



Captcha Verification

@June 23, 2022

Documentation of Project:

CAPTCHA technology authenticates that a real person is accessing the web content to block spammers and bots that try to automatically harvest email addresses or try to automatically sign up for access to websites, blogs or forums. In this video, I plan to show viewers how to create captcha verifications using the python allocated module for the same called ImageCaptcha. I create basic images using user input and then random. Finally, we create a user-interactive tkinter window to verify if input is provided by a bot or human to display either verification or error message.

Outline for Presentation:

5 minutes video

 [Presentation](#)

Code -

Tex

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import random
import string
from tkinter import *
from captcha.image import ImageCaptcha
from PIL import ImageTk, Image

# Simple program to make a Captcha text image from user input
img = ImageCaptcha(width = 300, height = 100) # Create image window
text = input("Enter the Text for Captcha: ") # Ask user for Text for captcha
Cap_data = img.generate(text) # Generate the image of the text
img.write(text, 'Captcha1.png') # Save the image

# Simple program to make a Captcha text image using random
image = ImageCaptcha(width = 300, height = 100) # Create image window
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characters = string.ascii_letters + string.digits          # Set of all alphabets and digits
string1 = ''.join(random.choice(characters) for i in range(8)) # Generate random text
Captcha_data = image.generate(string1)                    # Generate the image of the text
image.write(string1, 'Captcha2.png')                      # Save the image

# Program to make a Captcha text image at random and then having the user verify

# Creating user interactive window
window = Tk()
window.title("Captcha Verification App")
window.geometry("500x300")

# Create captcha image
cap = ImageCaptcha(width=300, height=100)
characters = string.ascii_letters + string.digits
val = ''.join(random.choice(characters) for i in range(4))
print(val)
images = cap.generate_image(val)
# images.show()
images.save("Final_Captcha.png")
# cap.write(val, 'Final_Captcha.png')

# Ask for input
label1 = Label(window, text="Enter Captcha: ")
label1.pack(pady=10)

# Receive Input from User
input1 = StringVar()
entry = Entry(window, textvariable=input1)
entry.pack(pady=10)

# Image Label
# canvas = Canvas(window, width = 300, height = 300)
# canvas.pack()
# img = PhotoImage(file="Final_output.jpg")
# canvas.create_image(300,100, anchor=NW, image=img)
# image1_label = Label(window, bg='#000000')
# image1_label.config(image=images)
# image1_label.pack(pady=10)

def check():
    if val == input1.get():
        final_output.config(text="Captcha verified successfully!")
    else:
        final_output.config(text="Captcha failed.")

# Button
click = Button(window, text="Verify", command=check, width=10)
click.pack(pady=10)

# Screen Label
final_output = Label(window, text="")
final_output.pack(pady=10)

window.mainloop()

```

