from tkinter import \*

import tkinter.messagebox

from captcha.image import ImageCaptcha

import string

import random

import os

import pyttsx3

audio\_captcha = ''

image\_captcha = ''

*def* generate\_captcha():

    data\_set = list(string.ascii\_letters + string.digits)  *# a-z,A-Z,0-9*

    s = ''

    for i in range(6):

        a = random.choice(data\_set)

        s = s + a

        data\_set.remove(a)

    global image\_captcha

    image\_captcha = s

    return s

*def* generate\_digit\_captcha():

    s1 = '';

    s = ''

    for i in range(4):

        a = str(random.randint(0, 9))

        s = s + a

        s1 = s1 + a + " "

    global audio\_captcha

    audio\_captcha = s

    return s1

*def* generate\_image\_captcha():

    os.startfile('c1.png')

*def* generate\_first\_image():

    img = ImageCaptcha()

    s = generate\_captcha()

*# print(s)*

    value = img.generate(s)

    img.write(s, "c1.png")

*def* regenerate\_image\_captcha():

    img = ImageCaptcha()

    s = generate\_captcha()

*# print(s)*

    value = img.generate(s)

    img.write(s, "c1.png")

    os.startfile('c1.png')

*# print("Image Captcha Generated.\n\n")*

*def* generate\_audio\_captcha():

    s = generate\_digit\_captcha()

*# print(s)*

    voiceEngine = pyttsx3.init()

    voiceEngine.setProperty('rate', 170)

    voiceEngine.setProperty('volume', 1.0)

    voices = voiceEngine.getProperty('voices')

    voiceEngine.setProperty('voice', voices[1].id)

    voiceEngine.say(s)

    voiceEngine.runAndWait()

    voiceEngine.say(s)

    voiceEngine.runAndWait()

*# print("Audio Captcha Generated.\n\n")*

*def* regenerate\_audio\_captcha():

    generate\_audio\_captcha()

*def* get\_audio():

    return audio\_captcha

*def* get\_image():

    return image\_captcha

*def* check\_audio\_captcha():

*# answer = input("\nEnter Value : ")*

    if ans.get() == get\_audio():

        tkinter.messagebox.showinfo("SUCCESS!", "Captcha Code Matched.")

        ans.set("")

    else:

        tkinter.messagebox.showinfo("WRONG!", "Captcha Code does not Matched.")

        ans.set("")

*def* check\_image\_captcha():

    if ans1.get() == get\_image():

        tkinter.messagebox.showinfo("SUCCESS!", "Captcha Code Matched.")

        ans1.set("")

    else:

        tkinter.messagebox.showinfo("WRONG!", "Captcha Code does not Matched.")

        ans1.set("")

root = Tk()

root.title("CAPTCHA Generation")

root.geometry("842x498")

root.configure(*background*='#ffd9db')

Tops = Frame(root, *bg*='#ff5c75', *pady*=1, *width*=550, *height*=50, *relief*="ridge")

Tops.grid(*row*=0, *column*=0)

ans = StringVar()

ans1 = StringVar()

generate\_first\_image()

Title\_Label = Label(Tops, *font*=('Comic Sans MS', 16, 'bold'),

*text*="             CAPTCHA Generator\t\t", *bg*='black',

*fg*='white', *justify*="center")

Title\_Label.grid(*row*=0, *column*=0)

MainFrame = Frame(root, *bg*='#05c4bc', *pady*=2, *width*=1350, *height*=100, *relief*=RIDGE)

MainFrame.grid(*row*=1, *column*=0)

LeftFrame = Frame(MainFrame, *bd*=10, *width*=200, *height*=200, *pady*=2, *padx*=10, *bg*='#68DEED', *relief*=RIDGE)

LeftFrame.pack(*side*=LEFT)

RightFrame = Frame(MainFrame, *bd*=10, *width*=200, *height*=200, *padx*=10, *pady*=2, *bg*='#68DEED', *relief*=RIDGE)

RightFrame.pack(*side*=RIGHT)

Label\_1 = Label(RightFrame, *font*=('lato black', 33, 'bold'), *text*=" Audio Captcha ", *padx*=2, *pady*=2, *bg*="yellow",

*fg*="black")

Label\_1.grid(*row*=0, *column*=0, *sticky*=W)

Label\_2 = Label(RightFrame, *font*=('arial', 20, 'bold'), *text*="", *padx*=2, *pady*=2, *bg*="#68DEED", *fg*="black")

Label\_2.grid(*row*=1, *column*=0, *sticky*=W)

Label\_9 = Button(RightFrame, *font*=('arial', 19, 'bold'), *text*="Play Audio", *padx*=2, *pady*=2, *bg*="blue", *fg*="white",

*command*=generate\_audio\_captcha)

Label\_9.grid(*row*=4, *column*=0)

Label\_7 = Label(RightFrame, *font*=('arial', 20, 'bold'), *text*="", *padx*=2, *pady*=2, *bg*="#68DEED", *fg*="black")

Label\_7.grid(*row*=2, *column*=0, *sticky*=W)

Entry\_1 = Entry(RightFrame, *font*=('arial', 20, 'bold'), *bd*=2, *fg*="black", *textvariable*=ans, *width*=14,

*justify*=LEFT).grid(*row*=5, *column*=0)

Label\_7 = Label(RightFrame, *font*=('arial', 20, 'bold'), *text*="", *padx*=2, *pady*=2, *bg*="#68DEED", *fg*="black")

Label\_7.grid(*row*=6, *column*=0, *sticky*=W)

Label\_7 = Label(RightFrame, *font*=('arial', 20, 'bold'), *text*="  ", *padx*=2, *pady*=2, *bg*="#68DEED", *fg*="black")

Label\_7.grid(*row*=6, *column*=1, *sticky*=W)

Label\_8 = Button(RightFrame, *font*=('Arial', 25, 'bold'), *text*="Check", *padx*=2, *pady*=2, *bg*="white", *fg*="blue",

*command*=check\_audio\_captcha)

Label\_8.grid(*row*=9, *column*=0)

Label\_4 = Button(RightFrame, *font*=('arial', 15, 'bold'), *text*="Regenerate", *padx*=2, *pady*=2, *bg*="white", *fg*="red",

*command*=regenerate\_audio\_captcha)

Label\_4.grid(*row*=10, *column*=0)

Label\_7 = Label(RightFrame, *font*=('arial', 20, 'bold'), *text*="      ", *padx*=2, *pady*=2, *bg*="#68DEED", *fg*="black")

Label\_7.grid(*row*=11, *column*=1, *sticky*=W)

Label\_1 = Label(LeftFrame, *font*=('lato black', 33, 'bold'), *text*=" Image Captcha ", *padx*=2, *pady*=2, *bg*="yellow",

*fg*="black")

Label\_1.grid(*row*=0, *column*=0, *sticky*=W)

Label\_2 = Label(LeftFrame, *font*=('arial', 20, 'bold'), *text*="", *padx*=2, *pady*=2, *bg*="#68DEED", *fg*="black")

Label\_2.grid(*row*=1, *column*=0, *sticky*=W)

Label\_9 = Button(LeftFrame, *font*=('arial', 19, 'bold'), *text*="Show Image", *padx*=2, *pady*=2, *bg*="blue", *fg*="white",

*command*=generate\_image\_captcha)

Label\_9.grid(*row*=4, *column*=0)

Label\_7 = Label(LeftFrame, *font*=('arial', 20, 'bold'), *text*="", *padx*=2, *pady*=2, *bg*="#68DEED", *fg*="black")

Label\_7.grid(*row*=2, *column*=0, *sticky*=W)

Entry\_1 = Entry(LeftFrame, *font*=('arial', 20, 'bold'), *bd*=2, *fg*="black", *textvariable*=ans1, *width*=14,

*justify*=LEFT).grid(*row*=5, *column*=0)

Label\_7 = Label(LeftFrame, *font*=('arial', 20, 'bold'), *text*="", *padx*=2, *pady*=2, *bg*="#68DEED", *fg*="black")

Label\_7.grid(*row*=6, *column*=0, *sticky*=W)

Label\_7 = Label(LeftFrame, *font*=('arial', 20, 'bold'), *text*="  ", *padx*=2, *pady*=2, *bg*="#68DEED", *fg*="black")

Label\_7.grid(*row*=6, *column*=1, *sticky*=W)

Label\_8 = Button(LeftFrame, *font*=('Arial', 25, 'bold'), *text*="Check", *padx*=2, *pady*=2, *bg*="white", *fg*="blue",

*command*=check\_image\_captcha)

Label\_8.grid(*row*=9, *column*=0)

Label\_4 = Button(LeftFrame, *font*=('arial', 15, 'bold'), *text*="Regenerate", *padx*=2, *pady*=2, *bg*="white", *fg*="red",

*command*=regenerate\_image\_captcha)

Label\_4.grid(*row*=10, *column*=0)

Label\_7 = Label(LeftFrame, *font*=('arial', 20, 'bold'), *text*="      ", *padx*=2, *pady*=2, *bg*="#68DEED", *fg*="black")

Label\_7.grid(*row*=11, *column*=1, *sticky*=W)

root.mainloop()