# Importing all the necessary modules

from tkinter import \*

from tkinter import filedialog

import pygame.mixer as mixer # pip install pygame

import os

# Initializing the mixer

mixer.init()

# Creating the master GUI for python music player

root = Tk()

root.geometry('700x220')

root.title('PythonGeeks Music Player')

root.resizable(0, 0)

# Finalizing the GUI

root.update()

root.mainloop()

# Play, Stop, Load and Pause & Resume functions

def play\_song(song\_name: StringVar, songs\_list: Listbox, status: StringVar):

song\_name.set(songs\_list.get(ACTIVE))

mixer.music.load(songs\_list.get(ACTIVE))

mixer.music.play()

status.set("Song PLAYING")

def stop\_song(status: StringVar):

mixer.music.stop()

status.set("Song STOPPED")

def load(listbox):

os.chdir(filedialog.askdirectory(title='Open a songs directory'))

tracks = os.listdir()

for track in tracks:

listbox.insert(END, track)

def pause\_song(status: StringVar):

mixer.music.pause()

status.set("Song PAUSED")

def resume\_song(status: StringVar):

mixer.music.unpause()

status.set("Song RESUMED")

# All the frames

song\_frame = LabelFrame(root, text='Current Song', bg='LightBlue', width=400, height=80)

song\_frame.place(x=0, y=0)

button\_frame = LabelFrame(root, text='Control Buttons', bg='Turquoise', width=400, height=120)

button\_frame.place(y=80)

listbox\_frame = LabelFrame(root, text='Playlist', bg='RoyalBlue')

listbox\_frame.place(x=400, y=0, height=200, width=300)

# All StringVar variables

current\_song = StringVar(root, value='<Not selected>')

song\_status = StringVar(root, value='<Not Available>')

# Playlist ListBox

playlist = Listbox(listbox\_frame, font=('Helvetica', 11), selectbackground='Gold')

scroll\_bar = Scrollbar(listbox\_frame, orient=VERTICAL)

scroll\_bar.pack(side=RIGHT, fill=BOTH)

playlist.config(yscrollcommand=scroll\_bar.set)

scroll\_bar.config(command=playlist.yview)

playlist.pack(fill=BOTH, padx=5, pady=5)

# SongFrame Labels

Label(song\_frame, text='CURRENTLY PLAYING:', bg='LightBlue', font=('Times', 10, 'bold')).place(x=5, y=20)

song\_lbl = Label(song\_frame, textvariable=current\_song, bg='Goldenrod', font=("Times", 12), width=25)

song\_lbl.place(x=150, y=20)

# Buttons in the main screen

pause\_btn = Button(button\_frame, text='Pause', bg='Aqua', font=("Georgia", 13), width=7,

command=lambda: pause\_song(song\_status))

pause\_btn.place(x=15, y=10)

stop\_btn = Button(button\_frame, text='Stop', bg='Aqua', font=("Georgia", 13), width=7,

command=lambda: stop\_song(song\_status))

stop\_btn.place(x=105, y=10)

play\_btn = Button(button\_frame, text='Play', bg='Aqua', font=("Georgia", 13), width=7,

command=lambda: play\_song(current\_song, playlist, song\_status))

play\_btn.place(x=195, y=10)

resume\_btn = Button(button\_frame, text='Resume', bg='Aqua', font=("Georgia", 13), width=7,

command=lambda: resume\_song(song\_status))

resume\_btn.place(x=285, y=10)

load\_btn = Button(button\_frame, text='Load Directory', bg='Aqua', font=("Georgia", 13), width=35, command=lambda: load(playlist))

load\_btn.place(x=10, y=55)

# Label at the bottom that displays the state of the music

Label(root, textvariable=song\_status, bg='SteelBlue', font=('Times', 9), justify=LEFT).pack(side=BOTTOM, fill=X)