic.load(f)
16
            if ptrec[0] == pt_ID:
17
               pt_name = ptrec[1]
               pt_char = ptrec[2]
18
19
               pt_stat = ptrec[3]
20
               found = 1
      except:
22
23
         pass
24
25
      if found == 1:
         print('Patient ID: ', pt_ID)
print('Patient Name: ', pt_name)
26
         print('Charge/Bill Amount: ', pt_char)
print('Status: ', pt_stat)
27
28
29
      elif found == 0:
30
         print('Patient Record not found!')
31
      f.close()
32
34
35
   def AddRecord(pt_ID):
36
      f = open ('PatientRecords.dat', 'rb')
37
      found = 0
38
      try:
39
         while True:
40
            ptrec = pic.load(f)
41
            if ptrec[0] == pt_ID:
42
               found = 1
43
      except:
44
         pass
45
      f.close()
46
47
      if found == 1:
         print('This Patient ID already exists! Try again')
48
49
      elif found == 0:
         f = open('PatientRecords.dat', 'ab')
51
         pt_name= (input('Please Enter Patient Name: '))
52
         pt_char= int(input('Please Enter Charge/Bill Amount: '))
53
         pt_stat= (input('Please Enter Patient Status: '))
54
         ptnewrec = [pt_ID, pt_name, pt_char, pt_stat]
55
         pic.dump(ptnewrec, f)
56
         print('Patient Record Added!')
57
         f.close()
   59
60
61
   def ModifyRecord(pt_ID):
62
        f1 = open ('PatientRecords.dat', 'rb')
63
        f2 = open('TempPatientRecords.dat', 'wb')
64
        found = 0
65
66
        try:
67
            while True:
68
                ptrec = pic.load(f1)
69
                if ptrec[0] == pt_ID:
70
                    pt_ID = ptrec[0]
71
                    pt_name = ptrec[1]
72
                    pt_char = ptrec[2]
73
                    pt_stat = ptrec[3]
                                                                                              16
                    print('Patient Name: ', pt_name)
74
75
                    ques_name = input('Modify Patient Name? (yes/no): ')
```

```
76
 77
                    if ques_name in ('Yes', 'yes'):
                        mod_name = input("Enter Patient's New Name: ")
 78
 79
                        new_ptrec = [pt_ID, mod_name, pt_char, pt_stat]
 80
                        found = 1
                        print('Charge/Bill Amount: ', pt_char)
 81
 82
                        ques_char = input('Modify Charge/Bill Amount? (yes/no): ')
 83
 84
                        if ques_char in ('Yes', 'yes'):
 85
                            mod_char = int(input("Enter New Charge/Bill Amount: "))
 86
 87
                            new_ptrec = [pt_ID, mod_name, mod_char, pt_stat]
                            print('Status:
                                           ', pt_stat)
 89
                            ques_stat = input('Modify Status? (yes/no): ')
 91
                            if ques_stat in ('Yes', 'yes'):
                                mod stat = int(input("Enter New Status: "))
 93
                                new_ptrec = [pt_ID, mod_name, mod_char, mod_stat]
                                pic.dump(new_ptrec, f2)
 95
 96
 97
                            elif ques_stat in ('No', 'no'):
 98
                                new_ptrec = [pt_ID, mod_name, mod_char, pt_stat]
 99
                                pic.dump(new_ptrec, f2)
101
102
                        elif ques_char in ('No', 'no'):
103
                            print('Status: ', pt_stat)
104
                            ques_stat = input('Modify Status? (yes/no): ')
105
106
                            if ques_stat in ('Yes', 'yes'):
                                mod_stat = int(input("Enter New Status: "))
107
108
                                  new_ptrec = [pt_ID, mod_name, pt_char, mod_stat]
109
                                   pic.dump(new_ptrec, f2)
110
111
112
                              elif ques_stat in ('No', 'no'):
113
                                   new_ptrec = [pt_ID, mod_name, pt_char, pt_stat]
114
                                   pic.dump(new_ptrec, f2)
115
116
117
                      elif ques_name in ('No', 'no'):
118
                          print('Charge/Bill Amount: ', pt_char)
119
                          ques_char = input('Modify Charge/Bill Amount? (yes/no): ')
120
121
                          if ques_char in ('Yes', 'yes'):
122
                              mod_char = int(input("Enter New Charge/Bill Amount: "))
123
                              new_ptrec = [pt_ID, pt_name, mod_char, pt_stat]
124
                              found = 1
125
                              print('Status: ', pt_stat)
126
                              ques_stat = input('Modify Status? (yes/no): ')
127
128
                              if ques_stat in ('Yes', 'yes'):
129
130
                                   mod stat = int(input("Enter New Status: "))
131
                                   new_ptrec = [pt_ID, pt_name, mod_char, mod_stat]
132
                                   pic.dump(new_ptrec, f2)
133
134
135
                              elif ques_stat in ('No', 'no'):
136
                                   new_ptrec = [pt_ID, pt_name, mod_char, pt_stat]
137
                                   pic.dump(new_ptrec, f2)
138
139
140
                            elif ques_char in ('No', 'no'):
                                print('Status: ', pt_stat)
141
142
                                ques_stat = input('Modify Status? (yes/no): ')
```

143

```
if ques_stat in ('Yes', 'yes'):
145
                                    mod_stat = int(input("Enter New Status: "))
146
                                    new_ptrec = [pt_ID, pt_name, pt_char, mod_stat]
147
                                    pic.dump(new_ptrec, f2)
148
                                    found = 1
149
150
                               elif ques_stat in ('No', 'no'):
151
                                    new_ptrec = [pt_ID, pt_name, pt_char, pt_stat]
152
                                    pic.dump(new_ptrec, f2)
                       break
154
155
         except:
156
             pass
157
158
         try:
159
              while True:
160
                  ptrec = pic.load(f1)
161
                  if ptrec[0] != pt_ID:
162
                      pic.dump(ptrec, f2)
163
         except:
164
              pass
165
166
         if found == 1:
167
              f1.close()
168
              f2.close()
169
              os.remove('PatientRecords.dat')
170
              os.rename('TempPatientRecords.dat', 'PatientRecords.dat')
171
              print('Record is modified!')
172
         elif found == 0:
173
              print('No records modified!')
174
176
177
    def DeleteRecord(pt_ID):
178
        f1 = open ('PatientRecords.dat', 'rb')
179
        f2 = open('TempPatientRecords.dat', 'wb')
180
181
        found = 0
182
        try:
            while True:
183
184
               ptrec = pic.load(f1)
185
                if ptrec[0] != pt_ID:
186
                   pic.dump(ptrec, f2)
187
                   found = 1
188
        except:
            pass
190
        if found == 1:
191
            f1.close()
192
            f2.close()
193
            os.remove('PatientRecords.dat')
194
            os.rename('TempPatientRecords.dat', 'PatientRecords.dat')
195
            print('The following patient record was deleted:')
            print('Patient ID: ', pt_ID)
print('Patient Name: ', ptrec[1])
196
197
198
            print('Charge/Bill Amount: ', ptrec[2])
            print('Status: ', ptrec[3])
199
200
201
        else:
202
            print('No such record found!')
203
205
206 def AdmitPatient(pt_ID):
       f1 = open('PatientRecords.dat', 'rb')
f2 = open('TempPatientRecords.dat', 'wb')
207
208
209
        found = 0
210
211212
        try:
           while True:
213
214
               ptrec = pic.load(f1)
215
               if pt_ID == ptrec[0]:
216
                   pt_name = ptrec[1]
217
                   pt_char = ptrec[2]
218
                   pt_stat = ptrec[3]
                   pt_stat = ptrec[]
print('Patient ID: ', pt_ID)
print('Patient Name: ', pt_name)
print('Charge/Bill Amount: ', pt_char)
219
220
221
                   print('Status: ', pt_stat)
224
                   if pt_stat == 'Admitted':
                                                                                                                 18
225
                       print('The patient has already been admitted!')
226
```

```
elif pt_stat == 'Discharged':
229
                         Adm = 0
230
                         found = 1
231
                         ques_admit = input('Do you want to admit the patient? (yes/no): ')
232
                         if ques_admit in ('Yes', 'yes'):
                             new_stat = 'Admitted'
234
                             new_ptrec = [pt_ID, pt_name, pt_char, new_stat]
235
                             pic.dump(new_ptrec, f2)
236
                             Adm = 1
237
                         elif ques_admit in ('No', 'no'):
238
                             Adm = 0
239
                     break
240
         except:
241
             pass
242
243
         try:
244
             while True:
245
                 ptrec = pic.load(f1)
246
                 if ptrec[0] != pt_ID:
247
                     pic.dump(ptrec, f2)
248
         except:
249
             pass
250
251
         if found == 1:
252
             f1.close()
253
             f2.close()
254
             os.remove('PatientRecords.dat')
255
             os.rename('TempPatientRecords.dat', 'PatientRecords.dat')
256
             if Adm == 1:
257
                 print('The patient has been Admitted now!')
258
259
            elif Adm == 0:
260
                print('The patient has NOT been admitted')
261
262
    263
264
    def DischargePatient(pt_ID):
265
        f1 = open('PatientRecords.dat', 'rb')
266
        f2 = open('TempPatientRecords.dat', 'wb')
267
        found = 0
268
269
        try:
270
            while True:
271
                ptrec = pic.load(f1)
272
273
274
                if pt_ID == ptrec[0]:
                    pt_name = ptrec[1]
275
                    pt_char = ptrec[2]
276
                    pt_stat = ptrec[3]
277
278
                    print('Patient ID: ', pt_ID)
print('Patient Name: ', pt_name)
                    print('Charge/Bill Amount: ', pt_char)
279
                    print('Status: ', pt_stat)
280
281
282
                    if pt_stat == 'Discharged':
283
                        print('The patient has already been discharged!')
284
                        break
285
286
                    elif pt_stat == 'Admitted':
287
                        Disch = 0
288
                        found = 1
289
290
                       ques_disch = input('Do you want to discharge the patient? (yes/no): ')
291
                       if ques_disch in ('Yes', 'yes'):
292
                           new_stat = 'Discharged'
                           new_ptrec = [pt_ID, pt_name, pt_char, new_stat]
94
                           pic.dump(new_ptrec, f2)
295
                           Disch = 1
296
297
                       elif ques disch in ('No', 'no'):
298
                           Disch = 0
299
                   break
800
        except:
301
           pass
302
303
304
           while True:
305
               ptrec = pic.load(f1)
                                                                                                                   19
               if ptrec[0] != pt_ID:
307
                   pic.dump(ptrec, f2)
```

```
except:
309
             pass
310
        if found == 1:
311
             f1.close()
313
             f2.close()
             os.remove('PatientRecords.dat')
314
315
             os.rename('TempPatientRecords.dat', 'PatientRecords.dat')
316
             if Disch == 1:
317
                 print('The patient has been Discharged now!')
318
319
             elif Disch == 0:
320
                 print('The patient has NOT been Discharged')
321
323
324 optn = 0
325 while optn!=7:
326
        print()
327
        print(
328
329
        print('
        330
        print('
                                  NEWLIFE GROUP OF HOSPITALS
        print('
331
                                   Where Care Comes First...
                                                                                    ١)
                  332
        print('
333
        print(
                                         DATABASE MENU
334
        print('|
        print('
                 Choose one of the following options to access Patient Records
335
                                                                                    ')
336
        print('|
                    **************
        print('
                                                                                    ')
337
                      MAINTENANCE
                                                       TRANSACTION
338
        print('
                     1 - VIEW
                                                    5 - ADMIT
                                                                                    ')
                     2 - ADD
3 - MODIFY
                                                    6 - DISCHARGE
339
        print('
                                                                                    ١)
        print('
340
                                                    7 - EXIT
341
        print('
                     4 - DELETE
                                                                                    ')
                    print('
342
                                                                                    ')
343
        print('|
print('|
                   344
345
        print('
                             >>>>> By- Divyalakshmi(11A) <<<<<<
                                                                                    ')
346
        print('
                                                                                    ١)
        347
348
        print('|
349
350
        optn = int(input('Enter Your Choice: '))
352
        import pickle as pic
353
        f = open("PatientRecords.dat", ap )
ptrec1 = [1001, 'Ramesh Raman', 450, 'Admitted']
ptrec2 = [1002, 'Samuel Raj', 560, 'Admitted']
ptrec3 = [1003, 'Adhavan Menon', 800, 'Discharged']
ntrec4 = [1004, 'Harry Jackson', 500, 'Admitted']
        f = open("PatientRecords.dat", 'ab')
354
355
356
        ptrecs = [1005, Adnavan Menon', 800, Discharged]
ptrec4 = [1004, 'Harry Jackson', 500, 'Admitted']
ptrec5 = [1005, 'Peter Jones', 350, 'Discharged']
ptrec6 = [1006, 'Maxwell Smith', 400, 'Discharged']
ptrec7 = [1007, 'Yash Chopra', 500, 'Discharged']
ptrec8 = [1008, 'Suresh Gopal', 450, 'Admitted']
ptrec9 = [1009, 'Krishna Sekar', 750, 'Admitted']
357
358
359
360
361
362
363
        ptrec10 = [1010, 'Bindu Raj', 400, 'Discharged']
        pic.dump(ptrec1,f)
364
365
        pic.dump(ptrec2,f)
366
        pic.dump(ptrec3,f)
367
        pic.dump(ptrec4,f)
368
        pic.dump(ptrec5,f)
369
        pic.dump(ptrec6,f)
370
        pic.dump(ptrec7,f)
371
        pic.dump(ptrec8,f)
        pic.dump(ptrec9,f)
373
        pic.dump(ptrec10,f)
374
375
        f.close()
376
        if optn == 1:
377
378
            pt_ID = int(input('Please Enter Patient ID: '))
            ViewRecord(pt_ID)
379
380
        if optn == 2:
381
            pt_ID = int(input('Please Enter Patient ID: '))
382
            AddRecord(pt_ID)
383
        if optn == 3:
             pt_ID = int(input('Please Enter Patient ID: '))
385
386
             ModifyRecord(pt_ID)
387
388
         if optn == 4:
                                                                                                                             20
             pt_ID = int(input('Please Enter Patient ID: '))
389
390
             DeleteRecord(pt_ID)
```

```
if optn == 5:
    pt_ID = int(input('Please Enter Patient ID: '))
AdmitPatient(pt_ID)

if optn == 6:
    pt_ID = int(input('Please Enter Patient ID: '))
    DischargePatient(pt_ID)

if optn == 7:
    break
```

## Input and Output Samples

#### Menu

```
NEWLIFE GROUP OF HOSPITALS
        Where Care Comes First...
DATABASE MENU
Choose one of the following options to access Patient Records
 ********
                *******
  MAINTENANCE
                  TRANSACTION
 1 - VIEW
                5 - ADMIT
 2 - ADD
                6 - DISCHARGE
 3 - MODIFY
 4 - DELETE
>>>>> By- Divyalakshmi(12A)
```

#### **Maintenance**

#### 1) VIEW option

#### a) Record Exists

Enter Your Choice: 1 Please Enter Patient ID: 1003 Patient ID: 1003

Patient Name: Adhavan Menon Charge/Bill Amount: Status: Discharged

#### b) Record Doesn't Exist

Please Enter Patient ID: 1014 Patient Record not found!

#### 2) ADD option

#### a) Adding a new record

Enter Your Choice: 2 Please Enter Patient ID: 1011 Please Enter Patient Name: Sumita Raj Please Enter Charge/Bill Amount: 300 Please Enter Patient Status: Admitted Patient Record Added!

#### b) Trying to add a record that already exists

```
Enter Your Choice: 2
Please Enter Patient ID: 1005
This Patient ID already exists! Try again
```

#### 3) MODIFY option

#### a) Record Modified

```
Enter Your Choice: 3
Please Enter Patient ID: 1001
Patient Name: Ramesh Raman
Modify Patient Name? (yes/no): yes
Enter Patient's New Name: Raamesh Raman
Charge/Bill Amount: 450
Modify Charge/Bill Amount? (yes/no): no
Patient Status: Admitted
Modify Patient Status? (yes/no): yes
Enter New Patient Status: Discharged
Patient Record Modified
```

#### b) Record Not Modified

```
Enter Your Choice: 3
Please Enter Patient ID: 1006
Patient Name: Maxwell Smith
Modify Patient Name? (yes/no): no
Charge/Bill Amount: 400
Modify Charge/Bill Amount? (yes/no): no
Patient Status: Discharged
Modify Patient Status? (yes/no): no
Patient Record NOT modified
```

#### 4) DELETE option

#### a) Record Deleted

```
Enter Your Choice: 4
Please Enter Patient ID: 1011
The following patient record was deleted:
Patient ID: 1011
Patient Name: Bindu Raj
Charge/Bill Amount: 400
Status: Discharged
```

#### **Transaction**

#### 5) ADMIT option

#### a) Admitting the Patient

```
Enter Your Choice: 5
Please Enter Patient ID: 1003
Patient ID: 1003
Patient Name: Adhavan Menon
Charge/Bill Amount: 800
Status: Discharged
Do you want to admit the patient? (yes/no): yes
The patient has been Admitted now!
```

#### b) Patient is not admitted

```
Enter Your Choice: 5
Please Enter Patient ID: 1003
Patient ID: 1003
Patient Name: Adhavan Menon
Charge/Bill Amount: 800
Status: Discharged
Do you want to admit the patient? (yes/no): no
The patient has NOT been admitted
```

#### c) Patient has already been admitted

```
Enter Your Choice: 5
Please Enter Patient ID: 1001
Patient ID: 1001
Patient Name: Ramesh Raman
Charge/Bill Amount: 450
Status: Admitted
The patient has already been admitted!
```

#### 6) DISCHARGE option

#### a) Discharging the Patient

```
Enter Your Choice: 6

Please Enter Patient ID: 1004

Patient ID: 1004

Patient Name: Harry Jackson

Charge/Bill Amount: 500

Status: Admitted

Do you want to discharge the patient? (yes/no): yes

The patient has been Discharged now!
```

#### b) Patient is not discharged

Enter Your Choice: 6
Please Enter Patient ID: 1004

Patient ID: 1004

Patient Name: Harry Jackson Charge/Bill Amount: 500

Status: Admitted

Do you want to discharge the patient? (yes/no): no

The patient has NOT been Discharged

#### c) Patient has already been discharged

Enter Your Choice: 6

Please Enter Patient ID: 1007

Patient ID: 1007

Patient Name: Yash Chopra Charge/Bill Amount: 500

Status: Discharged

The patient has already been discharged!

#### 7) EXIT option

Enter Your Choice: 7

>>>

## **Bibliography**

(Ctrl + click on the blue-highlighted words to be directed to the concerned website)

**Programming Language:** Python

Language Interpreter: Python 3.7.7 shell,

Thonny

**Project Documentation:** Microsoft Word 2019 in

Office 365

Coding Reference: Class Notes, Preeti Arora

Textbook, Geeks for Geeks Website,

GitHub Repositories on Python coding

Input/Output Samples: Notepad, Snipping tool,

Thonny, Python

**Images:** Google's images (including logos)

Cover pages designing: Canva website

**Content checker:** Grammarly (free version)

