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from tkinter import
import pygame
from tkinter import filedialog

root = Tk()
root.title('MP3 Player: Project #3')
root.iconbitmap('c:/gui')#help
root.geometry("700x500")

#allows the program to use Pygame Mixer.
pygame.mixer.init()

#allows the user to add a song to the playlist.
def add_song():
    song = filedialog.askopenfilename(initialdir = 'C:/audio/', title = "Choose a song", filetypes =
(("mp3 Files", "*.mp3"),))#help
    #removes the directory info, replaces with the song name.
    song = song.replace("c:/gui/audio/", "")
    song = song.replace(".mp3", "")

    #adds the song to the listbox
    music_box.insert(END, song)

#add many multiple songs to the listbox.
def add_many_songs():
    songs = filedialog.askopenfilenames(initialdir = 'C:/audio/', title = "Choose a song", filetypes =
(("mp3 Files", "*.mp3"),))

    #loops through the song list & is able to replace directory information and mp3.
    for song in songs:
        song = song.replace("c:/gui/audio/", "")
        song = song.replace(".mp3", "")

        #inserts songs into the playlist.
        music_box.insert(END, song)

#plays the selected song
def play():
    song = music_box.get(ACTIVE)
    song = f'C:/gui/audio/{song}.mp3'

    pygame.mixer.music.load(song)

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pygame.mixer.music.play(loops = 0)

#stops playing the selected song
def stop():
    pygame.mixer.music.stop(song)
    music_box.selection_clear(ACTIVE)

#skips to the next song in the playlist.
def next_song():
    next_choice = music_box.curselection()
    next_choice = next_choice[0]+1
    #grabs song name from the playlist.
    song = music_box.get(next_choice)

    song = f'C:/gui/audio/{song}.mp3'

    pygame.mixer.music.load(song)
    pygame.mixer.music.play(loops = 0)

    music_box.selection_clear(0, END)

    music_box.activate(next_choice)
    #plays the next song.
    music_box.selection_set(next_choice, Last=None)

    #plays the previous song.
def previous_song():
    next_choice = music_box.curselection()
    next_choice = next_choice[0]-1

    song = music_box.get(next_choice)

    song = f'C:/gui/audio/{song}.mp3'

    pygame.mixer.music.load(song)
    pygame.mixer.music.play(loops = 0)

    music_box.selection_clear(0, END)

    music_box.activate(next_choice)

    music_box.selection_set(next_choice, Last=None)
#deletes a song.
def delete_song():

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music_box.delete(ANCHOR)
#stops music if it's playing.
pygame.mixer.music.stop()
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#deletes all songs.
def delete_all_songs():
    music_box.delete(0, END)
    #stops music if its playing.
    pygame.mixer.music.stop()
#creates global pause variable.
global paused
paused = False
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#pause & unpause the song the user is listening to.
def pause(is_paused):
    global paused
    paused = is_paused
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if paused:
    pygame.mixer.music.unpause()
    paused = False
else:
    pygame.mixer.music.pause()
    paused = True
```

```
#creating what the playlist box looks like.
music_box = Listbox(root, bg = "black", fg = "white", width = 60, selectbackground = "silver",
slectforeground = "black") #background color is black, foreground color is white.
music_box.pack(pady = 20)
```

```
#initializing the controls of the mp3 player (play, pause, skip, rewind, and stop).
play_btn_img = PhotoImage(file = )
rewind_btn_img = PhotoImage(file = )
skip_btn_img = PhotoImage(file = )
pause_btn_img = PhotoImage(file = )
stop_btn_img = PhotoImage(file = )
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#allows for player controlled frame.
controls_frame = Frame(root)
controls_frame.pack()
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#allows for player controlled buttons.
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play_button = Button(controls_frame, image = play_btn_img, borderwidth=0, command = play)
rewind_button = Button(controls_frame, image = rewind_btn_img, borderwidth=0, command =
previous_song)
skip_button = Button(controls_frame, image = skip_btn_img, borderwidth=0, command =
next_choice)
pause_button = Button(controls_frame, image = pause_btn_img, borderwidth=0, command =
lambda: pause(paused))
stop_button = Button(controls_frame, image = stop_btn_img, borderwidth=0, command = stop)
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play_button.grid(row = 0, column = 0, padx=8)
rewind_button.grid(row = 0, column = 1, padx=8)
skip_button.grid(row = 0, column = 2, padx=8)
pause_button.grid(row = 0, column = 3, padx=8)
stop_button.grid(row = 0, column = 4, padx=8)
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#creates the menu.
my_menu = Menu(root)
root.config(menu=my_menu)
```

```
#adds song menu.
add_song_menu = Menu(my_menu)
my_menu.add_cascade(label= "Add Songs!", menu = add_song_menu)
add_song_menu.add_command(label = "Add a Song to the Playlist!", command = add_song)
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#allows users to add multiple songs instead of one.
add_song_menu.add_command(label = "Add some Song to the Playlist!", command =
add_many_songs)
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#allows the user to remove songs.
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remove_song_menu = Menu(my_menu)
my_menu.addcascade(Label = "remove Songs", menu = remove_song_menu)
remove_song_menu.add_command(Label = "Delete a Song from the playlist", command =
delete_song)
remove_song_menu.add_command(Label = "Delete all Songs from the playlist", command =
delete_all_songs)
```

```
root.mainloop
```