from tkinter import\*

from tkinter import ttk

import os

import tempfile

from twilio.rest import Client

root=Tk()

root.title("Hospital management System")

import mysql.connector

from tkinter import messagebox

root.state('zoomed')

root.config(bg='black')

#crteating function to access save prescription button and also creating for error message

def pd():

    if box\_not.get()=="" or boxref.get()=="":

        messagebox.showerror("Error","All fields are required")

    else:

        con=mysql.connector.connect(host='localhost',username='python project1',password='mypassword',database='hospital')

        my\_cursor=con.cursor()

        my\_cursor.execute("insert into hospital values(%s,%s,%s,%s,%s,%s,%s,%s,%s,%s,%s)",(

            nameoftab.get(),

            ref.get(),

            dos.get(),

            nooftab.get(),

            issuedate.get(),

            expdate.get(),

            dailydose.get(),

            side\_eff.get(),

            paitentid.get(),

            dob.get(),

            paitentadd.get()))

        con.commit()

        fetch\_data()

        con.close()

        messagebox.showinfo("Successfull","The data hes been inserted successfully!")

# creating function to access prescription button and showing prescription

def prescription():

    txtpres.insert(END,'Name of the paitent:\t\t\t'+paitentid.get()+'\n')

    txtpres.insert(END,'Date of birth:\t\t\t'+dob.get()+'\n')

    txtpres.insert(END,"Paitent's number:\t\t\t"+paitentnum.get()+'\n')

    txtpres.insert(END,"Paitent's address:\t\t\t"+ paitentadd.get()+'\n')

    txtpres.insert(END,'Reference number:\t\t\t'+ref.get()+'\n')

    txtpres.insert(END,'Blood pressure:\t\t\t'+bp.get()+'\n')

    txtpres.insert(END,'Dose(mg):\t\t\t'+dos.get()+'\n')

    txtpres.insert(END,'Daily dose:\t\t\t'+dailydose.get()+'\n')

    txtpres.insert(END,'Name of the tablets:\t\t\t'+nameoftab.get()+'\n')

    txtpres.insert(END,'Number of tablets:\t\t\t'+nooftab.get()+'\n')

    txtpres.insert(END,'Issue date:\t\t\t'+issuedate.get()+'\n')

    txtpres.insert(END,'Further information:\t\t\t'+further\_info.get()+'\n')

# For displaying the datails stored in the database

def fetch\_data():

    con=mysql.connector.connect(host='localhost',username='python project1',password='mypassword',database='hospital')

    my\_cursor=con.cursor()

    my\_cursor.execute('select \* from hospital')

    rows=my\_cursor.fetchall()

    if len(rows)!=0:

        table.delete(\*table.get\_children())

        for items in rows:

            table.insert('',END,values=items)

        con.commit()

    con.close()

#fetching and displaying the details from database table

def get\_data(event=''):

    cursor\_row=table.focus()

    data=table.item(cursor\_row)

    row=data['values']

    nameoftab.set(row[0])

    ref.set(row[1])

    dos.set(row[2])

    nooftab.set(row[3])

    issuedate.set(row[4])

    expdate.set(row[5])

    dailydose.set(row[6])

    side\_eff.set(row[7])

    paitentid.set(row[8])

    dob.set(row[9])

    paitentadd.set(row[10])

#creating function to access delete button

def delete():

    con=mysql.connector.connect(host='localhost',username='python project1',password='mypassword',database='hospital')

    my\_cursor=con.cursor()

    deleting=('delete from hospital where reference =%s')

    value=(ref.get(),)

    my\_cursor.execute(deleting,value)

    con.commit()

    con.close()

    fetch\_data()

    messagebox.showinfo('Information',"Paitent's data was deleted!")

#creating function for to access clear button

def clear():

    nameoftab.set('')

    ref.set('')

    dos.set('')

    nooftab.set('')

    lot.set('')

    issuedate.set('')

    expdate.set('')

    dailydose.set('')

    side\_eff.set('')

    further\_info.set('')

    bp.set('')

    stor\_advi.set('')

    medi.set('')

    paitentid.set('')

    NHS.set('')

    paitentnum.set('')

    dob.set('')

    paitentadd.set('')

#creating function for to access exist button

def exist():

    confirm= messagebox .askyesno('Conformation','Are you sure do you want to exist?')

    if confirm>0:

        root.destroy()

        return

# function for print option

def print\_text(txt):

    print('helloooo')

#function for message option

def message():

    account\_Sid = 'ACbc6e19269739aca0e09779cc1537e51c'

    auth\_token = '99cd950e3916008815a24ddfc065c0b4'

    client = Client(account\_Sid ,auth\_token)

    message\_text = txtpres.get('1.0', END)

    static\_text = "\n\nFrom Birla hospital - Madurai\nThis is the Prescription of your today's health checkup\n\n"

    message\_body = static\_text + message\_text

    message=client.messages\

       .create(

            body= message\_body,

            from\_='+12513021654',

            to= '+917824952342'

      )

    print(message.sid)

# function for print option

def print\_text(text):

    temp\_file=tempfile.mktemp('.txt')

    open(temp\_file, 'w').write(text)

    os.startfile(temp\_file, 'print')

#creating the heading 'hospital management system'

lbltitle=Label(root,bd=18,relief=RIDGE,text="Birla hospital pharmacy - Madurai",fg="green",bg="white",font=("times new romen",45,"bold"))

lbltitle.pack(side=TOP,fill=X)

#creating frame for filling space in (left side) and in prescription in (right side) and also in the data displaying (down)

dataframe=Frame(root,bd=10, relief=RIDGE)

dataframe.place(x=0, y=115, width=1500, height=390)

dataframeleft=LabelFrame(dataframe, bd=10, relief=RIDGE, padx=10, font=("times new romen",12),text="Patient")

dataframeleft.place(x=0,y=5,width=917,height=368)

dataframeright=LabelFrame(dataframe, bd=10, relief=RIDGE, padx=10, font=("times new romen",12),text='Prescription')

dataframeright.place(x=920,y=5,width=400,height=390)

detailsframe=Frame(root, bd=10, relief=RIDGE)

detailsframe.place(x=0,y=510,width=1360,height=150)

#Text variable for all entry field

nameoftab= StringVar()

ref=StringVar()

dos=StringVar()

nooftab=StringVar()

lot=StringVar()

issuedate=StringVar()

expdate=StringVar()

dailydose=StringVar()

side\_eff=StringVar()

further\_info=StringVar()

bp=StringVar()

stor\_advi=StringVar()

medi=StringVar()

paitentid=StringVar()

NHS=StringVar()

paitentnum=StringVar()

dob=StringVar()

paitentadd=StringVar()

#creating the names and the text box for Names of Tablet

Name\_tablet=Label(dataframeleft,text="Names of Tablet:",font=('times new romen',12,"bold"),padx=2,pady=6)

Name\_tablet.grid(row=0,column=0,sticky=W)

box\_not=Entry(dataframeleft,font=("times new romen",12,"bold"),width=32,textvar= nameoftab)

box\_not.grid(row=0,column=1)

#creating the names and the text box for Reference

lbref=Label(dataframeleft,text="Reference:",font=("times new romen",12,"bold"),textvar='Reference number:',padx=2)

lbref.grid(row=1, column=0,sticky=W)

boxref=Entry(dataframeleft,font=("times new romen",12,"bold"),width=32, textvar=ref)

boxref.grid(row=1,column=1)

#creating the names and the text box for Dose

lbdos=Label(dataframeleft,font=("times new romen",12,"bold"),text='Dose:',padx=2,pady=4)

lbdos.grid(row=2, column=0,sticky=W)

boxdos=Entry(dataframeleft,font=("times new romen",12,"bold"),width=32,textvar= dos)

boxdos.grid(row=2,column=1)

#creating the names and the text box for No.of.Tablets

lb\_no\_of\_tablets=Label(dataframeleft,font=("times new romen",12,"bold"),text='No.of.Tablets:',padx=2,pady=4)

lb\_no\_of\_tablets.grid(row=3, column=0,sticky=W)

box\_no\_of\_tablets=Entry(dataframeleft,font=("times new romen",12,"bold"),width=32,textvar=nooftab)

box\_no\_of\_tablets.grid(row=3,column=1)

#creating the names and the text box for Lot

lb\_lot=Label(dataframeleft,font=("times new romen",12,"bold"),text='Lot:',padx=2,pady=4)

lb\_lot.grid(row=4, column=0,sticky=W)

box\_lot=Entry(dataframeleft,font=("times new romen",12,"bold"),width=32,textvar=lot)

box\_lot.grid(row=4,column=1)

#creating the names and the text box for Issue Date

lb\_issuedate=Label(dataframeleft,font=("times new romen",12,"bold"),text='Issue Date:',padx=2,pady=4)

lb\_issuedate.grid(row=5, column=0,sticky=W)

box\_issuedate=Entry(dataframeleft,font=("times new romen",12,"bold"),width=32,textvar=issuedate)

box\_issuedate.grid(row=5,column=1)

#creating the names and the text box for Expire Date

lb\_expdate=Label(dataframeleft,font=("times new romen",12,"bold"),text='Expire Date:',padx=2,pady=4)

lb\_expdate.grid(row=6, column=0,sticky=W)

box\_expdate=Entry(dataframeleft,font=("times new romen",12,"bold"),width=32,textvar=expdate)

box\_expdate.grid(row=6,column=1)

#creating the names and the text box for Daily Dose

lb\_Dailydose=Label(dataframeleft,font=("times new romen",12,"bold"),text='Daily Dose:',padx=2,pady=4)

lb\_Dailydose.grid(row=7, column=0,sticky=W)

box\_Dailydose=Entry(dataframeleft,font=("times new romen",12,"bold"),width=32,textvar=dailydose)

box\_Dailydose.grid(row=7,column=1)

#creating the names and the text box for Side Effect

lb\_sideeffect=Label(dataframeleft,font=("times new romen",12,"bold"),text='Side Effect:',padx=2,pady=4)

lb\_sideeffect.grid(row=8, column=0,sticky=W)

box\_sideeffect=Entry(dataframeleft,font=("times new romen",12,"bold"),width=32,textvar=side\_eff)

box\_sideeffect.grid(row=8,column=1)

#creating the names and the text box for Further Information

lb\_furtherinfo=Label(dataframeleft,font=("times new romen",12,"bold"),text='Further Information:',padx=2,pady=2)

lb\_furtherinfo.grid(row=0, column=4,sticky=W)

box\_furtherinfo=Entry(dataframeleft,font=("times new romen",12,"bold"),width=30,textvar=further\_info)

box\_furtherinfo.grid(row=0,column=5)

#creating the names and the text box for Blood Pressure

lb\_bloodpressure=Label(dataframeleft,font=("times new romen",12,"bold"),text='Blood Pressure:',padx=2,pady=2)

lb\_bloodpressure.grid(row=1, column=4,sticky=W)

box\_bloodpressure=Entry(dataframeleft,font=("times new romen",12,"bold"),width=30,textvar=bp)

box\_bloodpressure.grid(row=1,column=5)

#creating the names and the text box for storage advice

lb\_storageadvice=Label(dataframeleft,font=("times new romen",12,"bold"),text='Storage Advice:',padx=2,pady=2)

lb\_storageadvice.grid(row=2, column=4,sticky=W)

box\_storageadvice=Entry(dataframeleft,font=("times new romen",12,"bold"),width=30,textvar=stor\_advi)

box\_storageadvice.grid(row=2,column=5)

#creating the names and the text box for medication

lb\_medication=Label(dataframeleft,font=("times new romen",12,"bold"),text='Medication:',padx=2,pady=2)

lb\_medication.grid(row=3, column=4,sticky=W)

box\_medication=Entry(dataframeleft,font=("times new romen",12,"bold"),width=30,textvar=medi)

box\_medication.grid(row=3,column=5)

#creating the names and the text box for Paitent name

lb\_patient\_id=Label(dataframeleft,font=("times new romen",12,"bold"),text="Patient's name:",padx=2,pady=2)

lb\_patient\_id.grid(row=4, column=4,sticky=W)

box\_patient\_id=Entry(dataframeleft,font=("times new romen",12,"bold"),width=30,textvar=paitentid)

box\_patient\_id.grid(row=4,column=5)

#creating the names and the text box for NHS number

lb\_NHS\_num=Label(dataframeleft,font=("times new romen",12,"bold"),text="NHS number:",padx=2,pady=2)

lb\_NHS\_num.grid(row=5, column=4,sticky=W)

box\_NHS\_num=Entry(dataframeleft,font=("times new romen",12,"bold"),width=30,textvar=NHS)

box\_NHS\_num.grid(row=5,column=5)

#creating the names and the text box for paitent number

lb\_paitents\_num=Label(dataframeleft,font=("times new romen",12,"bold"),text="paitents number:",padx=2,pady=2)

lb\_paitents\_num.grid(row=6, column=4,sticky=W)

box\_paitents\_num=Entry(dataframeleft,font=("times new romen",12,"bold"),width=30,textvar=paitentnum)

box\_paitents\_num.grid(row=6,column=5)

#creating the names and the text box for DOB

lb\_DOB=Label(dataframeleft,font=("times new romen",12,"bold"),text="Date Of Birth:",padx=2,pady=2)

lb\_DOB.grid(row=7, column=4,sticky=W)

box\_DOB=Entry(dataframeleft,font=("times new romen",12,"bold"),width=30,textvar=dob)

box\_DOB.grid(row=7,column=5)

#creating the names and the text box for paitent address

lb\_paitent\_add=Label(dataframeleft,font=("times new romen",12,"bold"),text="Paitent's address:",padx=2,pady=2)

lb\_paitent\_add.grid(row=8, column=4,sticky=W)

box\_paitent\_add=Entry(dataframeleft,font=("times new romen",12,"bold"),width=30,textvar=paitentadd)

box\_paitent\_add.grid(row=8,column=5)

#Text box for precription diplaying on right side

txtpres=Text(dataframeright, font=('times new romen',12,"bold"),width=41,height=17,padx=0,pady=5.5)

txtpres.grid(row=0,column=0)

#Creating button

#prescription button

pres\_but=Button(root, text="prescription",font="ariel 15 bold",bg="red",fg='white',bd=2,cursor="hand2",command=prescription)

pres\_but.place(x=3,y=660,width=320)

#save prescription data

save\_pres\_but=Button(root, text="save prescription data",font="ariel 15 bold",bg="green",fg='white',bd=2,cursor="hand2",command=pd)

save\_pres\_but.place(x=320,y=660,width=300)

#delete button

del\_but=Button(root, text="Delete",font="ariel 15 bold",bg="blue",fg='white',bd=2,cursor="hand2",command=delete)

del\_but.place(x=600,y=660,width=300)

#clear button

clear\_but=Button(root, text="Clear",font="ariel 15 bold",bg="yellow",fg='black',bd=2,cursor="hand2",command=clear)

clear\_but.place(x=870,y=660,width=280)

#exist button

exist\_but=Button(root, text="Exist",font="ariel 15 bold",bg="brown",fg='white',bd=2,cursor="hand2",command=exist)

exist\_but.place(x=1125,y=660,width=235)

#print button

print\_button = Button(root, text='Print', command=lambda: print\_text(txtpres.get('1.0', END)))

print\_button.place(x=850, y=450)

#message button

messbutton = Button(root, text='Message',command=message)

messbutton.place(x=700, y=450,width=100)

#For scrolling

scroll\_1=ttk.Scrollbar(detailsframe,orient=HORIZONTAL)

scroll\_1.pack(side='bottom',fill='x')

scroll\_2=ttk.Scrollbar(detailsframe,orient=VERTICAL)

scroll\_2.pack(side='right',fill='y')

table=ttk.Treeview(detailsframe,column=('not','ref','dose','no.of tab','issue','exp','dd','sd','pn','dob','pa'))

#headings for prescription data

table.heading('not',text='Name of tablet')

table.heading('ref',text='Reference number')

table.heading('dose',text='Dose')

table.heading('no.of tab',text='No.of.tablet')

table.heading('issue',text='Issue Date')

table.heading('exp',text='Exp Date')

table.heading('dd',text='Daily dose')

table.heading('sd',text='Side effect')

table.heading('pn',text='Paitent name')

table.heading('dob',text='DOB')

table.heading('pa',text='Patient address')

#To get the details in the precription

table['show']='headings'

table.pack(fill=BOTH,expand=1)

# Creating columns in the data shows below

table.column('not',width=95)

table.column('ref',width=95)

table.column('dose',width=95)

table.column('no.of tab',width=95)

table.column('issue',width=95)

table.column('exp',width=95)

table.column('dd',width=95)

table.column('sd',width=95)

table.column('pn',width=95)

table.column('dob',width=95)

table.column('pa',width=95)

# To display the information in the text box whatever is below

table.bind('<ButtonRelease-1>',get\_data)

fetch\_data()

#Closing

root.mainloop()