Experiment No. 8
Creating GUI with python containing widgets such as labels, textbox, radio, checkboxes and custom dialog boxes
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Experiment No. 8

Title: Creating GUI with python containing widgets such as labels, textbox, radio, checkboxes and custom dialog boxes

Aim: To study and create GUI with python containing widgets such as labels, textbox, radio, checkboxes and custom dialog boxes

Objective: To introduce GUI, TKinter in python

Theory:

Python offers multiple options for developing GUI (Graphical User Interface). Out of all the GUI methods, tkinter is the most commonly used method. It is a standard Python interface to the Tk GUI toolkit shipped with Python. Python with tkinter is the fastest and easiest way to create the GUI applications. Creating a GUI using tkinter is an easy task.

To create a tkinter app:

Importing the module – tkinter

Create the main window (container)

Add any number of widgets to the main window

Apply the event Trigger on the widgets.

Importing tkinter is same as importing any other module in the Python code. Note that the name of the module in Python 2.x is 'Tkinter' and in Python 3.x it is 'tkinter'.

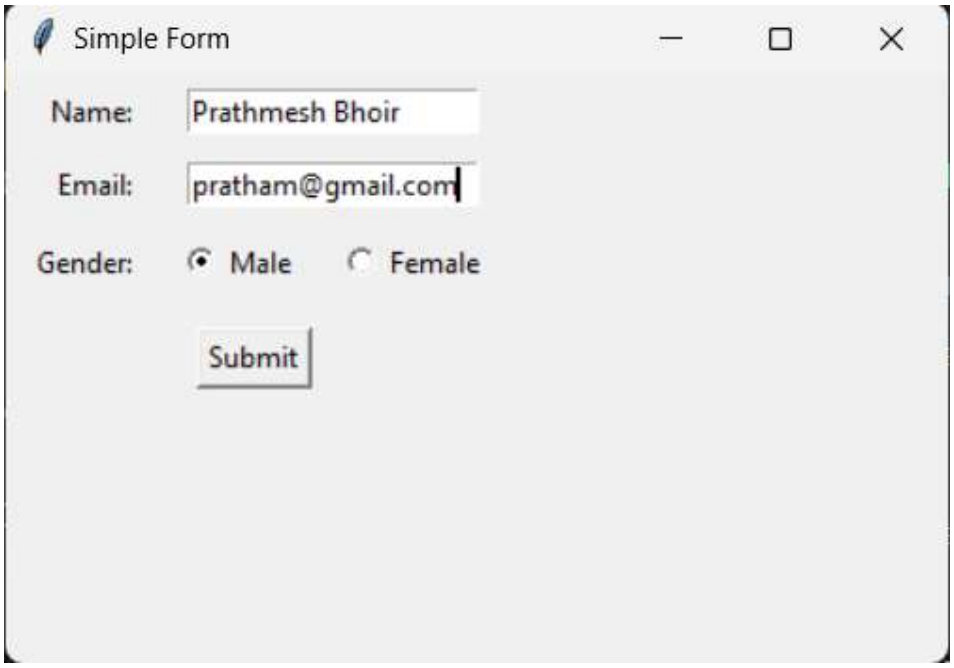
Program :

```
import tkinter as tk

from tkinter import messagebox



def submit_form():
```

```
    name = name_entry.get()
    email = email_entry.get()
    gender = gender_var.get()

    if name and email and gender:
                messagebox.showinfo("Submission Successful", f"Name: {name}\nEmail: {email}\nGender: {gender}")
    else:
        messagebox.showerror("Error", "Please fill in all fields.")



root = tk.Tk()
root.title("Simple Form")



root.geometry("400x250")

name_label = tk.Label(root, text="Name:")
name_label.grid(row=0, column=0, padx=10, pady=5, sticky="e")

name_entry = tk.Entry(root)
name_entry.grid(row=0, column=1, padx=10, pady=5)
```

```
email_label = tk.Label(root, text="Email:")
email_label.grid(row=1, column=0, padx=10, pady=5, sticky="e")

email_entry = tk.Entry(root)
email_entry.grid(row=1, column=1, padx=10, pady=5)

gender_label = tk.Label(root, text="Gender:")
gender_label.grid(row=2, column=0, padx=10, pady=5, sticky="e")

gender_var = tk.StringVar()
male_radio = tk.Radiobutton(root, text="Male", variable=gender_var, value="Male")
male_radio.grid(row=2, column=1, padx=5, pady=5, sticky="w")

female_radio = tk.Radiobutton(root, text="Female", variable=gender_var, value="Female")
female_radio.grid(row=2, column=1, padx=5, pady=5, sticky="e")

submit_button = tk.Button(root, text="Submit", command=submit_form)
submit_button.grid(row=3, columnspan=2, padx=10, pady=10)

root.mainloop()
```

Output :



Conclusion:

Learning and using Tkinter for GUI development in Python provides a user-friendly and straightforward way to create interactive interfaces. It seamlessly integrates with Python, making it accessible for developers of any skill level. Tkinter's versatile toolkit and event-driven programming allow for efficient design and implementation of GUIs for a wide range of projects, enhancing the overall user experience.