Simple Registration Form Using Tkinter

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Task-1: Simple Registration Form Using Tkinter in Python

Abstract: This project aims to develop a simple registration form using Tkinter, a standard GUI toolkit in Python. The registration form will include basic fields such as name, email, password, and a submit button. Tkinter provides an intuitive way to create graphical interfaces, making it suitable for beginners and small-scale projects. The form will validate user inputs, ensuring that required fields are filled and the email follows a standard format. Upon successful submission, the entered information will be stored or processed as desired. This project serves as an introductory exercise to GUI programming in Python and demonstrates how Tkinter can be utilized to create interactive forms for various applications.

Keywords: Tkinter- Tool Kit Interface

GUI - Graphical User Interface

Steps that I followed:

1. Creating main window
2. Title and Geometry of window
3. Creating Labels for entry fields
4. Geometric alignment and packing
5. Creating Entry fields
6. Dropdown menu and Check Box and Radio Button
7. Submit button and On Click Function
8. Getting entered Data
9. Message boxes, Warning and Error
10. Data storing in Excel file

Step 1 : Creating main Window

#code

```
import tkinter as tk

window = tk.Tk()

window.mainloop()
```

Step 2 : Title and Geometry of window

#code

Window.title(“Simple Registration Form”)

Window.geometry(“300x500”)

Step 3 : Creating Labels for Entry fields

#code

Name_label = tk.Label(window, text=”Name:”)

Email_label = tk.Label(window, text=”Email:”)

Ph_no_label = tk.Label(window, text=”Phone Number:”)

College_label = tk.Label(window, text=”College:”)

Id_no_label = tk.Label(window, text=”ID Number:”)

Step 4 : Geometry alignment and packing

#code

Name_label.grid(row=0, column=0, padx=10, pady=10)

Email_label.grid(row=1, column=0, padx=10, pady=10)

Ph_no_ label.grid(row=2, column=0, padx=10, pady=10)

College_ label.grid(row=3, column=0, padx=10, pady=10)

Id_no_ label.grid(row=4, column=0, padx=10, pady=10)

Step 5 : Creating Entry Fields

#code

Name_entry = tk.Entry(window)

Email_entry = tk.Entry(window)

Ph_no_entry = tk.Entry(window)

College_entry = tk.Entry(window)

Id_no_entry = tk.Entry(window)

#packing

Name_entry.grid(row=0, column=1, padx=10, pady=10)

Email_Entry.grid(row=1, column=1, padx=10, pady=10)

Ph_no_ Entry.grid(row=2, column=1, padx=10, pady=10)

College_Entry.grid(row=3, column=1, padx=10, pady=10)

Id_no_ Entry.grid(row=4, column=1, padx=10, pady=10)

Step 6 : Dropdown menu and Check Box and Radio Button

#code

#dropdown menu

from tkinter import ttk

Year_entry = ttk.Combobox(window, values=[“1st”, ”2nd”, “3rd”, “4th”])

Branch_entry = ttk.Combobox(window, values=[“ECE”, “CSE”, “CIVIL”, “MECH”])

#label and packing

Year_label = tk.Label(window, text=”Year:”)

Year_label.grid(row=5, column=0, padx=10, pady=10)

Year_entry.grid(row=5, column=1, padx=10, pady=10)

Branch_label(window, text=”Branch”)

Branch_label.grid(row=6, column=0, padx=10, pady=10)

Branch_entry.grid(row=6, column=1, padx=10, pady=10)

#check box

Check_value =tk.Intvar() #on value= 1, off value=0

Check_box = ttk.CheckButton(window, text=”Agree TC “, variable=Check_value)

Check_box.grid(row=7, column=1, padx=10, pady=10)

#Radio Button

g=tk.StringVar()
gender_label=tk.Label(text="Gender:")
gender_label.grid(row=2,column=0,padx=10,pady=10)
gender_entry_m=ttk.Radiobutton(text="Male",value="male",variable=g)
gender_entry_m.grid(row=2,column=1)
gender_entry_f=ttk.Radiobutton(text="Female",value="female",variable=g)
gender_entry_f.grid(row=3,column=1)

Step 7 : Submit button and On click function

```
#code

#On Click Funtion

def On_click():

        print("registration successful")


#submit button

Submit_button = tk.Button(text="Submit", command=On_click)

Submt_button.grid(row=8, column=1, padx=10, pady=10)
```

Step 8 : Getting entered Data

```
#code

def On_click() :

        Name = Name_entry.get()

        Email = Email_entry.get()

        Ph_no = Ph_no_entry.get()

        College = College_entry.get()

        ID_no = Id_no_entry.get()

        Year = Year_entry.get()

        Branch = Branch_entry.get()

        Check = Check_value.get()


        Print("Name:{}\n Email:{}\nPh_no:{} \n College:{} \n ID:{} \n Year:{} Branch:{}

                check:{}".format(Name,Email,Ph_no,College,ID_no,Year,Branch,Check))
```

Step 9 : Message boxes, Warning and Error

```
#code

from tkinter import messagebox


if Name and Email and Ph_no and College and ID_no and Year and Branch and Check==1 :
```

```
            messagebox.showinfo("Submitted", "Name:{}\n Email:{}\n Ph_no:{} \n College:{} \n
            ID:{}\n Year:{}\n Branch:{}\n check:{}".format (Name,Email,Ph_no,College, ID_no,
            Year,Branch,Check))
            if "@" not in Email :
                    messagebox.showerror("error", "email incorrect")
else :
        messagebox.showwarning("Warning", "Fill all the entries")
```

Step 10 : Data Storing in Excel file

```
#code
Import openpyxl
From openpyxl import load_workbook
File_path = r" Book1.xlsx"
# please create excel file and copy excel file path and paste after r
A= openpyxl.load_workbook(file_path)
B= A["Sheet1"]                          #Sheet1 is name of the sheet in excel
B.append(Name,Email,Ph_no,College,year,branch,check)
A.save(file_path)
```

#Password Block : (additional**)**

```
#code
Password_entry = tk.Entry(window, show="*")
Password_entry.pack()
```

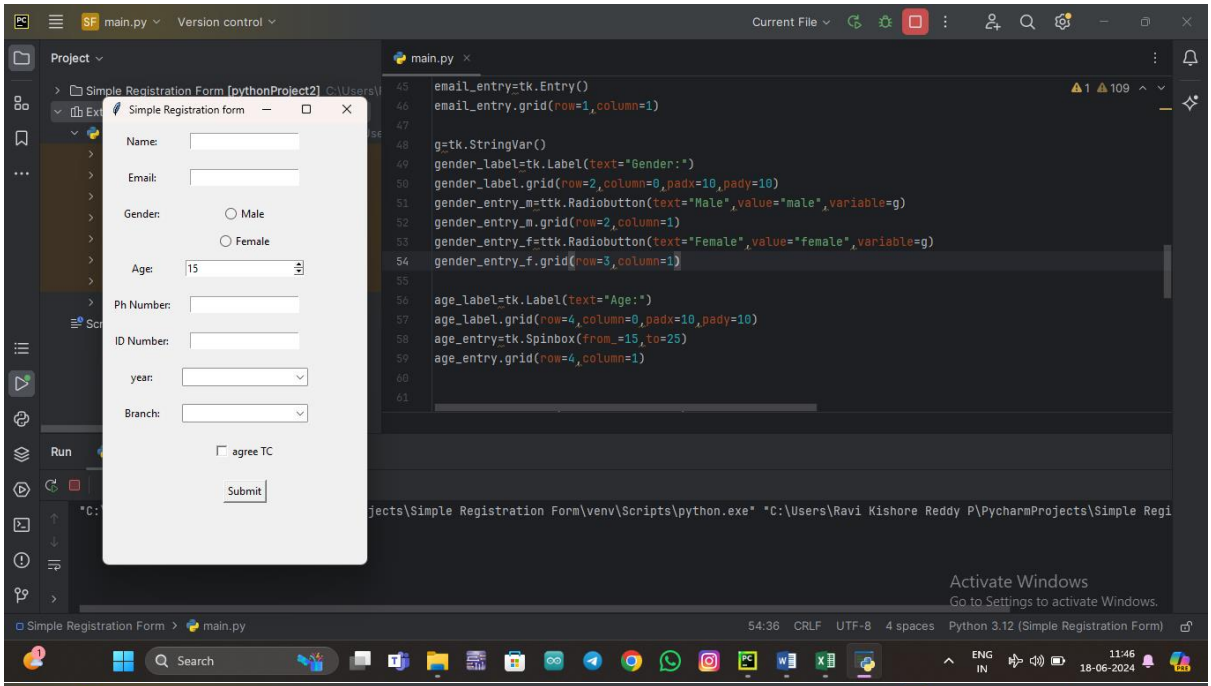
#Spinbox :

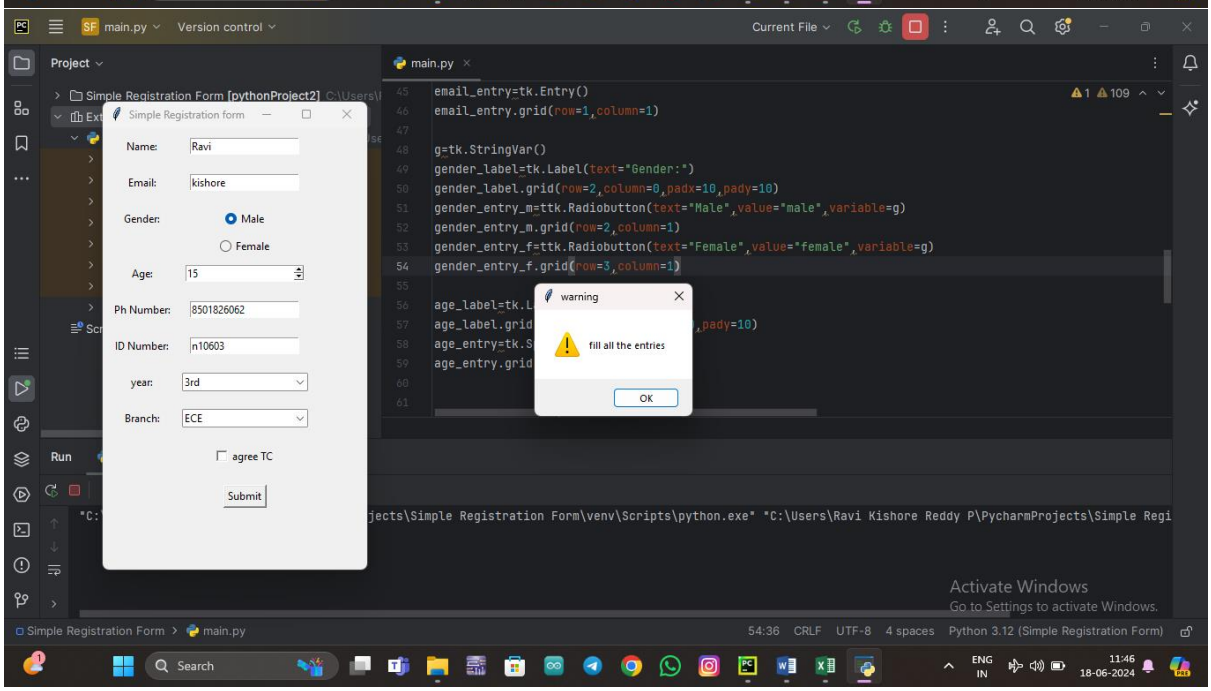
```
#code
age_label=tk.Label(text="Age:")
age_label.grid(row=4,column=0,padx=10,pady=10)
age_entry=tk.Spinbox(from_=15,to=25)
age_entry.grid(row=4,column=1)
```

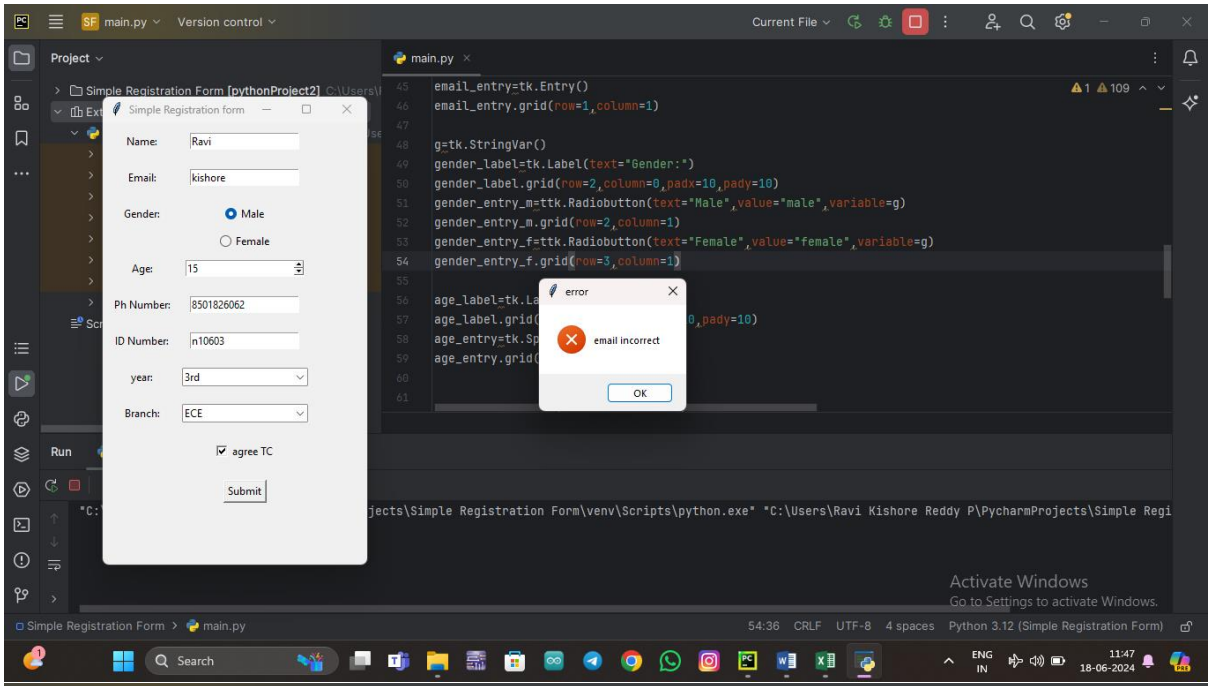
SIMPLE REGISTRATION FORM CODE:

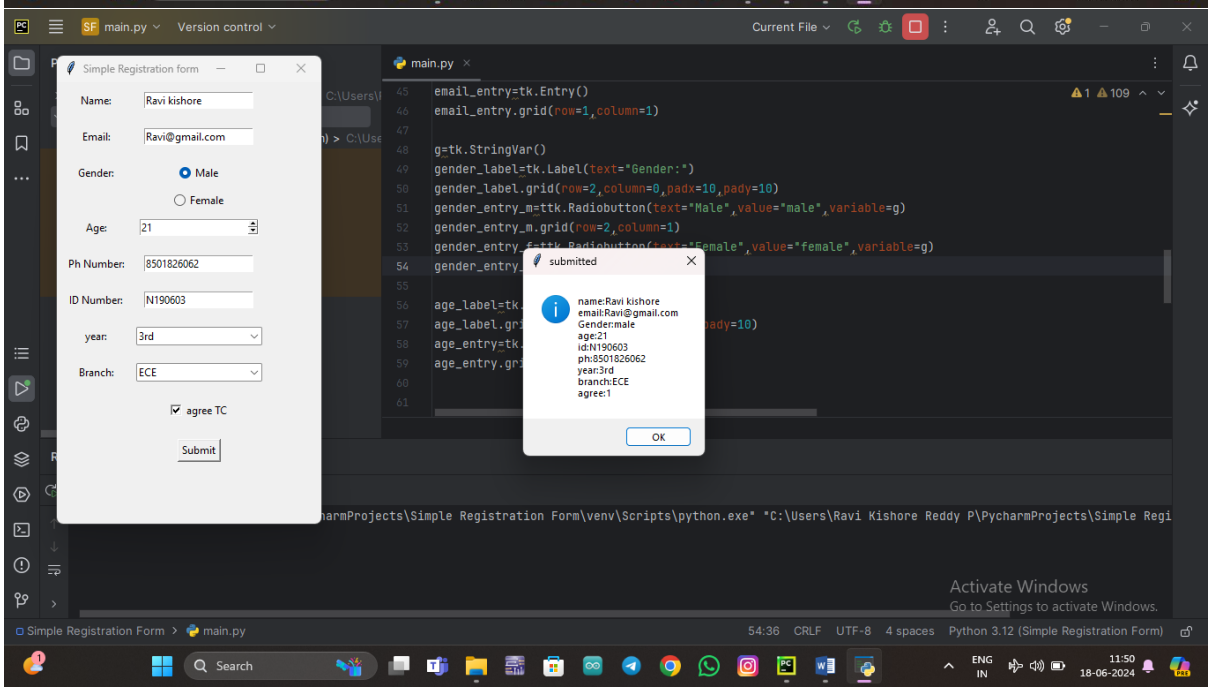
```
import tkinter as tk
from tkinter import ttk,messagebox
import openpyxl
from openpyxl import load_workbook

window = tk.Tk()
window.title("Simple Registration form")
window.geometry("300x500")

file_path=r"Book1.xlsx"
a=openpyxl.load_workbook(file_path)
b=a["Sheet1"]


def on_click():
    name=name_entry.get()
    email=email_entry.get()
    age=age_entry.get()
    gender=g.get()
    id=id_entry.get()
    ph=ph_entry.get()
    year=year_entry.get()
    branch=branch_entry.get()
    agree=val.get()

    if name and email and id and ph and year and branch and agree and
gender and age:
        if "@" not in email:
            messagebox.showerror("error", "email incorrect")
        else :

messagebox.showinfo("submitted","name:{}\nemail:{}\nGender:{}\nage:{}\nid:{
}\nph:{}\nyear:{}\nbranch:{}\nagree:{}".format(name,email,gender,age,id,ph,
year,branch,agree))
            b.append([name,email,gender,age,id,ph,year,branch,agree])
            a.save(file_path)

    else:
         messagebox.showwarning("warning","fill all the entries")


name_label=tk.Label(text="Name:")
name_label.grid(row=0,column=0,padx=10,pady=10)
name_entry=tk.Entry()
name_entry.grid(row=0,column=1)

email_label=tk.Label(text="Email:")
email_label.grid(row=1,column=0,padx=10,pady=10)
email_entry=tk.Entry()
email_entry.grid(row=1,column=1)

g=tk.StringVar()
gender_label=tk.Label(text="Gender:")
gender_label.grid(row=2,column=0,padx=10,pady=10)
gender_entry_m=ttk.Radiobutton(text="Male",value="male",variable=g)
gender_entry_m.grid(row=2,column=1)
gender_entry_f=ttk.Radiobutton(text="Female",value="female",variable=g)
gender_entry_f.grid(row=3,column=1)
```

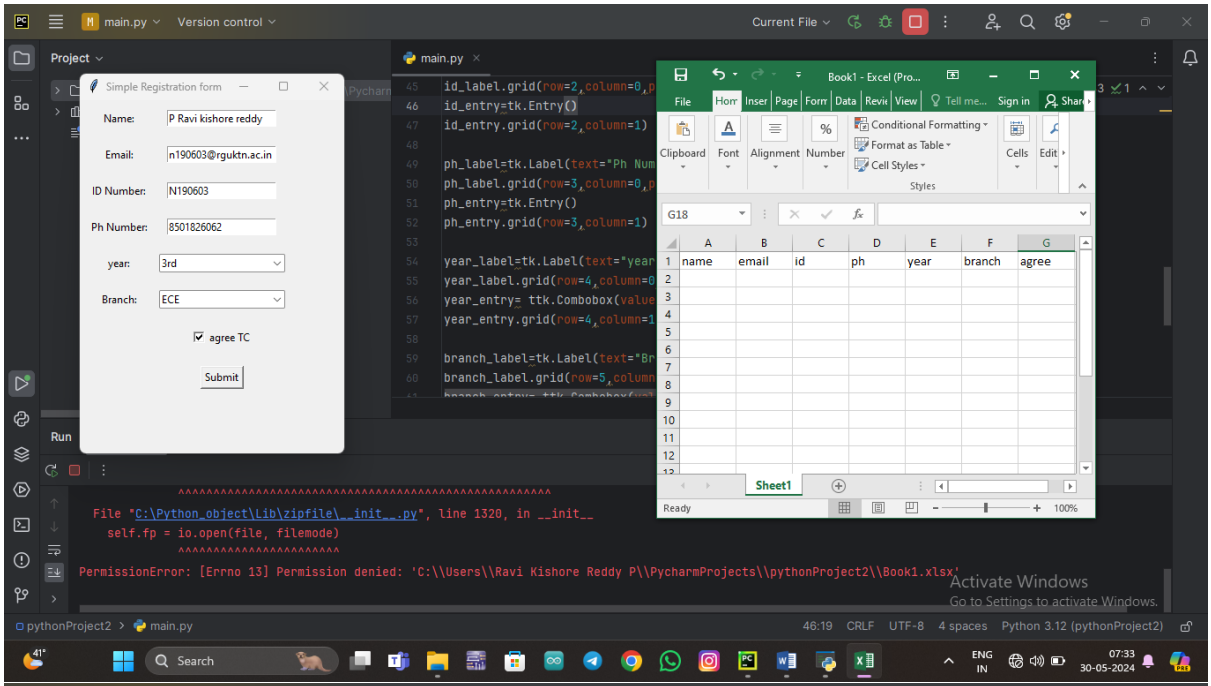
```
age_label=tk.Label(text="Age:")
age_label.grid(row=4,column=0,padx=10,pady=10)
age_entry=tk.Spinbox(from_=15,to=25)
age_entry.grid(row=4,column=1)


ph_label=tk.Label(text="Ph Number:")
ph_label.grid(row=5,column=0,padx=10,pady=10)
ph_entry=tk.Entry()
ph_entry.grid(row=5,column=1)

id_label=tk.Label(text="ID Number:")
id_label.grid(row=6,column=0,padx=10,pady=10)
id_entry=tk.Entry()
id_entry.grid(row=6,column=1)

year_label=tk.Label(text="year:")
year_label.grid(row=7,column=0,padx=10,pady=10)
year_entry= ttk.Combobox(values=["1st","2nd","3rd","4th"])
year_entry.grid(row=7,column=1)

branch_label=tk.Label(text="Branch:")
branch_label.grid(row=8,column=0,padx=10,pady=10)
branch_entry= ttk.Combobox(values=["ECE","CSE","CIVIL","MECH","EEE"])
branch_entry.grid(row=8,column=1)


val=tk.IntVar()
agree_entry =tk.Checkbutton(text="agree TC",variable=val)
agree_entry.grid(row=9,column=1,padx=10,pady=10)

submit = tk.Button(text="Submit",command=on_click)
submit.grid(row=10,column=1,padx=10,pady=10)

window.mainloop()
```

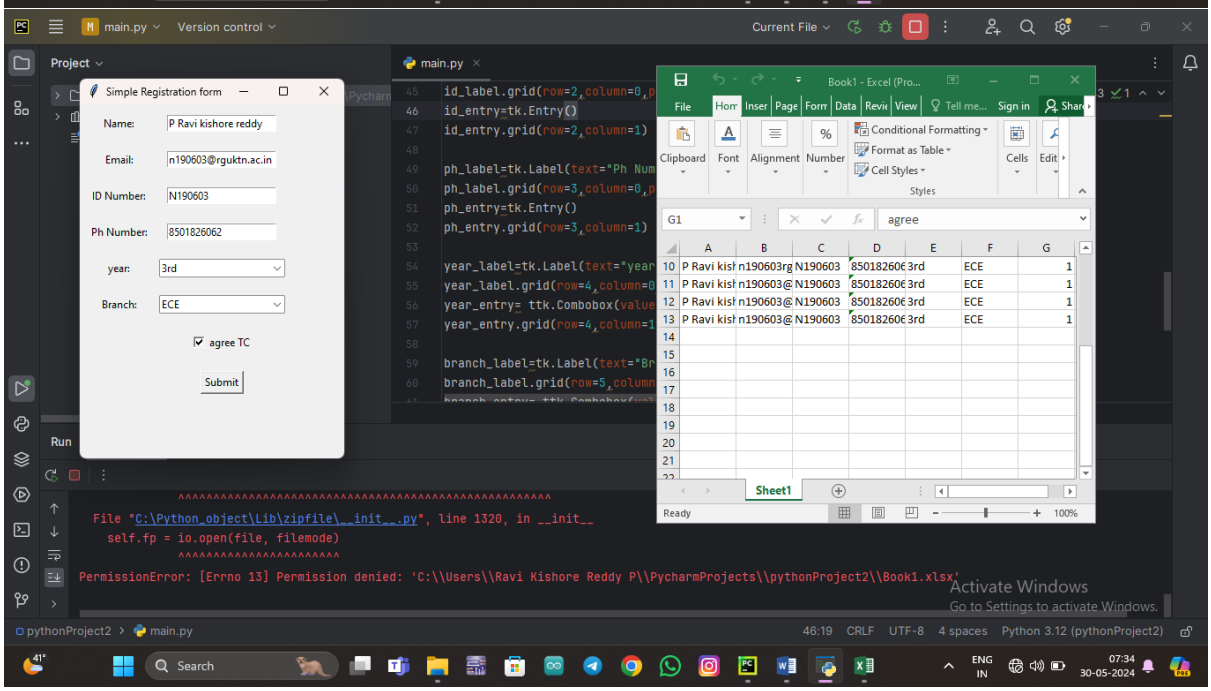

Simple Registration form
Name:
Email:
Gender:
Male
Female
Age:
15
Ph Number:
ID Number:
year:
Branch:
agree TC
Submit
email_entry=tk.Entry()
email_entry.grid(row=1,column=1)
g=tk.StringVar()
gender_label=tk.Label(text="Gender:")
gender_label.grid(row=2,column=0,padx=10,pady=10)
gender_entry_m=ttk.Radiobutton(text="Male",value="male",variable=g)
gender_entry_m.grid(row=2,column=1)
gender_entry_f=ttk.Radiobutton(text="Female",value="female",variable=g)
gender_entry_f.grid(row=3,column=1)
age_label=tk.Label(text="Age:")
age_label.grid(row=4,column=0,padx=10,pady=10)
age_entry=tk.Spinbox(from_=15,to=25)
age_entry.grid(row=4,column=1)
Activate Windows
Go to Settings to activate Windows.


Simple Registration form
Name:
Ravi
Email:
kishore
Gender:
Male
Female
Age:
15
Ph Number:
8501826062
ID Number:
n10603
year:
3rd
Branch:
ECE
agree TC
Submit
warning
fill all the entries
OK
email_entry=tk.Entry()
email_entry.grid(row=1,column=1)
g=tk.StringVar()
gender_label=tk.Label(text="Gender:")
gender_label.grid(row=2,column=0,padx=10,pady=10)
gender_entry_m=ttk.Radiobutton(text="Male",value="male",variable=g)
gender_entry_m.grid(row=2,column=1)
gender_entry_f=ttk.Radiobutton(text="Female",value="female",variable=g)
gender_entry_f.grid(row=3,column=1)
Activate Windows
Go to Settings to activate Windows.


Simple Registration form
Name: Ravi
Email: kishore
Gender: Male
Female
Age: 15
Ph Number: 8501826062
ID Number: n10603
year: 3rd
Branch: ECE
agree TC
Submit
error
email incorrect
OK
email_entry=tk.Entry()
email_entry.grid(row=1,column=1)
g=tk.StringVar()
gender_label=tk.Label(text="Gender:")
gender_label.grid(row=2,column=0,padx=10,pady=10)
gender_entry_m=ttk.Radiobutton(text="Male",value="male",variable=g)
gender_entry_m.grid(row=2,column=1)
gender_entry_f=ttk.Radiobutton(text="Female",value="female",variable=g)
gender_entry_f.grid(row=3,column=1)
Activate Windows
Go to Settings to activate Windows.


Simple Registration form
Name: Ravi kishore
Email: Ravi@gmail.com
Gender: Male
Female
Age: 21
Ph Number: 8501826062
ID Number: N190603
year: 3rd
Branch: ECE
agree TC
Submit
submitted
name:Ravi kishore
email:Ravi@gmail.com
Gender:male
age:21
id:N190603
ph:8501826062
year:3rd
branch:ECE
agree:1
OK
Activate Windows
Go to Settings to activate Windows.


Simple Registration form
Name: P Ravi kishore reddy
Email: n190603@rguktn.ac.in
ID Number: N190603
Ph Number: 8501826062
year: 3rd
Branch: ECE
agree TC
Submit
Book1 - Excel (Pro...
name email id ph year branch agree
Sheet1
Ready
File "C:\Python_object\Lib\zipfile__init__.py", line 1320, in __init__
self.fp = io.open(file, filemode)
PermissionError: [Errno 13] Permission denied: 'C:\\Users\\Ravi Kishore Reddy P\\PycharmProjects\\pythonProject2\\Book1.xlsx'
Activate Windows
Go to Settings to activate Windows.
pythonProject2 > main.py
46:19 CRLF UTF-8 4 spaces Python 3.12 (pythonProject2)
07:33
30-05-2024


Simple Registration form
Name: P Ravi kishore reddy
Email: n190603@rguktn.ac.in
ID Number: N190603
Ph Number: 8501826062
year: 3rd
Branch: ECE
agree TC
Submit
Book1 - Excel (Pro...
P Ravi kisl n190603rg N190603 8501826060 3rd ECE 1
P Ravi kisl n190603@ N190603 8501826060 3rd ECE 1
P Ravi kisl n190603@ N190603 8501826060 3rd ECE 1
P Ravi kisl n190603@ N190603 8501826060 3rd ECE 1
Sheet1
Ready
File "C:\Python_object\Lib\zipfile__init__.py", line 1320, in __init__
self.fp = io.open(file, filemode)
PermissionError: [Errno 13] Permission denied: 'C:\\Users\\Ravi Kishore Reddy P\\PycharmProjects\\pythonProject2\\Book1.xlsx'
Activate Windows
Go to Settings to activate Windows.
pythonProject2 > main.py
46:19 CRLF UTF-8 4 spaces Python 3.12 (pythonProject2)
07:34
30-05-2024