# PROJECT REPORT ON

## **MEDICAL INVENTORY SYSTEM**

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## **PYTHON PROGRAMMING (INT 213)**

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Date Of Submission: 20 November 2021



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#### MEDICAL INVENTORY SYSTEM

#### **ABSTRACT**

The "Medical Inventory System" has been developed to override the problems prevailing in the practicing manual system. This software is supported to eliminate and, in some cases, reduce the hardships faced by this existing system. Moreover, this system is designed for the particular need of the company to carry out operations in a smooth and effective manner.

The application is reduced as much as possible to avoid errors while entering the data. It also provides error message while entering invalid data. No formal knowledge is needed for the user to use this system. Thus, by this all it proves it is user-friendly. Medical Inventory System, as described above, can lead to error free, secure, reliable and fast management system. It can assist the user to concentrate on their other activities rather to concentrate on the record keeping. Thus, it will help organization in better utilization of resources.

## **ACKNOWLEDGEMENT**

I would like to Acknowledge all those without whom this Project would not have been successful. Firstly, I would wish to Thank our Computer Science (PYTHON) Teacher Prof. Sagar Pande who guided me throughout the project and gave his immense support. He made us understand how to successfully complete this project and without him, the project would not have been complete.

This project has been a source to learn and bring out theoretical knowledge to the real-life world. So, I would really acknowledge his help and guidance for this project.

I would also like to Thank my parents who have always been there whenever needed.

Once again, Thanks to everyone for making this project successful.

## **INTRODUCTION**

This is a program to manage a Medical Inventory. The Aim of this project is to make the work of the user and management easier by keeping records of different medical goods such as medicines. Through this program we can do a lot of things like: -

- 1. Any Person can easily search for any type of medicines available he / she wants to purchase.
- 2. We can also know the details of the available medicines.
- 3. We can also see the exact prices assigned to every medicines.
- 4. Admin can use the System to add, delete, update, modify the medicines data available in the database.
- 5. We can also see the Availability of Medicines through this Program

## **CONTRIBUTION**

Raunak Kumar: -

GUI (GRAPHICAL USER INTERFACE)

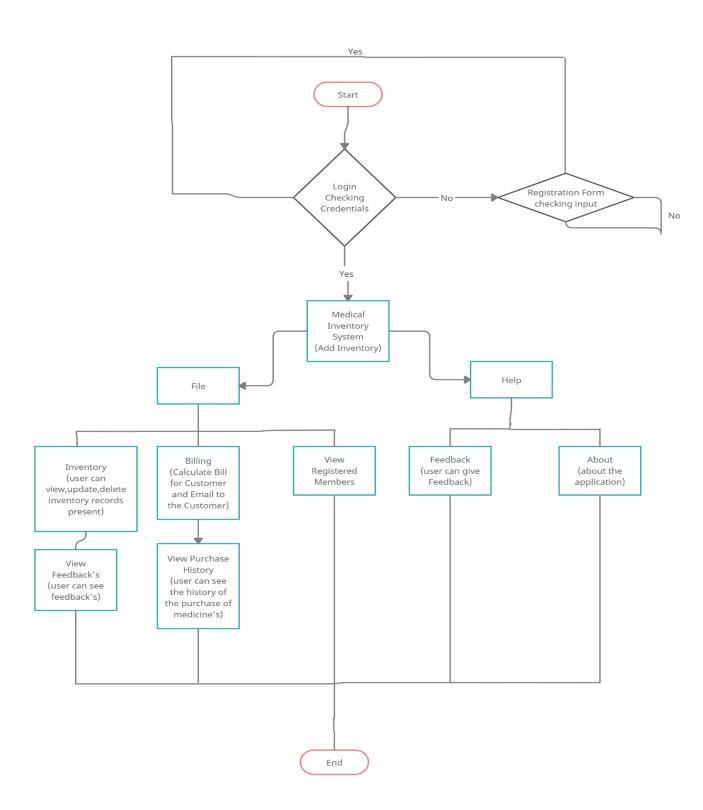
**CODING** 

**REPORT** 

## **OBJECTIVE**

The AIM of the Project is to make the works of user easier by keeping records in Database, provide a attractive user interface to user to access with every records easily.

## **DATA FLOW DIAGRAM**



## **TKINTER**

Tkinter is an open source, portable graphical user interface (GUI) library designed for use in Python scripts.

Tkinter relies on the Tk library, the GUI library used by Tcl / Tk and Perl, which is in turn implemented in C. Therefore, Tkinter can be said to be implemented using multiple layers.

## **Advantages of Tkinter: -**

#### 1. Layered Approach: -

The layered approach used in designing Tkinter gives Tkinter all of the advantages of the TK library. Therefore, at the time of creation, Tkinter inherited from the benefits of a GUI toolkit that had been given time to mature. This makes early versions of Tkinter a lot more stable and reliable than if it had been rewritten from scratch. Moreover, the conversion from Tcl/Tk to Tkinter is really

trivial, so that Tk programmers can learn to use Tkinter very easily.

#### 2. Accessibility: -

Learning Tkinter is very intuitive, and therefore quick and painless. The Tkinter implementation hides the detailed and complicated calls in simple, intuitive methods. This is a continuation of the Python way of thinking, since the language excels at quickly building prototypes. It is therefore expected that its preferred GUI library be implemented using the same approach.

#### 3. Portability: -

Python scripts that use Tkinter do not require modifications to be ported from one platform to the other. Tkinter is available for any platform that Python is implemented for, namely Microsoft Windows, X Windows, and Macintosh. This gives it a great advantage over most competing libraries, which are often restricted to one or two platforms. Moreover,

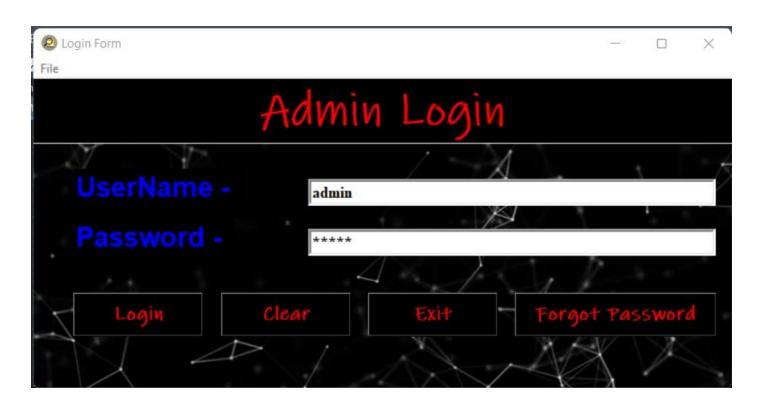
Tkinter will provide the native look-and-feel of the specific platform it runs on.

## 4. Availability: -

Tkinter is now included in any Python distribution. Therefore, no supplementary modules are required in order to run scripts using Tkinter.

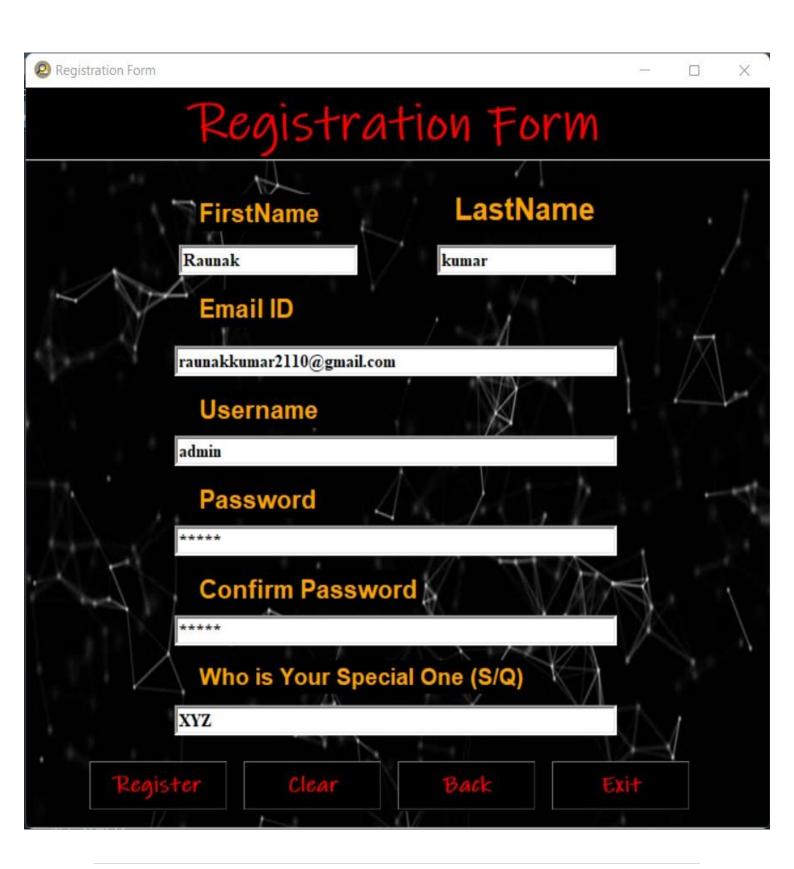
## IMPLEMENTATION AND RESULTS (SCREENSHOTS)

## **Login Form**





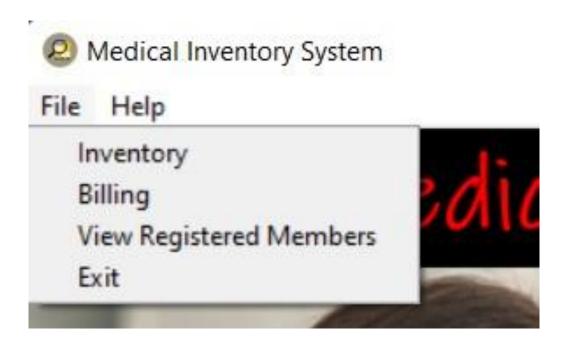
## **Registration Form**



#### **Main Frame**



#### Menu's

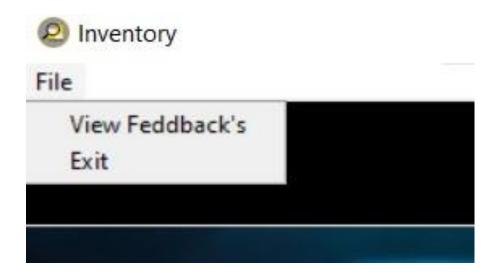




## **Inventory Frame**



#### Menu's



## **Feedbacks**

Name	Email_ID	Phone	Rate	Description
Raunak Kumar	raunakkumar2110@gmail.com	8827280526	5	Hey Your Interface is DamN GOOD.
shreyash	shreyash@gmail.com	8796547924	4	Excellent
Rohit	rohit@gmail.com	8247946517	5	excellent work
Ayushi	ayushi@gmail.com	9647812457	5	Interface is really Impressing

## **Billing Frame**





Medicine Name

Aminophylline

Quantity

4z

Purchase Date

Mon, 06 Dec 2021

Medicine Name

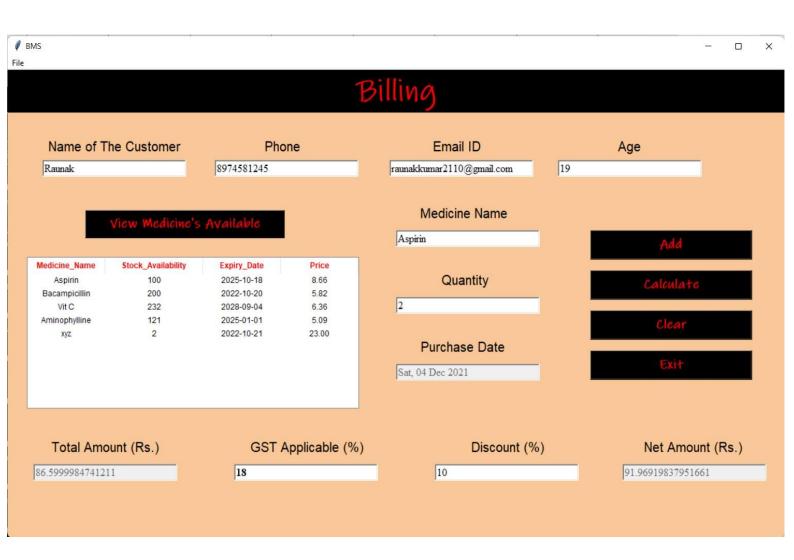
Bacampicillin

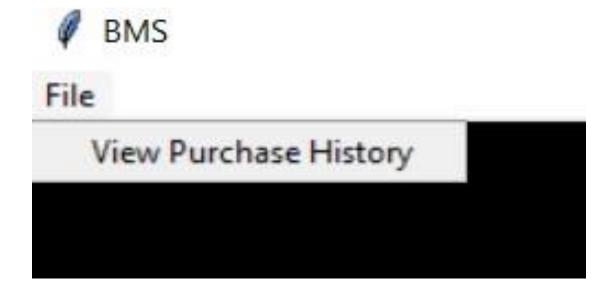
Quantity

1

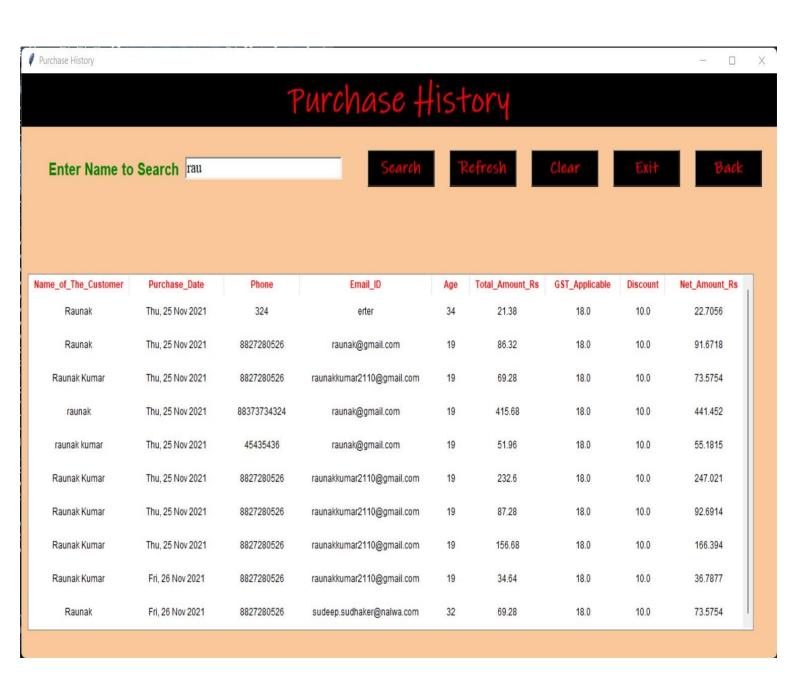
Purchase Date

Mon, 06 Dec 2021

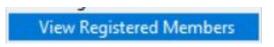




## **Purchase History**

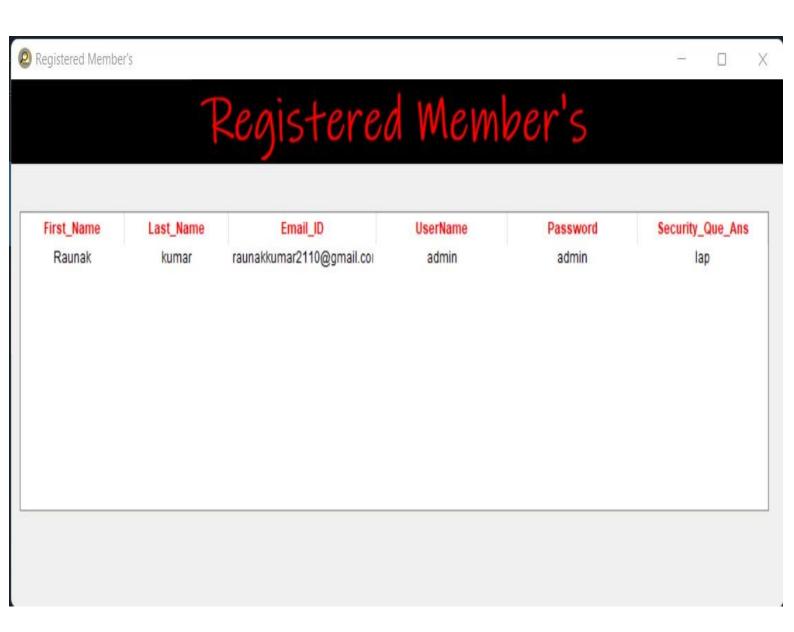


## Registered Member's Frame









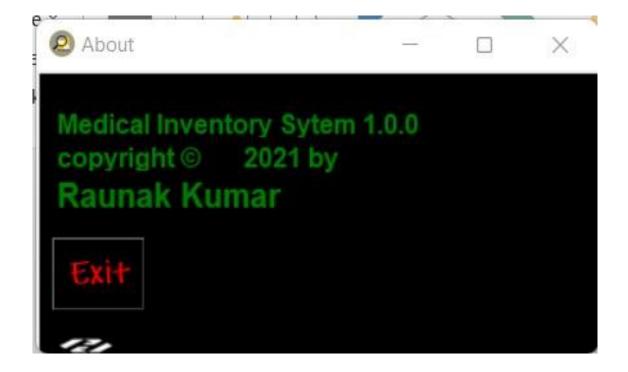
## **Feedback Frame**

## Feedback

Peedback		=	×
: -	Feedback		
	Name		
	Vijay kumar		
5	Email_ID		
	vijay@gmail.com		
	Phone		
	8791347859		
	Rate		
	[1 - Poor, 2 - Fairy Poor, 3 - Good, 4 - Very Good, 5 - Excellent]		
	5		
	Desrciption		
	Great Work		
5			
,			
	Submit Clear Back Exit		
	Great Work  Submit Clear Back Exit		

## **About Frame**

## About



## **MYSQL Tables**

MySQL 8.0 Cor	mmand Line Clie	ent															-	0	)
ysql> select	* from cred	ential	.s_login_regis	stration;															
First_Name	Last_Name	Emai	.l_ID		UserNam	e   Password	Securi	ty_Que	_Ans										
Raunak	+   kumar   y		 nakkumar2110@g nakkkumar2110@			admin   lap     ad   to													
t rows in set	+ (0.01 sec)	+		+		+	+		+										
ql> select	* from feed	back;																	
lame	<del>+</del>   Email_ID			Phone	Rate	+   Description				<del>-</del>									
Raunak Kumar   raunakkumar2110@gmail.com   8827280526   5 shreyash   shreyash@gmail.com   8796547924   4 Rohit   rohit@gmail.com   8247946517   5 Ayushi   ayushi@gmail.com   9647812457   5					Hey Your In   Excellent   excellent w   Interface i	ork													
rows in set	(0.01 sec)				-+	+				+									
sql> select	* from mis_	store;				+		+		-+	+		+						
Medicine_ID	Medicine_	Name	Description			Stock_Avail	ability	Loca	tion	Priority	/   Expiry_Date	Pr	rice						
M01 M02 M03 M04 M06	Vit C	llin   	Minor aches, pains, and Fevers lin   For Infections   Growth and repair of tissues ine   To relieve bronchial spasm   pain				200 232 121	Room Room	No - 3		2025-10-18 2022-10-20 2028-09-04 2025-01-01 2022-10-21	5   6   5	5.82   5.36   5.99   8.00						
rows in set	(0.00 sec)	+				+		+		-+	+	-+	+						
sql> select	* from purc	hase_r	ecord;;																
Name_of_The_	_Customer	Purch	ase_Date	Phone	<del>-</del>	mail_ID			Age	Quantity	Total_Amount_	Rs   (	GST_Applicable	+   Discount	+   Net_Amount_Rs	<del>,</del> 			
ıfe	······		25 Nov 2021		32   w				234	1		.7	18	10		<del>!</del> 			
aunak ef			25 Nov 2021   25 Nov 2021		324   e 324   e				34   323	2   3	21. 27.		18 18	10   10					
-1			25 Nov 2021   25 Nov 2021		343   r				34	2	27.		18	10					
wf			25 Nov 2021		324 e				342	2	21.		18	10					
			25 Nov 2021		34   r	e			3	1	90.		18	10					
ds			25 Nov 2021		324   e				32	3	51.		18	10					
rr ewf			25 Nov 2021		2324   e 3343   e				343	2	21. 34.		18 19	10					
ewr er			25 Nov 2021   25 Nov 2021			tr eg			342   43	3   1	34. 25.		18 18	10   10					
f3rcr			25 Nov 2021			vrg			543	3		23	18	10					
ver		Thu,	25 Nov 2021		34   e	f			343	2	51.	96	18	10	55.1815				
evd		Thu,	25 Nov 2021		354   v	ef			3	2	27	.5	18	10	29.205				

## **MYSQL**

MySQL is a relational database management system (RDBMS) developed by Oracle that is based on structured query language (SQL).

A database is a structured collection of data. It may be anything from a simple shopping list to a picture gallery or a place to hold the vast amounts of information in corporate network. In particular, a relational database is a digital store collecting data and organizing it according to the relational model. In this model, tables consist of rows and columns, and relationships between data elements all follow a strict logical structure. An RDBMS is simply the set of software tools used to actually implement, manage, and query such a database.

## **CODE (SCREENSHOTS)**

```
from tkinter import *;
from tkinter import ttk;
from PIL import Image,ImageTk;
import mysql.connector;
import numpy as np;
import datetime as dt;
import smtplib;
from email.mime.text import MIMEText;
from email.mime.multipart import MIMEMultipart;
from email.mime.base import MIMEBase;
from email import encoders;
```

1. from tkinter import \*:-

It is used to import all the functions and modules in it.

2. from tkinter import ttk: -

It's a module which provide access to Tk themed widgets.

3.from PIL import Image, ImageTk: -The ImageTk module contains support to create

and modify Tkinter BitmapImage and PhotoImage.

4.import mysql.connector: -

To create connection to the MySQL server.

5.import numpy as np : -

It is used to import the all functionalities of numpy like multidimensional array and matrix data structure.

6.import smtplib : -

This module is used to define SMTP client session object that can be used to send mail to any internet machine.

7. from email.mime.text import MIMEText : -

This class is used to create MIME objects of major type text.

8. from email.mime.multipart import MIMEMultipart : -

Multipart class is used to define its own content type

9. from email.mime.base import MIMEBase : -

It is a base class for mime specialization.

10. from email import encoders : -

It is used to encode the messages payload.

## **ADVANTAGES**

- It is useful for health care organization to keep track of medicine supplies and sell of medicines.
- As this particular is having GUI so it would be more and more easier for user to use the interface.

As it is not possible to handle the data in hard copy so Database in the backend has been used to handle or hold the customers data.

## **DISADVANTAGES**

- As implementing and maintaining the application needs money as per requirement.
- User may insert wrong data or record.

```
from tkinter import *;
from tkinter import ttk;
from PIL import Image,ImageTk;
import mysql.connector;
from datetime import date;
import numpy as np;
def LoginFrame1():
            global uname;
global passw;
             global main_frame;
main_frame = Tk();
             main_frame.geometry("700x330");
main_frame.iconbitmap("ic1.ico");
              main_frame.title("Login Form");
            m = Menu(main_frame);
m1 = Menu(m,tearoff = 0);
m.add_cascade(label = "File",menu = m1);
m1.add_command(label = "Register",command = regtologmenu);
               main_frame.config(menu = m);
                Label(main_frame,text = "Admin Login",justify = "center",font = ("Ink Free",35,"bold"),fg = "Red",bg = "Black",width = 300).pack();
                bg = Image.open("l.jpg");
                img = ImageTk.PhotoImage(bg,master = main_frame);
             img = Image(x.Protoinage(og,master = main_Trame);
lbl = Label(main_frame, image = img).pack(pady = 0.5 );
username_label = Label(main_frame,text = "UserName - ",font = ("Ink Free",20,"bold"),bg = "Black",fg = "Blue").place(x = 40,y =90);
password_label = Label(main_frame,text = "Password - ",font = ("Ink Free",20,"bold"),bg = "Black",fg = "Blue").place(x = 40,y =140);
uname = Entry(main_frame,width = 50,borderwidth = 3,font = ("Times New Roman",12,"bold"));
uname.place(x = 275,y = 100);
passw = Entry(main_frame,width = 50,borderwidth = 3,show = "*",font = ("Times New Roman",12,"bold"));
                passw.place(x = 275,y = 150);
               loginButt = Button(main_frame,text = "Login",font = ("Ink Free",15,"bold"),command = CredentialCheck,fg = "Red",bg = "Black",width = 10).place(x = 130,y = 214);
clearButt = Button(main_frame,text = "Clear",font = ("Ink Free",15,"bold"),command = Clear_F1,fg = "Red",bg = "Black",width = 10).place(x = 278 ,y = 214);
exitButt = Button(main_frame, text = "Exit",font = ("Ink Free",15,"bold"),fg = "Red",bg = "Black",command = main_frame.destroy,width = 10).place(x = 425,y = 214);
               main_frame.mainloop();
              fentry1.place(x = 144,y = 140);
lentry2 = Entry(rframe, width = 20, borderwidth = 3, font = ("Times New Roman", 12, "bold"));
lentry2.place(x = 387,y = 140);
Email = Label(rframe, text = "Email ID", font = ("Ink Free", 20, "bold"), bg = "Black", fg = "Orange").place(x = 160,y = 180);
emailentry3.place(x = 140,y = 230);
uname = Label(rframe, text = "Username", font = ("Ink Free", 20, "bold"), bg = "Black", fg = "Orange").place(x = 160,y = 270);
uentry4.place(x = 140,y = 310);
p = Label(rframe, text = "Password", font = ("Ink Free", 20, "bold"), bg = "Black", fg = "Orange").place(x = 160,y = 350);
pentry5.place(x = 140,y = 310);
p = Label(rframe, width = 51, borderwidth = 3, show = "*", font = ("Times New Roman", 12, "bold"));
pentry5.place(x = 140,y = 399);
cp = Label(rframe, text = "Confirm Password", font = ("Ink Free", 20, "bold"), bg = "Black", fg = "Orange").place(x = 160,y = 350);
pentry5.place(x = 140,y = 399);
cp = Label(rframe, width = 51, borderwidth = 3, show = "*", font = ("Times New Roman", 12, "bold"));
cpentry6.place(x = 140,y = 390);
cpentry6.place(x = 140,y = 470);
cpentry6.place(x = 
 def regtologmenu():
    main_frame.destroy();
    RegisterForm();
                ClearRegForm();
fentry1.delete(0,END);
lentry2.delete(0,END);
emailentry3.delete(0,END);
uentry4.delete(0,END);
pentry5.delete(0,END);
cpentry5.delete(0,END);
 def backRegForm():
    rframe.destroy();
    LoginFrame1();
def Register():
    fn = fentry1.get();
    ln = lentry2.get();
    ei = emailentry3.get();
    un = uentry4.get();
    p = pentry5.get();
    cp = cpentry6.get();
                if p != cp:
    messagebox.showinfo("","Password doesn't match");
```

```
userna = uname.get();
pas = passw.get();
if userna == "" or pas
                        - pass.get();
userna == "" or pas == "":
messagebox.showinfo("Alert","Please Fill the Username and Password");
                         e:
mydb = mysql.connector.connect(host = "localhost",user = "root",password = "admin",database = "medical_inventory_system_python");
mycur=mydb.cursor()
sql = ("select * from credentials_login_registration where USERNAME =%s and PASSWORD =%s ");
val = (userna,pas);
mycur.execute(sql, val);
result = mycur.fetchall()
if result:
                                     main_frame.destroy();
MDPFrame2();
                         else:
__messagebox.showinfo("","Sorry Try Again ⊚ ");
def Clear_F1():
    uname.delete(0, END);
    passw.delete(0, END);
def RegisterForm():
    global fentry1;
    global lentry2;
    global emailentry3;
            global emailentry3;
global uentry4;
global pentry5;
global cpentry6;
global cpentry6;
global cpentry6;
global rframe;
rframe = Tk();
rframe.geometry("700x600");
rframe.geometry("700x600");
rframe.iconbitmap("ic1.ico");
Label(rframe,text = "Registration Form", justify = "center", font = ("Ink Free", 35, "bold"), fg = "Red", bg = "Black", width = 300).pack();
bg = Image.open("1.jpg").resize((700,600));
img = Image.open("1.jpg").resize((700,600));
img = Image.open("1.jpg").resize((700,600));
img = Image.open("1.jpg").resize((700,600));
img = Label(rframe,image = img).pack(pady = 0.5);
fname = Label(rframe,text = "FirstName",font = ("Ink Free",20,"bold"),bg = "Black",fg = "Orange").place(x = 160,y =90);
Iname = Label(rframe,text = "LastName",font = ("Ink Free",20,"bold"),bg = "Black",fg = "Orange").place(x = 400,y =90);
fentry1 = Entry(rframe,width = 20,borderwidth = 3,font = ("Times New Roman",12,"bold"));
```

```
::
mydb = mysql.connector.connect(host = "localhost",user = "root",password = "admin",database = "medical_inventory_system_python");
mycur = mydb.cursor();
val = [fn,ln,ei,un,cp]);
sql="INSERT INTO credentials_login_registration(First_Name,Last_Name,Email_ID,UserName,Password)VALUES (%s,%s,%s,%s,%s)";
mycur.executemany(sql,val);
mydb.commit();
mydb.commit();
mysb.commit();
messagebox.showinfo("","You have been successfully Registered , Thank you ");
ClearRegForm()
```

```
tree.colame("Got," Audot # = 150, simulatin = 50, anchor = CHTER);

tree.colame("Cold. Audot # # = 150, simulatin = 50, anchor = CHTER);

tree.colame("SCZ. Appi Cooble", width = 120, simulatin = 50, anchor = CHTER);

tree.colame("SCZ. Appi Cooble", width = 120, simulatin = 50, anchor = CHTER);

tree.colame("SCZ. Appi Cooble", width = 120, simulatin = 50, anchor = CHTER);

tree.localing("Appi Cooble", width = 120, simulatin = 50, anchor = CHTER);

tree.localing("Appi Cooble", width = 120, simulatin = 50, anchor = CHTER);

tree.localing("Appi Cooble", width = 120, simulatin = 50, anchor = CHTER);

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tree.localing("Appi Cooble", width = 120, simulatin = 50, anchor = CHTER);

tree.localing("Appi Cooble", width = 120, simulatin = 50, anchor = CHTER);

tree.localing("Appi Cooble", width = 120, simulatin = 50, anchor = CHTER);

tree.localing("Appi Cooble", width = 120, simulatin = 50, anchor = CHTER);

tree.colame("SELECT Medicine, Momes", stock, Avoilability, Expiry_Date, Price FROW mis_store");

mydu = mydu.connector.connect(host = "localhost", user = "root", password = "admin", database = "medical_inventory_system_python");

mycur = mydu.connector.connect(host = "localhost", user = "root", password = "admin", database = "medical_inventory_system_python");

mycur = mydu.connector.connect(host = "localhost", user = "root", password = "admin", database = "medical_inventory_system_python");

mycur = mydu.connector.connect(host = "localhost", user = "root", password = "admin", database = "medical_inventory_system_python");

mycur = mydu.connector.connect(host = "localhost", user = "root", password = "admin", database = "medical_inventory_system_python");

mycur = mydu.connector.connect(host = "localhost", user = "root", pas
```

```
tree.heading("Medicine_Name",text = "Medicine_Name",anchor = CENTER);

tree.heading("Stock_Availability",text = "Stock_Availability",anchor = "Availability",anchor = "Availability",an
```

```
mycursor-executemany(sql,val);
mydic mycursor executemany(sql,val);
mydic mycursor executemany(sql,val);
msd.comfig(state = NOSMAL);
msd.comfi
```

```
nell.comfig(tate = DISABLED);

def combil():
    mi.delete() (BD);
    mi.delete() (BD);
```

```
Combol.set("Select Location"");
combol.set("Select Location");
combol.set("Select Location");
combol.set("Select Location");
combol.set("Select Location");
combol.set("Select");
combol.set("Select")
```

```
tree("show") = "secology";

scordigare(";) for (mularion o)) = scordigare(";) for (mularion o));

scordigare(";) for (mularion o)) = scordigare(";) for mularion o);

scordigare(";) for mularion of m
```

```
mydic.close():

for wisk:

for wisk:

# variety:

# public myord, connector.connect(host = "locathost", user = "moot", password = "admin", database = "medical_tnventory_system_python");

# public myord, public my
```

```
sql = "UDDATE mis_store SET Stock_Avoidability = "%s" where Stock_Avoidability = "%s" %(val2,val3);
mycurecute(sql);
mycurecute(sql);
mycurecute(sql);
mycurecute(sql);
myd = mygal_connector.connect(host = "locathost",user = "root",password = "admin",database = "medical_inventory_system_python");
myd = mygal_connector.connect(host = "locathost",user = "root",password = "admin",database = "medical_inventory_system_python");
mycurecute(sql);
mycurecute(sql);
mycurecute(sql);
mycurecute(sql);
mycurecute(sql);
mycurecute(sql);
mycurecute(sql);
mycurecute(sql);
mycurecute(sql);
myd = mygal_connector.connect(host = "locathost",user = "root",password = "admin",database = "medical_inventory_system_python");
mycurecute(sql);
mycurecute(s
```

```
tree.column("Email_ID", width = 300, minwidth = 50, anchor = CENTER);
       tree.column("Phone",width = 170,minwidth = 50,anchor = CENTER);
       tree.column("Rate",width = 50,minwidth = 50,anchor = CENTER);
       tree.column("Description", width = 360, minwidth = 50, anchor = CENTER);
      tree.heading("Name",text = "Name",anchor = CENTER);
tree.heading("Email_ID",text = "Email_ID",anchor = CENTER);
      tree.heading("Phone",text = "Phone",anchor = CENTER);
tree.heading("Rate",text = "Rate",anchor = CENTER);
tree.heading("Description",text = "Description",anchor = CENTER);
      i = 0;
      for ro in mycur: #For each row in mycur
    tree.insert("", i, text="",values=(ro[0],ro[1],ro[2],ro[3],ro[4]),tags=("even",));
      tree.place(x = 10,y =100);
def inventory():
      f2.destroy();
      global f5;
      f5 = Tk();
f5.title("Inventory");
f5.iconbitmap("ic1.ico");
f5.geometry("1070x500");
      bg = Image.open("f5.jpg").resize((1070,500));
m = Menu(f5);
      m1 = Menu(m,tearoff = 0);
      m.add_cascade(label = "File",menu = m1);
      m1.add_command(label = "View Feddback's",command = viewfb);
      m1.add_command(label = "Exit",command = f5.destroy);
      f5.config(menu = m);
img = ImageTk.PhotoImage(bg,master = f5);
      lbl = Label(f5,image = img).place(x = 0,y = 63.3);
      Label(f5,text = "Inventory", justify = "center", font = ("Ink Free", 35, "bold"), fg = "Red", bg = "Black", width = 300).pack();
viewmi = Button(f5,text = "View Medicine Inventory", font = ("Ink Free", 15, "bold"), fg = "Red", bg = "Black", width = 25, command = vmi).place(x = 40,y = 400);
delfinvent = Button(f5,text = "Delete from Inventory", font = ("Ink Free", 15, "bold"), fg = "Red", bg = "Black", width = 25, command = dmi).place(x = 380,y = 400);
updateinvent = Button(f5,text = "Update Inventory", font = ("Ink Free", 15, "bold"), fg = "Red", bg = "Black", width = 25, command = umi).place(x = 720,y = 400);
```

## **FUTURE SCOPE**

In future the need of the Medical Inventory System will be more as in the era of automation and Digitization every thing is going to be paperless and no body needs to perform or keep data in hard copy. And in future this Medical inventory system could be more and more time saving for user as everything is going to be Digitalized so that there would be no hand work which actually takes lot of time and also to maintain that hard copy.

## **CONCLUSION**

Effective implementation of this software will take care of the basic requirements of the medical inventory management system because it is capable of providing easy and effective storage of information related to activities happening. This system provides an easy way for the operator to interact with the database and to manipulate the data in the database. The operator can add delete update the records in the database with ease.

## REFERENCES

## **♣** NUMPY (LIBRARY)

<a href="https://numpy.org/doc/stable/reference/generated/numpy.array.html">https://numpy.org/doc/stable/reference/generated/numpy.array.html</a>

## **4** STACKOVERFLOW

https://stackoverflow.com/questions/64526 651/duplicate-entry-0-for-key-primaryand-i-cannot-use-auto-increment-since-the

## **TALEND**

<a href="https://www.talend.com/resources/what-is-mysql/">https://www.talend.com/resources/what-is-mysql/</a>

## **W3SCHOOLS**

https://www.w3schools.com/python/pytho n\_mysql\_getstarted.asp