

Тема: составление программ с использованием GUI Tkinter в IDE PyCharm Community.

Цель: закрепить усвоенные знания, понятия, алгоритмы, основные принципы составления программ, приобрести навыки составления программ с использованием GUI Tkinter в IDE PyCharm Community.

Постановка задачи.

1. В соответствии с номером варианта перейти по ссылке на прототип и реализовать его. (Вариант 6)

EVENT REGISTRATION FORM

Name
First Name Last Name

Company

Email

Phone
Area Code Phone Number

Subject

Are you an existing customer?
☒ Yes ☐ No

REGISTER

2.

```
2. # Дано расстояние L в сантиметрах. Используя операцию деления  
3. # нацело, найти количество полных метров в нем (1 метр =100 см).
```

Тип алгоритма: линейная.

Текст программы 1:

```
import tkinter as tk
from tkinter import ttk

def register():
    print("Registration button clicked")

root = tk.Tk()
root.title("Event Registration Form")

root.geometry("500x500")
root.configure(bg='#5B26CB')

frame = tk.Frame(root, bg='white', padx=20, pady=20)
frame.pack(pady=20)

title_label = tk.Label(frame, text="EVENT REGISTRATION FORM", font=('Montserrat', 14, 'bold'), fg='white', bg='black')
title_label.grid(row=0, columnspan=2, pady=10)

first_name_label = tk.Label(frame, text="First Name", bg='white')
first_name_label.grid(row=1, column=0, sticky='w')
first_name_entry = tk.Entry(frame)
first_name_entry.grid(row=1, column=1)

last_name_label = tk.Label(frame, text="Last Name", bg='white')
last_name_label.grid(row=2, column=0, sticky='w')
last_name_entry = tk.Entry(frame)
last_name_entry.grid(row=2, column=1)

company_label = tk.Label(frame, text="Company", bg='white')
company_label.grid(row=3, column=0, sticky='w')
company_entry = tk.Entry(frame)
company_entry.grid(row=3, column=1)

email_label = tk.Label(frame, text="Email", bg='white')
email_label.grid(row=4, column=0, sticky='w')
email_entry = tk.Entry(frame)
email_entry.grid(row=4, column=1)

phone_label = tk.Label(frame, text="Phone", bg='white')
phone_label.grid(row=5, column=0, sticky='w')
area_code_entry = tk.Entry(frame, width=5)
area_code_entry.grid(row=5, column=1, sticky='w')
phone_number_entry = tk.Entry(frame)
phone_number_entry.grid(row=5, column=1, padx=(45, 0))

subject_label = tk.Label(frame, text="Subject", bg='white')
subject_label.grid(row=6, column=0, sticky='w')
subject_combobox = ttk.Combobox(frame, values=["Option 1", "Option 2", "Option 3"])

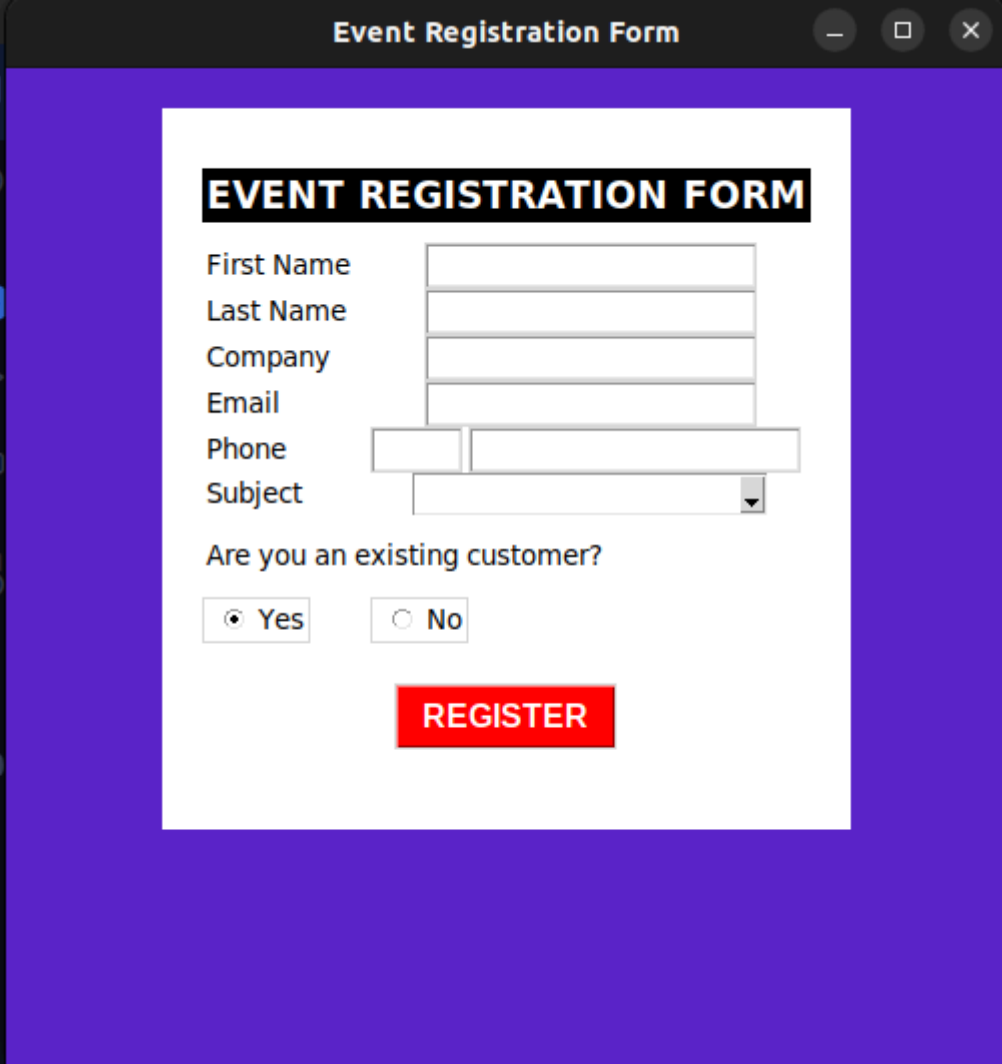
existing_customer_label = tk.Label(frame, text="Are you an existing customer?", bg='white')
existing_customer_label.grid(row=7, columnspan=2, pady=10, sticky='w')

customer_var = tk.StringVar(value="Yes")
yes_radiobutton = tk.Radiobutton(frame, text="Yes", variable=customer_var, value="Yes", bg='white')
yes_radiobutton.grid(row=8, column=0, sticky='w')
no_radiobutton = tk.Radiobutton(frame, text="No", variable=customer_var, value="No", bg='white')
no_radiobutton.grid(row=8, column=1, sticky='w')

register_button = tk.Button(frame, text="REGISTER", command=register, bg='red', fg='white', font=('Arial', 12, 'bold'))
register_button.grid(row=9, columnspan=2, pady=20)

root.mainloop()
```

Выполнение программы 1:



The image shows a screenshot of a web application window titled "Event Registration Form". The window has a dark blue header bar with the title and standard window control buttons (minimize, maximize, close). The main content area has a solid blue background. Centered on this background is a white rectangular form. At the top of the form is a black header with the text "EVENT REGISTRATION FORM" in white, bold, uppercase letters. Below this header, the form contains several input fields: "First Name", "Last Name", "Company", and "Email" are each followed by a single-line text input box. "Phone" is followed by a two-part input box (country code and number). "Subject" is followed by a text input box with a dropdown arrow on the right. Below these fields is the question "Are you an existing customer?" followed by two radio button options: "Yes" (which is selected) and "No". At the bottom of the form is a prominent red button with the word "REGISTER" in white, bold, uppercase letters.

Event Registration Form

EVENT REGISTRATION FORM

First Name

Last Name

Company

Email

Phone

Subject

Are you an existing customer?

☒ Yes ☐ No

REGISTER

Текст программы 2:

```
# Дано расстояние L в сантиметрах. Используя операцию деления
# нацело, найти количество полных метров в нем (1 метр =100 см).

import tkinter as tk

def to_meters():
    l = float(entry_l.get())
    meters = l / 100
    whole_meters = int(meters)
    meters_result.config(text=f"Количество полных метров: {whole_meters}.")

root = tk.Tk()
root.title("Сантиметры в метры")

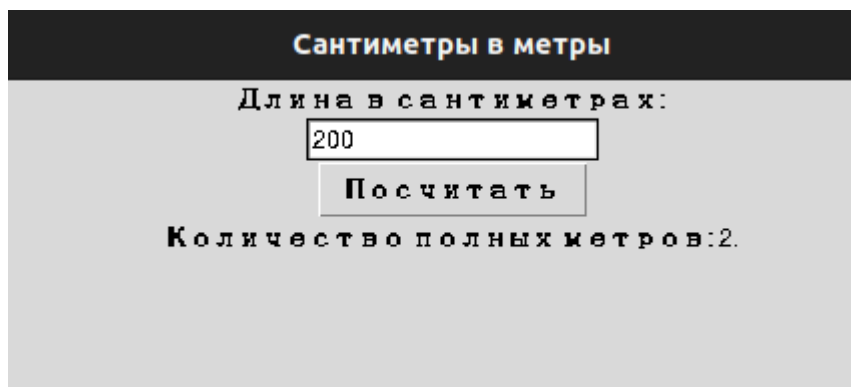
label_l = tk.Label(root, text="Длина в сантиметрах:")
label_l.pack()
entry_l = tk.Entry(root)
entry_l.pack()

button_calculate = tk.Button(root, text="Посчитать", command=to_meters)
button_calculate.pack()

meters_result = tk.Label(root, text="")
meters_result.pack()

root.mainloop()
```

Выполнение программы 2:



Вывод: закрепил и усвоил знания, понятия, алгоритмы, основные принципы составления программ, приобрел навыки составления программ с использованием GUI Tkinter в IDE PyCharm Community.