REGISTERATION FORM

### Overview

This task involves creating a GUI registration form using the Tkinter library. The form includes:

* Name
* Email
* Age
* Gender (with radio buttons)
* Submit button

### Prerequisites

* Python installed on your system.
* Tkinter library installation code : pip install tkinter

### Implementation Steps

1. **Import Required Libraries:**

import tkinter as tk

from tkinter import messagebox

1. **Create the Submit Function:** This function will handle form submission and validation.

def submit():

name = name\_entry.get()

email = email\_entry.get()

age = age\_entry.get()

gender = gender\_var.get()

# Validation for empty fields

if name == "" or email == "" or age == "":

messagebox.showerror("Error", "Please fill in all fields")

else:

messagebox.showinfo("Success", f"Registration Successful!\nName: {name}\nEmail: {email}\nAge: {age}\nGender: {gender}")

1. **Create the Main Window:** Set up the main application window.

root = tk.Tk()

root.title("Registration Form")

1. **Add Labels and Entry Fields:** Define labels and entry fields for name, email, and age.

# Name

name\_label = tk.Label(root, text="Name:")

name\_label.grid(row=0, column=0, padx=10, pady=5)

name\_entry = tk.Entry(root)

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

# Email

email\_label = tk.Label(root, text="Email:")

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

email\_entry = tk.Entry(root)

email\_entry.grid(row=1, column=1, padx=10, pady=5)

# Age

age\_label = tk.Label(root, text="Age:")

age\_label.grid(row=2, column=0, padx=10, pady=5)

age\_entry = tk.Entry(root)

age\_entry.grid(row=2, column=1, padx=10, pady=5)

1. **Add Gender Radio Buttons:** Use radio buttons to select gender.

gender\_label = tk.Label(root, text="Gender:")

gender\_label.grid(row=3, column=0, padx=10, pady=5)

gender\_var = tk.StringVar()

male\_radio = tk.Radiobutton(root, text="Male", variable=gender\_var, value="Male")

male\_radio.grid(row=3, column=1, padx=10, pady=5)

female\_radio = tk.Radiobutton(root, text="Female", variable=gender\_var, value="Female")

female\_radio.grid(row=3, column=2, padx=10, pady=5)

1. **Add Submit Button:** Create a button to submit the form.

submit\_button = tk.Button(root, text="Submit", command=submit)

submit\_button.grid(row=4, column=0, columnspan=2, padx=10, pady=10)

1. **Run the Main Event Loop:** Start the Tkinter event loop to run the application.

root.mainloop()

### Complete Code

Here’s the complete code for the registration form:

python

Copy code

import tkinter as tk

from tkinter import messagebox

def submit():

name = name\_entry.get()

email = email\_entry.get()

age = age\_entry.get()

gender = gender\_var.get()

if name == "" or email == "" or age == "":

messagebox.showerror("Error", "Please fill in all fields")

else:

messagebox.showinfo("Success", f"Registration Successful!\nName: {name}\nEmail: {email}\nAge: {age}\nGender: {gender}")

# Create main window

root = tk.Tk()

root.title("Registration Form")

# Labels

name\_label = tk.Label(root, text="Name:")

name\_label.grid(row=0, column=0, padx=10, pady=5)

email\_label = tk.Label(root, text="Email:")

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

age\_label = tk.Label(root, text="Age:")

age\_label.grid(row=2, column=0, padx=10, pady=5)

gender\_label = tk.Label(root, text="Gender:")

gender\_label.grid(row=3, column=0, padx=10, pady=5)

# Entry fields

name\_entry = tk.Entry(root)

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

email\_entry = tk.Entry(root)

email\_entry.grid(row=1, column=1, padx=10, pady=5)

age\_entry = tk.Entry(root)

age\_entry.grid(row=2, column=1, padx=10, pady=5)

# Radio buttons for gender

gender\_var = tk.StringVar()

male\_radio = tk.Radiobutton(root, text="Male", variable=gender\_var, value="Male")

male\_radio.grid(row=3, column=1, padx=10, pady=5)

female\_radio = tk.Radiobutton(root, text="Female", variable=gender\_var, value="Female")

female\_radio.grid(row=3, column=2, padx=10, pady=5)

# Submit button

submit\_button = tk.Button(root, text="Submit", command=submit)

submit\_button.grid(row=4, column=0, columnspan=2, padx=10, pady=10)

root.mainloop()

### Explanation

* **Labels and Entry Fields:** Used to collect user input for name, email, and age.
* **Radio Buttons:** Allow the user to select their gender.
* **Submit Button:** Triggers the submit function, which validates input and displays a success message.
* **Validation:** Checks if any fields are empty and displays an error message if necessary.
* **Layout:** Uses a grid layout to organize the form elements neatly.

### Conclusion

This guide covers the basics of creating a simple registration form using Tkinter. You can enhance this form by adding more fields, validation, or saving the data to a file or database. This task provides a solid foundation in GUI development with Python and Tkinter.