

PYTHON 2



REGISTRATION FORM FOR
LAMBTON COLLEGE

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Project description

In this project, we have created registration form for a college which is linked to database. Firstly, we made templates by using images and widgets and create registration form. This form includes first name, last name, contact no. email. Security questions and answers, passwords and term and conditions.

The name of this form is REGISTRATION FORM FOR LAMBTON COLLEGE.

We used PYCHARM and SQLite3 IDE for this project.

We used libraries such as tkinter and pillow, sqlite3, OOP, database intersection.

At the end of this project, user can register by entering personal information. If user do not fill all the field the pop-up window will show that “all field are required”. if passwords do not match with other then pop-up window show “password and confirm password is not matching”.

Group members

Members:

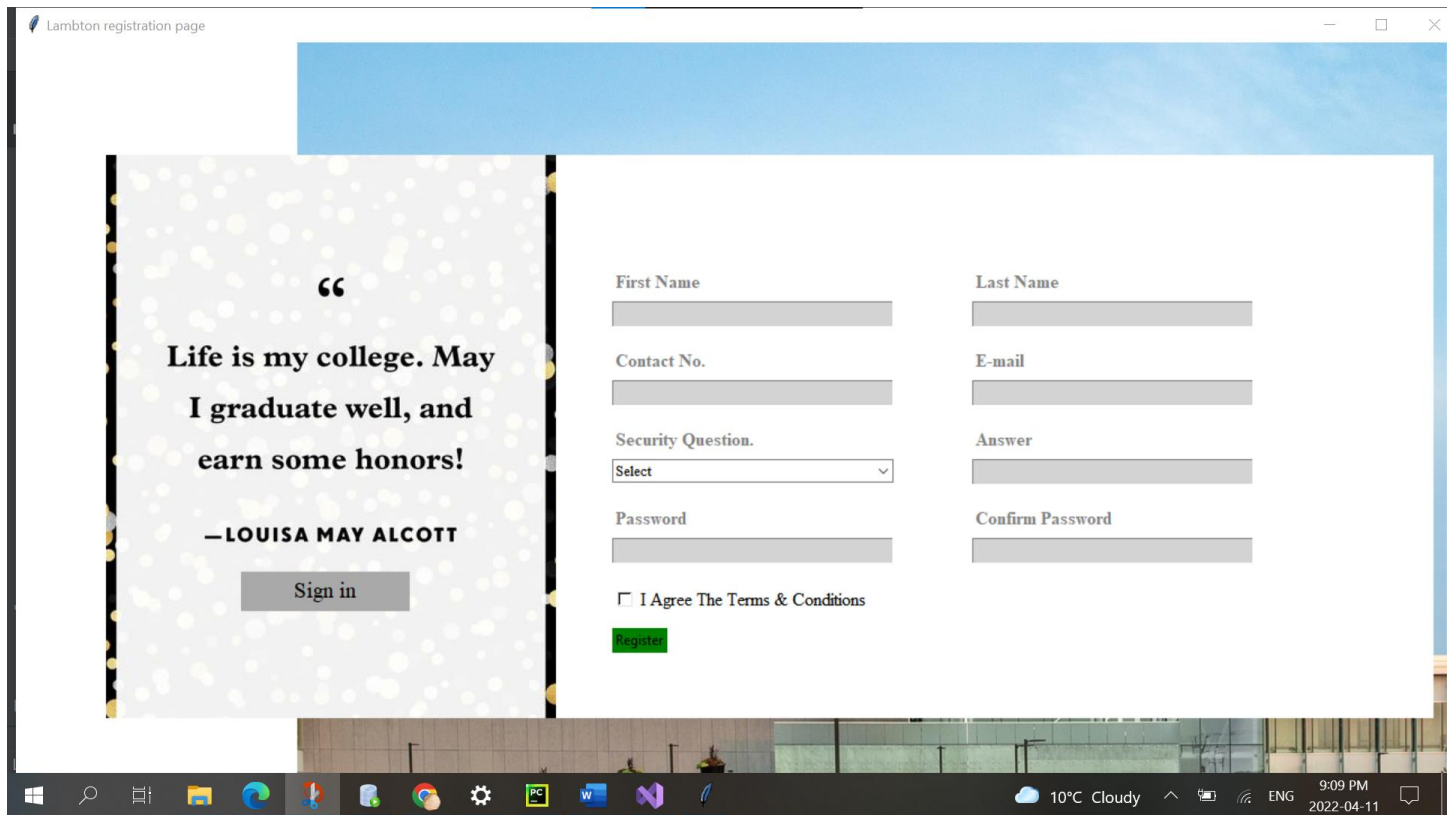
- AMANDEEP (C0840378)
- GURUSHARAN SINGH (C0828270)
- PRABHJOT KAUR KINGRA (C0834571)
- ROMANJIT KAUR (C0798336)
- SRUTHY AMEY SAMUEL (C0834672)

Leader: SRUTHY AMEY SAMUEL

Project scope

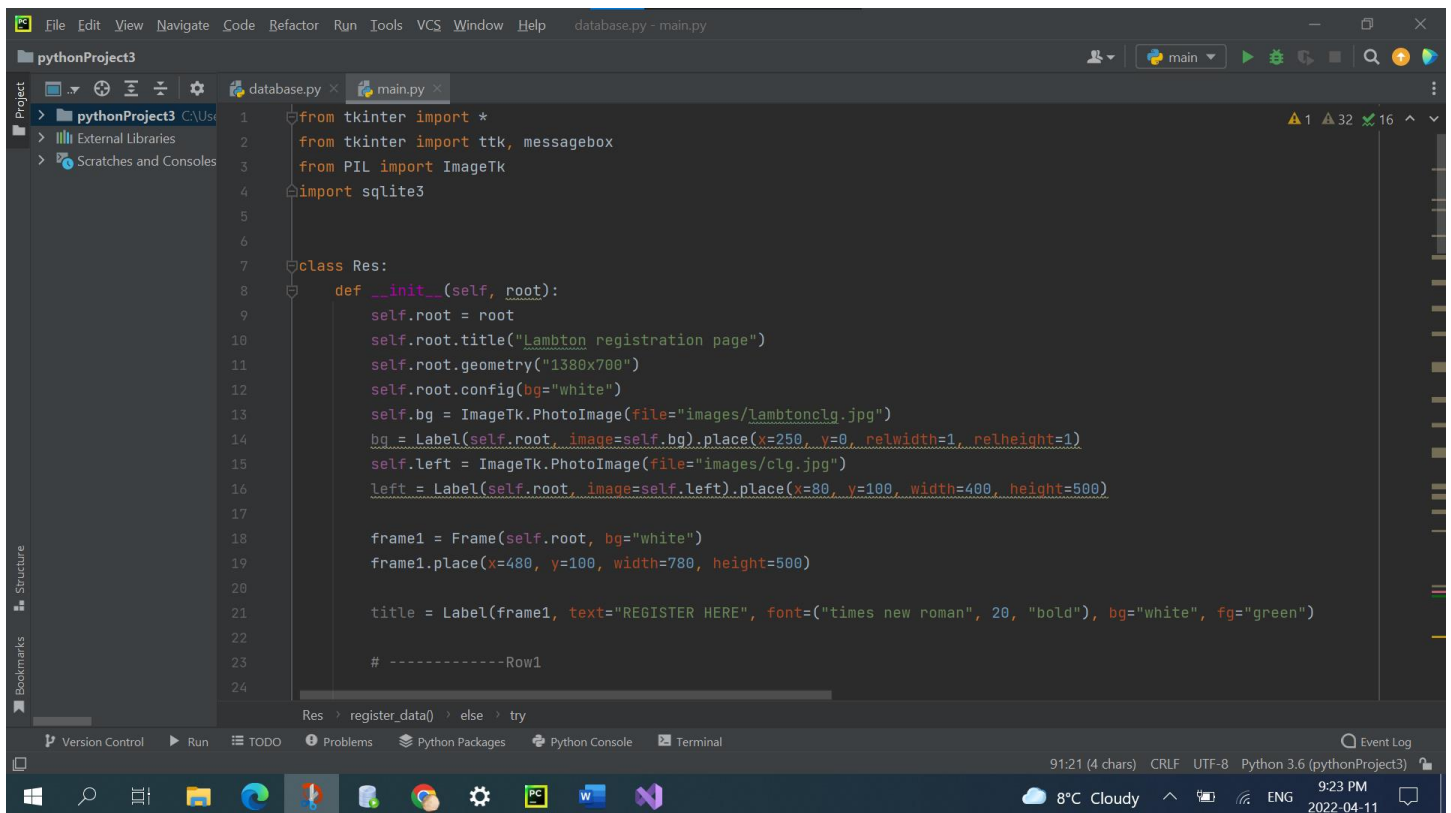
Tk interface

By using python libraries, we created registration form which is shown below



In the python code, we import tkinter , PIL for import images ,ttk for combo boxes .we made a class named as RES and use constructor def_init_ so that we call an object which is created from a class. In our code, root is an object of class you can see in the main.py program.

Python code

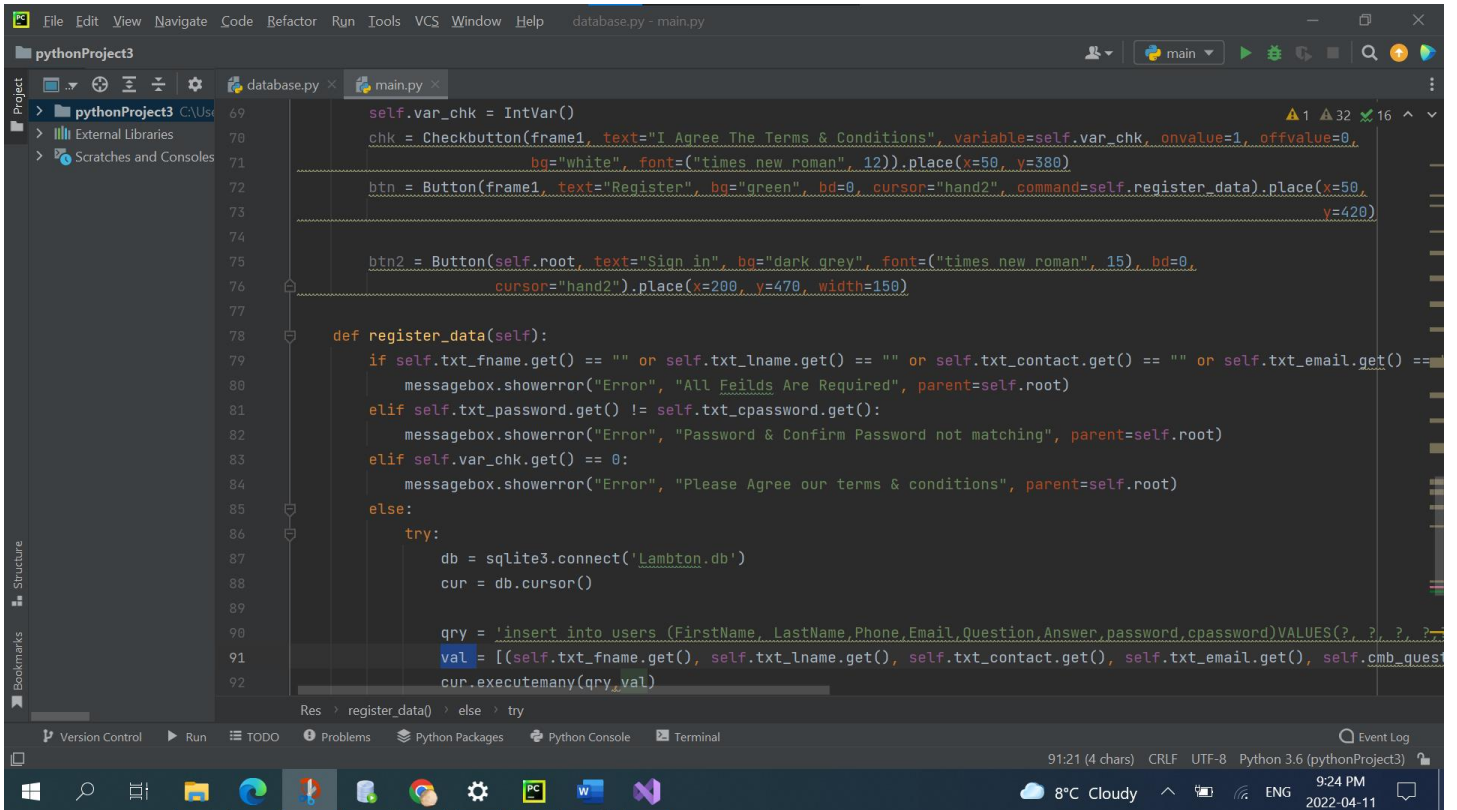


The screenshot shows a code editor window for a project named 'pythonProject3'. The editor is displaying the file 'main.py'. The code is a Tkinter application for a 'Lambton registration page'. It imports tkinter, messagebox, ImageTk, and sqlite3. A class 'Res' is defined with an '__init__' method. The method sets the root window's title to 'Lambton registration page', geometry to '1380x700', and background to 'white'. It loads two images: 'images/lambtonclg.jpg' and 'images/clg.jpg'. The first image is placed at (250, 0) with a width of 1 and a height of 1. The second image is placed at (80, 100) with a width of 400 and a height of 500. A frame is created with a white background and placed at (480, 100) with a width of 780 and a height of 500. A label 'title' is created with the text 'REGISTER HERE', font 'times new roman', size 20, bold, white background, and green foreground. The label is placed at (80, 100) with a width of 400 and a height of 500. The code ends with a comment '# -----Row1'.

```
1 from tkinter import *
2 from tkinter import ttk, messagebox
3 from PIL import ImageTk
4 import sqlite3
5
6
7 class Res:
8     def __init__(self, root):
9         self.root = root
10        self.root.title("Lambton registration page")
11        self.root.geometry("1380x700")
12        self.root.config(bg="white")
13        self.bg = ImageTk.PhotoImage(file="images/lambtonclg.jpg")
14        bg = Label(self.root, image=self.bg).place(x=250, y=0, relwidth=1, relheight=1)
15        self.left = ImageTk.PhotoImage(file="images/clg.jpg")
16        left = Label(self.root, image=self.left).place(x=80, y=100, width=400, height=500)
17
18        frame1 = Frame(self.root, bg="white")
19        frame1.place(x=480, y=100, width=780, height=500)
20
21        title = Label(frame1, text="REGISTER HERE", font=("times new roman", 20, "bold"), bg="white", fg="green")
22
23        # -----Row1
24
```

```
File Edit View Navigate Code Refactor Run Tools VCS Window Help database.py - main.py
pythonProject3
Project
  pythonProject3 C:\Users\User\OneDrive - Lambton College\Desktop\pythonProject3
  External Libraries
  Scratches and Consoles
database.py x main.py x
22 # -----Row1
23
24
25 f_name = Label(frame1, text="First Name", font=("times new roman", 12, "bold"), bg="white", fg="gray").place(
26     x=50, y=100)
27 self.txt_fname = Entry(frame1, font=("times new roman", 12), bg="lightgray")
28 self.txt_fname.place(x=50, y=130, width=250)
29
30 l_name = Label(frame1, text="Last Name", font=("times new roman", 12, "bold"), bg="white", fg="gray").place(
31     x=370, y=100)
32 self.txt_lname = Entry(frame1, font=("times new roman", 12), bg="lightgray")
33 self.txt_lname.place(x=370, y=130, width=250)
34 # -----Row2
35 contact = Label(frame1, text="Contact No.", font=("times new roman", 12, "bold"), bg="white", fg="gray").place(
36     x=50, y=170)
37 self.txt_contact = Entry(frame1, font=("times new roman", 12), bg="lightgray")
38 self.txt_contact.place(x=50, y=200, width=250)
39
40 email = Label(frame1, text="E-mail", font=("times new roman", 12, "bold"), bg="white", fg="gray").place(
41     x=370, y=170)
42 self.txt_email = Entry(frame1, font=("times new roman", 12), bg="lightgray")
43 self.txt_email.place(x=370, y=200, width=250)
44
Res > register_data() > else > try
Version Control Run TODO Problems Python Packages Python Console Terminal
91:21 (4 chars) CRLF UTF-8 Python 3.6 (pythonProject3)
8°C Cloudy 9:23 PM 2022-04-11
```

```
File Edit View Navigate Code Refactor Run Tools VCS Window Help database.py - main.py
pythonProject3
Project
  pythonProject3 C:\Users\User\OneDrive - Lambton College\Desktop\pythonProject3
  External Libraries
  Scratches and Consoles
database.py x main.py x
45 # -----Row3
46 question = Label(frame1, text="Security Question.", font=("times new roman", 12, "bold"), bg="white",
47     fg="gray").place(
48     x=50, y=240)
49 self.cmb_quest = ttk.Combobox(frame1, font=("times new roman", 10), state='readonly')
50 self.cmb_quest['values'] = ("Select", "Your First Pet Name", "Your Birth Place", "Your Best Friend Name")
51 self.cmb_quest.place(x=50, y=270, width=250)
52 self.cmb_quest.current(0)
53 answer = Label(frame1, text="Answer", font=("times new roman", 12, "bold"), bg="white", fg="gray").place(
54     x=370, y=240)
55 self.txt_answer = Entry(frame1, font=("times new roman", 12), bg="lightgray")
56 self.txt_answer.place(x=370, y=270, width=250)
57 # -----Row4
58 password = Label(frame1, text="Password", font=("times new roman", 12, "bold"), bg="white", fg="gray").place(
59     x=50, y=310)
60 self.txt_password = Entry(frame1, font=("times new roman", 12), bg="lightgray")
61 self.txt_password.place(x=50, y=340, width=250)
62
63 cpassword = Label(frame1, text="Confirm Password", font=("times new roman", 12, "bold"), bg="white",
64     fg="gray").place(
65     x=370, y=310)
66 self.txt_cpassword = Entry(frame1, font=("times new roman", 12), bg="lightgray")
67 self.txt_cpassword.place(x=370, y=340, width=250)
68 # -----Row5
Res > register_data() > else > try
Version Control Run TODO Problems Python Packages Python Console Terminal
91:21 (4 chars) CRLF UTF-8 Python 3.6 (pythonProject3)
8°C Cloudy 9:24 PM 2022-04-11
```

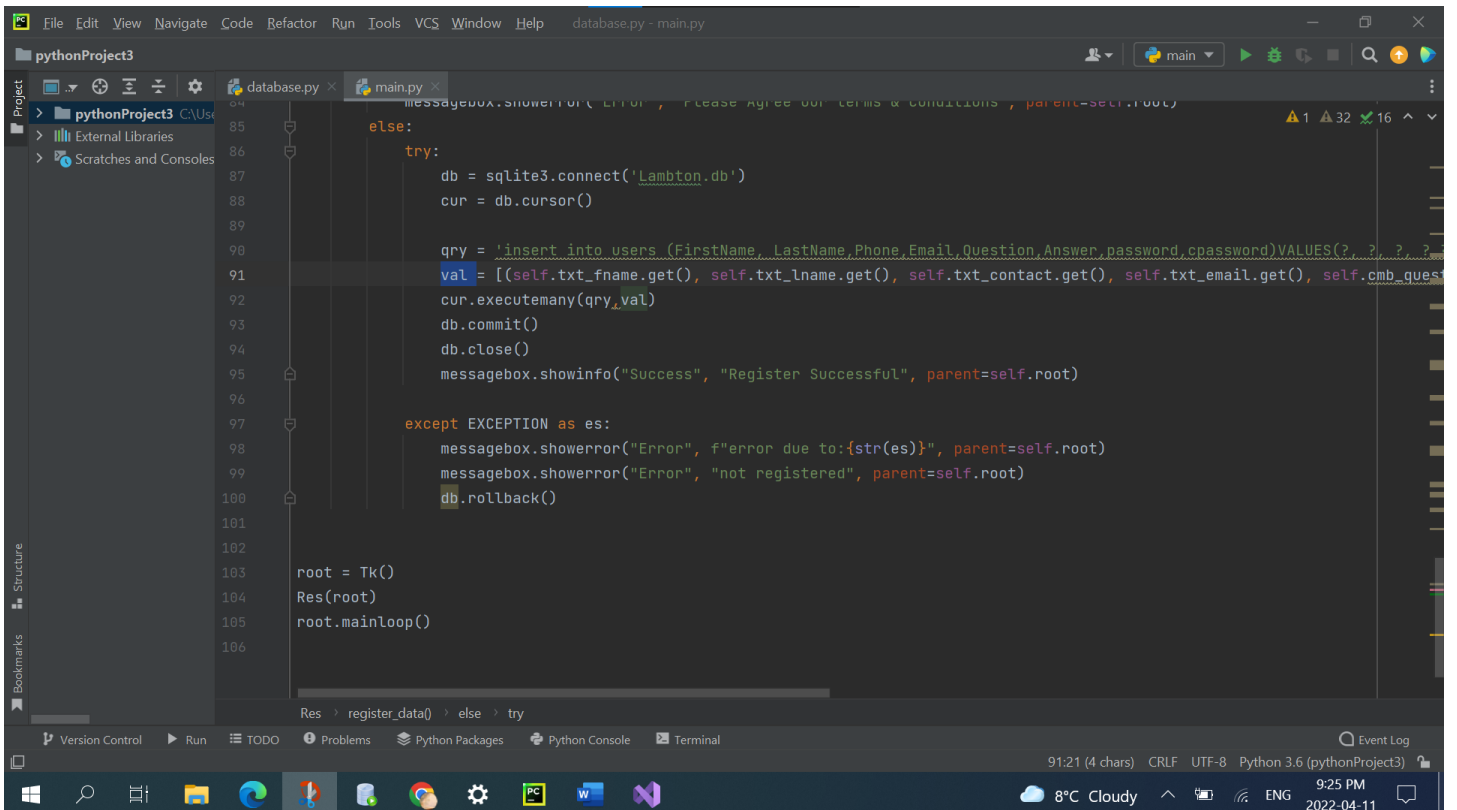



```
File Edit View Navigate Code Refactor Run Tools VCS Window Help database.py - main.py

pythonProject3
  pythonProject3 CAUs
  External Libraries
  Scratches and Consoles

69 self.var_chk = IntVar()
70 chk = Checkbutton(frame1, text="I Agree The Terms & Conditions", variable=self.var_chk, onvalue=1, offvalue=0,
71                  bg="white", font=("times new roman", 12)).place(x=50, y=380)
72 btn = Button(frame1, text="Register", bg="green", bd=0, cursor="hand2", command=self.register_data).place(x=50,
73                                                       y=420)
74
75 btn2 = Button(self.root, text="Sign in", bg="dark grey", font=("times new roman", 15), bd=0,
76               cursor="hand2").place(x=200, y=470, width=150)
77
78 def register_data(self):
79     if self.txt_fname.get() == "" or self.txt_lname.get() == "" or self.txt_contact.get() == "" or self.txt_email.get() ==
80         messagebox.showerror("Error", "All Feilds Are Required", parent=self.root)
81     elif self.txt_password.get() != self.txt_cpassword.get():
82         messagebox.showerror("Error", "Password & Confirm Password not matching", parent=self.root)
83     elif self.var_chk.get() == 0:
84         messagebox.showerror("Error", "Please Agree our terms & conditions", parent=self.root)
85     else:
86         try:
87             db = sqlite3.connect('Lambton.db')
88             cur = db.cursor()
89
90             qry = 'insert into users (FirstName, LastName, Phone, Email, Question, Answer, password, cpassword) VALUES(?, ?, ?, ?'
91             val = [(self.txt_fname.get(), self.txt_lname.get(), self.txt_contact.get(), self.txt_email.get(), self.cmb_quest
92                   cur.executemany(qry, val)

Res > register_data() > else > try
Version Control Run TODO Problems Python Packages Python Console Terminal
91:21 (4 chars) CRLF UTF-8 Python 3.6 (pythonProject3)
8°C Cloudy 9:24 PM 2022-04-11
```



```
File Edit View Navigate Code Refactor Run Tools VCS Window Help database.py - main.py

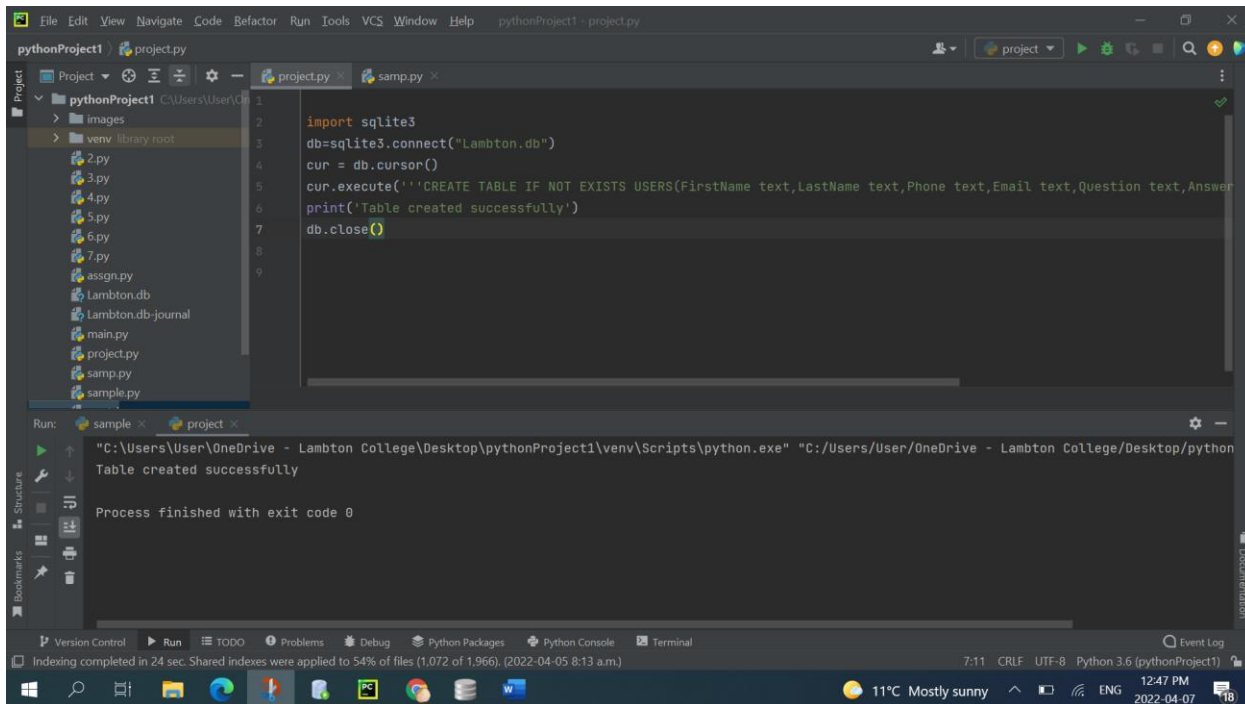
pythonProject3
  pythonProject3 CAUs
  External Libraries
  Scratches and Consoles

94         db.commit()
95         db.close()
96         messagebox.showinfo("Success", "Register Successful", parent=self.root)
97     except EXCEPTION as es:
98         messagebox.showerror("Error", f"error due to:{str(es)}", parent=self.root)
99         messagebox.showerror("Error", "not registered", parent=self.root)
100         db.rollback()
101
102
103 root = Tk()
104 Res(root)
105 root.mainloop()
106

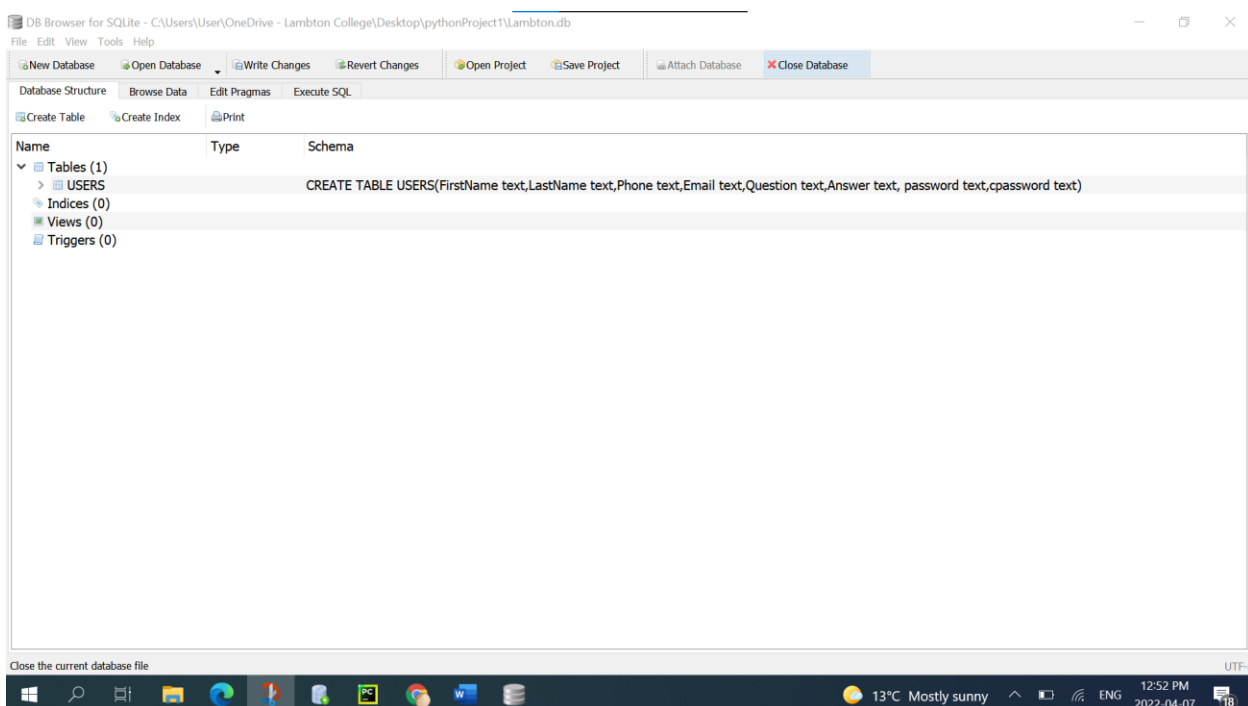
Res > register_data() > else > try
Version Control Run TODO Problems Python Packages Python Console Terminal
91:21 (4 chars) CRLF UTF-8 Python 3.6 (pythonProject3)
8°C Cloudy 9:25 PM 2022-04-11
```

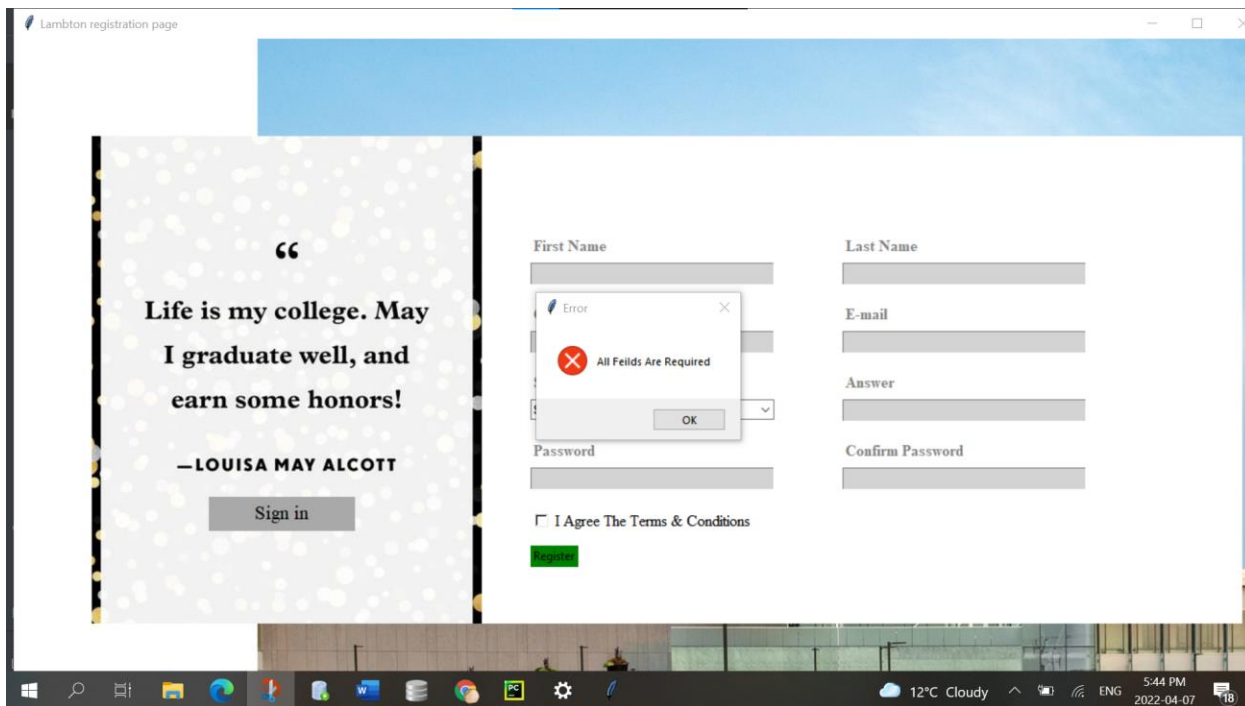

SQLite database

After python code we connected it with database. When user enter any entry in the form we can fetch it and stored in the database .

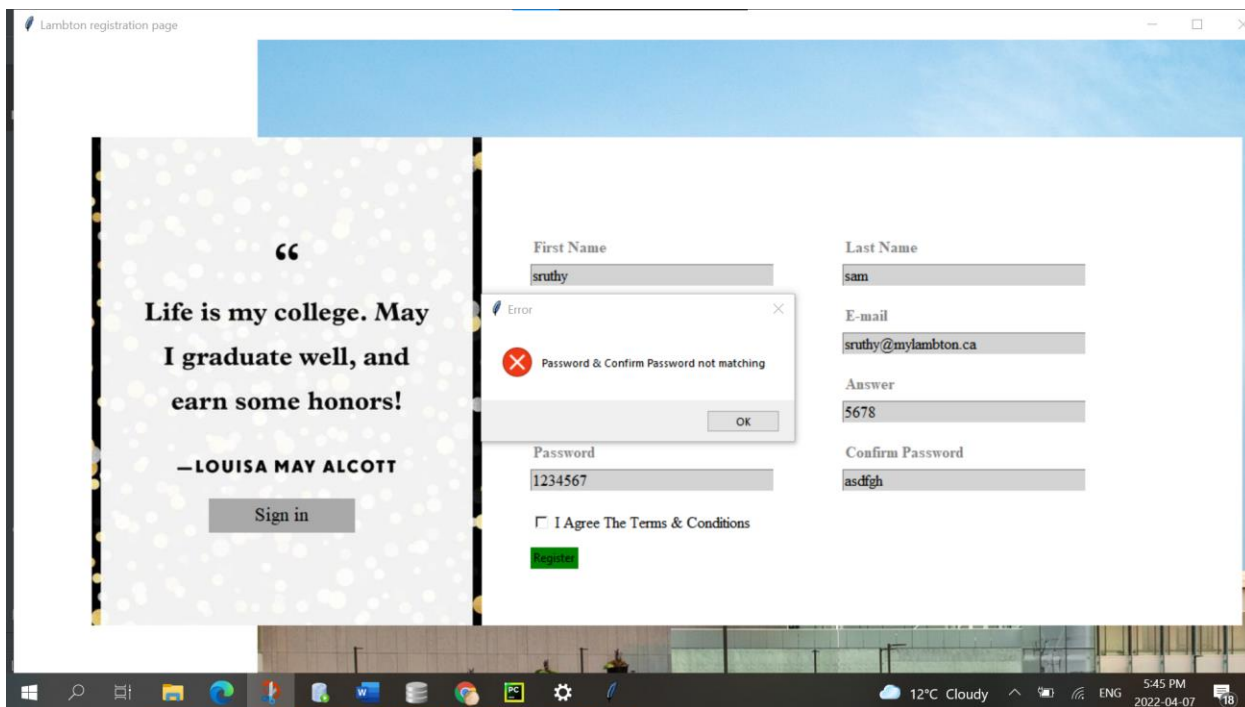


In the above screenshot we connect PyCharm to sqlite3 and create table. Our table is created successfully.

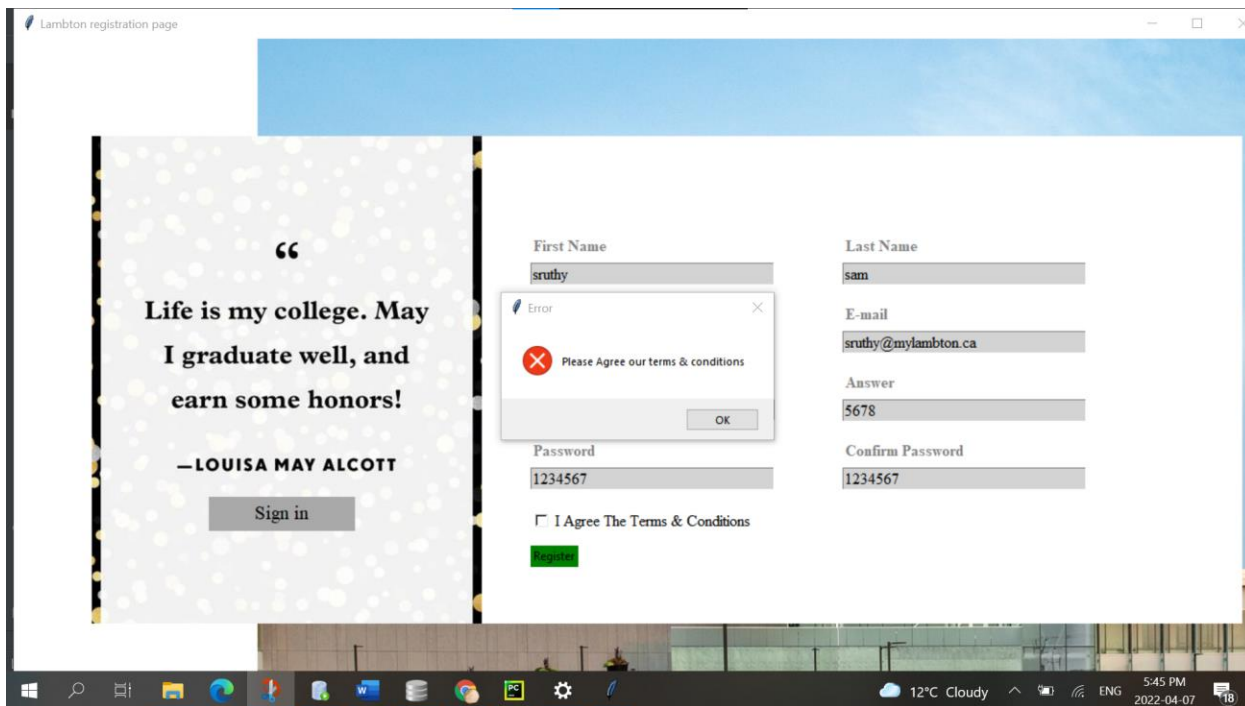




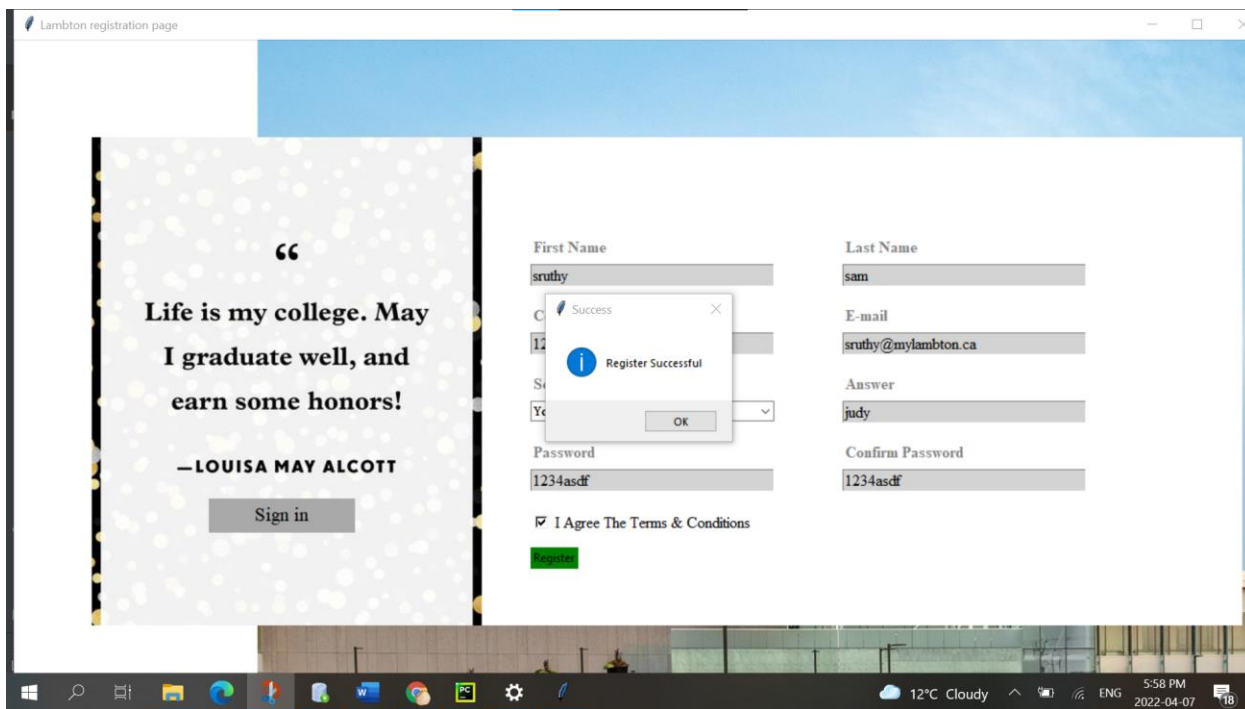
In the above screenshot if the user do not fill all entries , a pop-up box will appear “all fields are required”.



If the password and confirm password not matching.



If user do not select terms and condition.



In the above screenshot, user entered all entries and pop-up window shows register successful.

By using SELECT statement we can check user's entries which is inserted in our database. In the below image you can see

DB Browser for SQLite - C:\Users\User\OneDrive - Lambton College\Desktop\pythonProject3\lambton.db

File Edit View Tools Help

New Database Open Database Write Changes Revert Changes Open Project Save Project Attach Database Close Database

Database Structure Browse Data Edit Pragma Execute SQL

SQL 1

```
1 SELECT * from users;
```

	FirstName	LastName	Phone	Email	Question	Answer	password	cpassword
1	1	1	1	1	Your First Pet Name	1	1	1
2	sruthy	sam	1234456	sruthy@mylambton.ca	Your First Pet Name	judy	1234asdf	1234asdf

Execution finished without errors.
Result: 2 rows returned in 13ms
At line 1:
SELECT * from users;

UTF-8

Windows taskbar: 12°C Cloudy, 5:59 PM, 2022-04-07

TECHNOLOGY

For this project we used PyCharm and sqlite3 db browser



Tasks

All Group members referred to different materials and collected ideas to make the interface more interactive.

OOP Concepts:

Amandeep

Gursharan Singh

GUI framework: Romanjit Kaur

Sruthy Amey Samuel

Database Connectivity: Prabhjot Kaur Kingra