

Department of Computer Engineering

Experiment No. 7

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

Date of Performance:

Date of Submission:



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Experiment No. 7

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:

from tkinter import *

def clear_fields():

entry name.delete(0, END)

entry email.delete(0, END)

entry course.delete(0, END)



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```
entry semester.delete(0, END)
  entry contact.delete(0, END)
base = Tk()
base.title("Registration Form")
base.geometry("400x250")
# Labels
label_name = Label(base, text="Name:")
label_email = Label(base, text="Email:")
label_course = Label(base, text="Course:")
label semester = Label(base, text="Semester:")
label contact = Label(base, text="Contact Number:")
# Entry fields
entry name = Entry(base)
entry email = Entry(base)
entry course = Entry(base)
entry\_semester = Entry(base)
entry\_contact = Entry(base)
# Submit button
button_submit = Button(base, text="Submit")
# Clear button
button clear = Button(base, text="Clear", command=clear fields)
```



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Grid placement

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

entry name.grid(row=0, column=1, padx=10, pady=5)

label email.grid(row=1, column=0, padx=10, pady=5)

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

label course.grid(row=2, column=0, padx=10, pady=5)

entry_course.grid(row=2, column=1, padx=10, pady=5)

label_semester.grid(row=3, column=0, padx=10, pady=5)

entry_semester.grid(row=3, column=1, padx=10, pady=5)

label_contact.grid(row=4, column=0, padx=10, pady=5)

entry_contact.grid(row=4, column=1, padx=10, pady=5)

button submit.grid(row=5, columnspan=2, padx=10, pady=10)

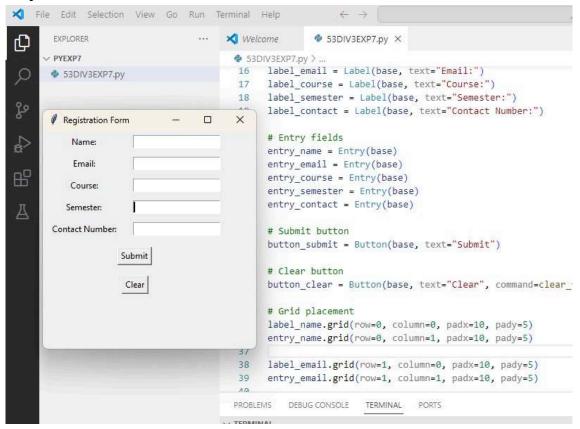
button_clear.grid(row=6, columnspan=2, padx=10, pady=5)

base.mainloop()



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Output:



Conclusion:

the study and creation of GUI using Python and Tkinter have provided a solid foundation in understanding how to incorporate various widgets such as labels, textboxes, radio buttons, checkboxes, and custom dialog boxes into graphical user interfaces. This experiment has demonstrated the versatility and flexibility of Tkinter in building interactive applications, laying the groundwork for further exploration and development in GUI programming with Python.