Jun Zhou

Illinois Institute of Technology

ITMD513

Email: zhoujun9633@163.com

CWID: A20488371

# Snapshot

1. Your entire interface at runtime including your save button added on with Title.
2. Initial snapshot of listbox at runtime.
3. Show a contact being added. (add Max, Zhou in a contact list)
4. Show a contact deleted. (delete Jackson, Janet)
5. Show a contact being updated. (James, Lebron updated to Lebron, James)
6. Show modified contactlist file. (contained in contacts.py)

# Sourcecode

import os

from tkinter import \*

from tkinter import messagebox

from contacts import \*

# Jun Zhou

# July 10th, 2023

# Lab7

# ITMD513

def selection():

print ('At %s of %d' % (select.curselection(), len(contactlist)))

return int(select.curselection()[0])

def addContact():

contactlist.append([nameVar.get(), phoneVar.get()])

setList()

messagebox.showinfo("Success", "Contacts added successfully!")

def updateContact():

contactlist[selection()]=[nameVar.get(), phoneVar.get()]

setList()

messagebox.showinfo("Success", "Contacts Updated successfully!")

def deleteContact():

result = messagebox.askquestion('Confirmation', 'Are you sure you want to delete this contact?')

if result == 'yes':

del contactlist[selection()]

setList()

def loadContact():

name, phone = contactlist[selection()]

nameVar.set(name)

phoneVar.set(phone)

def saveContacts():

temp\_file = open('temp.py', 'w')

temp\_file.write('contactlist = [\n')

for index, contact in enumerate(contactlist):

formatted = ', '.join(f"'{element}'" for element in contact)

temp\_file.write(f' [{formatted}]')

if index != len(contactlist) - 1:

temp\_file.write(',')

temp\_file.write('\n')

temp\_file.write(']')

os.remove('contacts.py')

os.rename('temp.py', 'contacts.py')

def exitProgram():

result = messagebox.askquestion('Exit', 'Are you want to exit?')

if result == 'yes':

os.\_exit(1)

def buildFrame():

global nameVar, phoneVar, select

root = Tk()

root.title('My Contact List') # Set title

frame1 = Frame(root)

frame1.pack()

Label(frame1, text='Name:').grid(row=0, column=0, sticky=W)

nameVar = StringVar()

name = Entry(frame1, textvariable=nameVar)

name.grid(row=0, column=1, sticky=W)

Label(frame1, text='Phone:').grid(row=1, column=0, sticky=W)

phoneVar= StringVar()

phone = Entry(frame1, textvariable=phoneVar)

phone.grid(row=1, column=1, sticky=W)

frame1 = Frame(root) # add a row of buttons

frame1.pack()

btn1 = Button(frame1,text=' Add ',command=addContact)

btn2 = Button(frame1,text='Update',command=updateContact)

btn3 = Button(frame1,text='Delete',command=deleteContact)

btn4 = Button(frame1,text=' Load ',command=loadContact)

btn5 = Button(frame1, text=' Save ', command=saveContacts)

btn1.pack(side=LEFT)

btn2.pack(side=LEFT)

btn3.pack(side=LEFT)

btn4.pack(side=LEFT)

btn5.pack(side=LEFT)

frame1 = Frame(root) # allow for selection of names

frame1.pack()

scroll = Scrollbar(frame1, orient=VERTICAL)

select = Listbox(frame1, yscrollcommand=scroll.set, height=7)

scroll.config (command=select.yview)

scroll.pack(side=RIGHT, fill=Y)

select.pack(side=LEFT, fill=BOTH)

frame1 = Frame(root) # add exit button

frame1.pack()

btn6 = Button(frame1, text=' Exit ', command=exitProgram)

btn6.pack()

return root

def setList():

contactlist.sort()

select.delete(0, END)

for name,phone in contactlist:

select.insert(END, name)

if \_\_name\_\_ == "\_\_main\_\_":

root = buildFrame()

setList()

root.mainloop()