

МИНИСТЕРСТВО НАУКИ И ВЫСШЕГО ОБРАЗОВАНИЯ
РОССИЙСКОЙ ФЕДЕРАЦИИ
ФЕДЕРАЛЬНОЕ ГОСУДАРСТВЕННОЕ БЮДЖЕТНОЕ
ОБРАЗОВАТЕЛЬНОЕ УЧРЕЖДЕНИЕ ВЫСШЕГО ОБРАЗОВАНИЯ
«ОРЛОВСКИЙ ГОСУДАРСТВЕННЫЙ УНИВЕРСИТЕТ
ИМЕНИ И.С. ТУРГЕНЕВА»

Кафедра программной инженерии

ОТЧЕТ ПО ЛАБОРАТОРНОЙ РАБОТЕ № 4

по дисциплине «Программирование на языке Python»

на тему: «Разработка графического интерфейса»

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Группа 92ПГ

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Вариант 7

Разработать и реализовать графический интерфейс для задания лабораторной работы № 3. Обязательные элементы графического интерфейса: надписи, кнопки, текстовые поля, выпадающий список, чекбоксы и/или радиокнопки, всплывающее окно с сообщением

Код программы

```
from tkinter import *
from tkinter import messagebox
from tkinter.ttk import Radiobutton
from tkinter.ttk import Combobox
from tkinter import ttk

class Medicament:
    code = 1
    name = 'paracetamol'
    cost = 1000
    receipt = True
    description = 'braise, amoxiciline'

    def __init__(self, code1, name1, cost1, receipt1, description1):
        self.code = code1
        self.name = name1
        self.cost = cost1
        self.receipt = receipt1
        self.description = description1

    def show(self):
        print(self.code, self.name, self.cost, self.receipt, self.description)

    def Get_code(self):
        return self.code

    def Get_name(self):
        return self.name

    def Get_cost(self):
        return self.cost

    def Get_description(self):
        return self.description

    def Get_receipt(self):
        return self.receipt

def click():
    prix = 0
    cod = int(comb1.get())
    for i in range(len(medList)):
        if cod == medList[i].Get_code():
            messagebox.showerror('Error input', 'This code already exist! Choose another one')
            cod = 0
    nom = ten2.get()
    try:
```

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    prix = int(ten3.get())
except ValueError:
    try:
        prix = float(ten3.get())
    except ValueError:
        messagebox.showerror('Error input', 'The price can be an integer or a float')

descr = ten4.get()
recp = selected.get()
if not cod or not nom or not prix or not descr:
    messagebox.showerror('Title', 'Fill all the blank space')
else:
    med = Medicament(cod, nom, prix, recp, descr)
    medList.append(med)

def DeList():
    verf = False
    try:
        delCod = int(ten5.get())
    except ValueError:
        messagebox.showerror('Error input', 'The code should be an integer')
        delCod = 0
    if not delCod:
        messagebox.showerror('Error', 'Fill the blank place')
    else:
        for i in range(len(medList)):
            if delCod == medList[i].code:
                del medList[i]
                verf = True
                break
    if not verf:
        messagebox.showerror('Error input', 'This code doesnt exit')
    else:
        messagebox.showinfo('Success', 'The code is successfully delete! Press Show again to see the change')

def show():
    for i in tree.get_children():
        tree.delete(i)
    for i in range(len(medList)):
        tree.insert(parent="", index=0, values= (medList[i].code, medList[i].name, medList[i].cost, medList[i].receipt, medList[i].description))

def showSpec():
    for i in tree.get_children():
        tree.delete(i)
    for i in range(len(medList)):
        if not medList[i].receipt:
            tree.insert(parent="", index=0, values= (medList[i].code, medList[i].name, medList[i].cost, medList[i].receipt, medList[i].description))

```

```

window = Tk()

window.geometry('1000x700')
selected = BooleanVar()
selected.set(False)
medList = []

col = ('code', 'name', 'price', 'receipt', 'description')

tree = ttk.Treeview(window, columns=col, show='headings')
tree.grid(row=14, column=0, sticky='nsew')

# define headings
tree.heading('code', text='Code')
tree.heading('name', text='Name')
tree.heading('price', text='price')
tree.heading('receipt', text='receipt')
tree.heading('description', text='description')

tree.column("code", anchor=W, width=80)
tree.column("name", anchor=W, width=100)
tree.column("price", anchor=W, width=80)
tree.column("receipt", anchor=W, width=80)
tree.column("description", anchor=W, width=100)

lb = Label(window, text="Information's card ", fg='red', font=('Times New Roman Bold', 18))
lb.grid(column=0, row=0)
l1 = Label(window, text="Code of the medicine ", font=('Times New Roman', 14))
l2 = Label(window, text="Name of the medicine ", font=('Times New Roman', 14))
l3 = Label(window, text="Price of the medicine ", font=('Times New Roman', 14), )
l4 = Label(window, text="Description  ", font=('Times New Roman', 14))
l5 = Label(window, text=" ", font=('Times New Roman', 14))
l6 = Label(window, text="Enter the code of the medicine to delete", font=('Times New Roman', 14))
l7 = Label(window, text="See the medicine without receipt", font=('Times New Roman', 14))

l1.grid(column=0, row=1)
l2.grid(column=0, row=3)
l3.grid(column=0, row=5)
l4.grid(column=0, row=7)
l5.grid(column=0, row=9)
l6.grid(column=1, row=3)
l7.grid(column=1, row=12)
comb1 = Combobox(window)
comb1['values'] = (1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20)
comb1.current(0)
ten2 = Entry(window, width=20, bd=3, justify=LEFT)
ten3 = Entry(window, width=20, bd=3, justify=LEFT)

```

```
ten4 = Entry(window, width=20, bd=3, justify=LEFT)
ten5 = Entry(window, width=20, bd=3, justify=LEFT)
rad1 = Radiobutton(window, text='Need receipt', value=True, variable=selected)
rad2 = Radiobutton(window, text="Don't need receipt", value=False, variable=selected)
comb1.grid(column=0, row=2)
ten2.grid(column=0, row=4)
ten3.grid(column=0, row=6)
ten4.grid(column=0, row=8)
ten5.grid(column=1, row=4)
rad1.grid(column=0, row=10)
rad2.grid(column=1, row=10)
btn = Button(window, text='Add new medicine', bg='#2186C1', fg='white', command=click)
btn1 = Button(window, text='Show all', bg='#2186C1', fg='white', command=show)
btn2 = Button(window, text='Delete', bg='#2186C1', fg='white', command=DeList)
btn3 = Button(window, text='No receipt', bg='#2186C1', fg='white', command=showSpec)
btn.grid(column=0, row=11)
btn1.grid(column=1, row=14)
btn2.grid(column=1, row=5)
btn3.grid(column=1, row=13)

window.mainloop()
```