

8/10/25

Task 11 use Tkinter module for UI Design

Aim:

To design a simple GUI application using the Tkinter module in python for collecting and displaying student details such as Name, Roll number, department and Emails

Algorithm:

1. Start the program
2. Import the tkinter module and messagebox and tkinter
3. Create the main application window using TK()
4. Set the window title, size (geometry) and background color.
5. Create labels and Entry widgets for
 - Name
 - Roll Number
 - Department
 - Emails
6. Create Buttons:
 - submit: Display entered details using a messagebox or in a text widget
 - clear: Reset all input fields to empty
7. Define functions:
 - submit_details() - To get data from input fields and display it
 - clear_fields() - To clear all input fields
8. Arrange widgets using the grid() method

9. Run the Tkinter event loop using
root.mainloop()
10. End the program

Program:

```
import tkinter as tk
from tkinter import messagebox

def submit_details():
    name = name_entry.get()
    roll = roll_entry.get()
    dept = dept_entry.get()
    email = email_entry.get()

    if name == "" or roll == "" or dept == "" or email == "":
        messagebox.showwarning("Input error",
                                "Please fill all fields")
    else:
        info = f"Name : {name} \n Roll number : {roll} \n Department : {dept} \n Email : {email}"
        messagebox.showinfo("Student Details", info)

def clear_fields():
    name_entry.delete(0, tk.END)
    roll_entry.delete(0, tk.END)
    dept_entry.delete(0, tk.END)
    email_entry.delete(0, tk.END)

root = tk.Tk()
root.title("Student Information Form")
root.geometry("400x350")
root.config(bg = "#E8F0F2")
```

Input:

Student Information form	
Name:	Bhuvaneshwaran
Roll Number:	VT027982
Department:	CSE
Email:	VT027982@veltech.edu.in

Output:

Student details	
i	Name: Bhuvaneshwaran
	Roll no: VT027982
	Department: CSE
	Email: VT027982@gmail.com

fk.Label(root, text="Student Information Form",
font=("Arial", 16, "bold"), bg="#E8F0F2", fg="black").

grid(row=0, column=0, columnspan=2, pady=10)

fk.Label(root, text="Name:", font=("Arial", 12),
font=("Arial", 12), bg="#E8F0F2").grid(row=1,
column=0, sticky="e", padx=10, pady=5)

fk.Label(root, text="Department:", font=("Arial", 12),
bg="#E8F0F2").grid(row=2, column=0, sticky="e",
padx=10, pady=5)

fk.Label(root, text="Email:", font=("Arial", 12),
bg="#E8F0F2").grid(row=3, column=0, sticky="e",
padx=10, pady=5)

name_entry = fk.Entry(root, width=25)

roll_entry = fk.Entry(root, width=25)

dept_entry = fk.Entry(root, width=25)

email_entry = fk.Entry(root, width=25)

name_entry.grid(row=1, column=1, pady=5)

roll_entry.grid(row=2, column=1, pady=5)

dept_entry.grid(row=3, column=1, pady=5)

email_entry.grid(row=4, column=1, pady=5)

fk.Button(root, text="Submit", command=submit_details,
width=10, bg="#4CAF50", fg="white").grid(
row=5, column=0, pady=20)

fk.Button(root, text="Clear", command=clear_fields,
width=10, bg="#f44336", fg="white").grid(
row=5, column=1, pady=20)

root.mainloop()

Result:

The program successfully creates a Tkinter GUI
form that collects and displays student details
with proper layout, buttons and message bars.

EX NO.	
PERFORMANCE (5)	11
RESULT AND ANALYSIS	5
VIVA VOCE (5)	5
TOTAL (20)	21
SIGNATURE	
DATE	

23/10/25