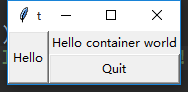
tkinter GUI编程

例：程序tkinter\_test/gui\_test1.py

import sys  
from tkinter import \*  
  
  
def greeting():  
 print('Hello python world!...')  
  
  
# 点击退出回调函数  
def button\_quit():  
 print('Hello, I must be going...')  
 sys.exit()  
  
  
if \_\_name\_\_ == '\_\_main\_\_':  
 widget = Frame()  
 widget.pack()  
 Button(widget, text='Hello', command=greeting).pack(side=LEFT, fill=Y)  
 Label(widget, text='Hello container world').pack(side=TOP)  
 Button(widget, text='Quit', command=button\_quit).pack(side=RIGHT, expand=YES, fill=X)  
  
 widget.mainloop()

输出为：

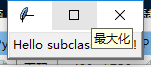


自定义按钮

例：程序tkinter\_test/gui\_test2.py

from tkinter import \*  
  
  
# 自定义Button  
class HelloButton(Button):  
 def \_\_init\_\_(self, parent=None, \*\*config):  
 super().\_\_init\_\_(parent, \*\*config)  
 self.pack()  
 self.config(command=self.callback)  
  
 def callback(self):  
 print('Goodbye world...')  
 self.quit()  
  
  
if \_\_name\_\_ == '\_\_main\_\_':  
 HelloButton(text='Hello subclass world!').mainloop()

输出为：



GUI外观

例：程序tkinter\_test/gui\_test3.py

from tkinter import \*  
  
root = Tk()  
widget = Label(root, text='Hello config world')  
widget.config(bg='black', fg='yellow')  
label\_font = ('times', 20, 'bold')  
widget.config(font=label\_font)  
widget.config(height=3, width=20)  
widget.pack(expand=YES, fill=BOTH)  
root.mainloop()

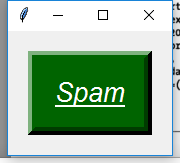


按钮与鼠标的外观

例：程序tkinter\_test/gui\_test4.py

from tkinter import \*  
  
widget = Button(text='Spam', padx=10, pady=10)  
widget.pack(padx=20, pady=20)  
widget.config(cursor='gumby')  
widget.config(bd=8, relief=RAISED)  
widget.config(bg='dark green', fg='white')  
widget.config(font=('helvetica', 20, 'underline italic'))  
mainloop()

输出：



例：程序tkinter\_test/gui\_test5.py

import tkinter  
from tkinter import Tk, Button  
tkinter.NoDefaultRoot()  
  
# 两个独立的根窗口  
win1 = Tk()  
win2 = Tk()  
  
Button(win1, text='Spam', command=win1.destroy).pack()  
Button(win2, text='SPAM', command=win2.destroy).pack()  
win1.mainloop()

对话框：

例：程序tkinter\_test/gui\_test6.py

from tkinter import \*  
from tkinter.messagebox import \*  
  
  
def callback():  
 if askyesno('Verify', 'Do you really want to quit?'):  
 showwarning('Yes', 'Quit not yet implemented') # 提示  
 else:  
 showinfo('No', 'Quit has been cancelled') # 信息  
  
  
if \_\_name\_\_ == '\_\_main\_\_':  
 error = 'Sorry, no Spam allowed'  
 Button(text='Quit', command=callback).pack(fill=X)  
 Button(text='Spam', command=(lambda: showerror('Spam', error))).pack(fill=X)  
 mainloop()

不同的对话框：

例：程序tkinter\_test/gui\_test7.py

from tkinter.filedialog import askopenfilename  
from tkinter.colorchooser import askcolor  
from tkinter.messagebox import askquestion, showerror  
from tkinter.simpledialog import askfloat  
from tkinter import \*  
  
  
demos = {  
 'Open': askopenfilename,  
 'Color': askcolor,  
 'Query': lambda: askquestion('Warning', 'You typed "rm \*"\n Confirm?'),  
 'Error': lambda: showerror('Error!', "He's dead, Jim"),  
 'Input': lambda: askfloat('Entry', 'Enter credit card number')  
}  
  
  
class Demo(Frame):  
 def \_\_init\_\_(self, parent=None, \*\*options):  
 super().\_\_init\_\_(parent, \*\*options)  
 self.pack()  
 Label(self, text='Basic demos').pack()  
 for key, value in demos.items():  
 Button(self, text=key, command=value).pack(side=TOP, fill=BOTH)  
  
  
if \_\_name\_\_ == '\_\_main\_\_':  
 Demo().mainloop()

事件：

例：程序tkinter\_test/bind.py

from tkinter import \*  
  
  
def show\_pos\_event(event):  
 print('Widget={0}, X={1}, Y={2}'.format(event.widget, event.x, event.y))  
  
  
def show\_all\_event(event):  
 print(event)  
 for attr in dir(event):  
 if not attr.startswith('\_\_'):  
 print(attr, '=>', getattr(event, attr))  
  
  
# 键按下  
def on\_key\_press(event):  
 print('Got key press:', event.char)  
  
  
# 向上箭头按下  
def on\_arrow\_key(event):  
 print('Got up arrow key press')  
  
  
# 回车按钮  
def on\_return\_key(event):  
 print('Got return key press')  
  
  
# 鼠标左键点击  
def on\_left\_click(event):  
 print('Got left mouse button click:', end=' ')  
 show\_pos\_event(event)  
  
  
# 鼠标右键  
def on\_right\_click(event):  
 print('Got right mouse button click:', end=' ')  
 show\_pos\_event(event)  
  
  
# 鼠标中间按钮  
def on\_middle\_click(event):  
 print('Got middle mouse button click:', end=' ')  
 show\_pos\_event(event)  
 show\_all\_event(event)  
  
  
# 左键拖动  
def on\_left\_drag(event):  
 print('Got left mouse button drag:', end=' ')  
 show\_pos\_event(event)  
  
  
# 鼠标左键双击  
def on\_double\_left\_click(event):  
 print('Got double left mouse click:', end=' ')  
 show\_pos\_event(event)  
 tk\_root.quit()  
  
  
if \_\_name\_\_ == '\_\_main\_\_':  
 tk\_root = Tk()  
 label\_font = ('courier', 20, 'bold')  
 widget = Label(tk\_root, text='Hello bind world')  
 widget.config(bg='red', font=label\_font)  
 widget.config(height=5, width=20)  
 widget.pack(expand=YES, fill=BOTH)  
  
 widget.bind('<Button-1>', on\_left\_click)  
 widget.bind('<Button-3>', on\_right\_click)  
 widget.bind('<Button-2>', on\_middle\_click)  
  
 widget.bind('<Double-1>', on\_double\_left\_click)  
 widget.bind('<B1-Motion>', on\_left\_drag)  
 widget.bind('<KeyPress>', on\_key\_press)  
 widget.bind('<Up>', on\_arrow\_key)  
 widget.bind('<Return>', on\_return\_key)  
 widget.focus()  
 tk\_root.title('Click Me')  
 tk\_root.mainloop()

菜单：

例：程序tkinter\_test/gui\_test8.py

from tkinter import \*  
from tkinter.messagebox import \*  
  
  
def not\_done():  
 showerror('Not', 'Not yet available')  
  
  
def make\_menu(win):  
 top = Menu(win)  
 win.config(menu=top)  
 file = Menu(top)  
 file.add\_command(label='New...', command=not\_done, underline=0)  
 file.add\_command(label='Open...', command=not\_done, underline=0)  
 file.add\_command(label='Quit', command=win.quit, underline=0)  
 top.add\_cascade(label='File', menu=file, underline=0)  
  
 edit = Menu(top, tearoff=False)  
 edit.add\_command(label='Cut', command=not\_done, underline=0)  
 edit.add\_command(label='Paste', command=not\_done, underline=0)  
 edit.add\_separator()  
 top.add\_cascade(label='Edit', menu=edit, underline=0)  
  
 sub\_menu = Menu(edit, tearoff=True)  
 sub\_menu.add\_command(label='Spam', command=win.quit, underline=0)  
 sub\_menu.add\_command(label='Eggs', command=not\_done, underline=0)  
 edit.add\_cascade(label='Stuff', menu=sub\_menu, underline=0)  
  
  
if \_\_name\_\_ == '\_\_main\_\_':  
 root = Tk()  
 root.title('menu window')  
 make\_menu(root)  
 message = Label(root, text='Window menu basic')  
 message.pack(expand=YES, fill=BOTH)  
 message.config(relief=SUNKEN, width=40, height=7, bg='beige')  
 root.mainloop()

输出为：

