



Project Title: Keylogger Detection System

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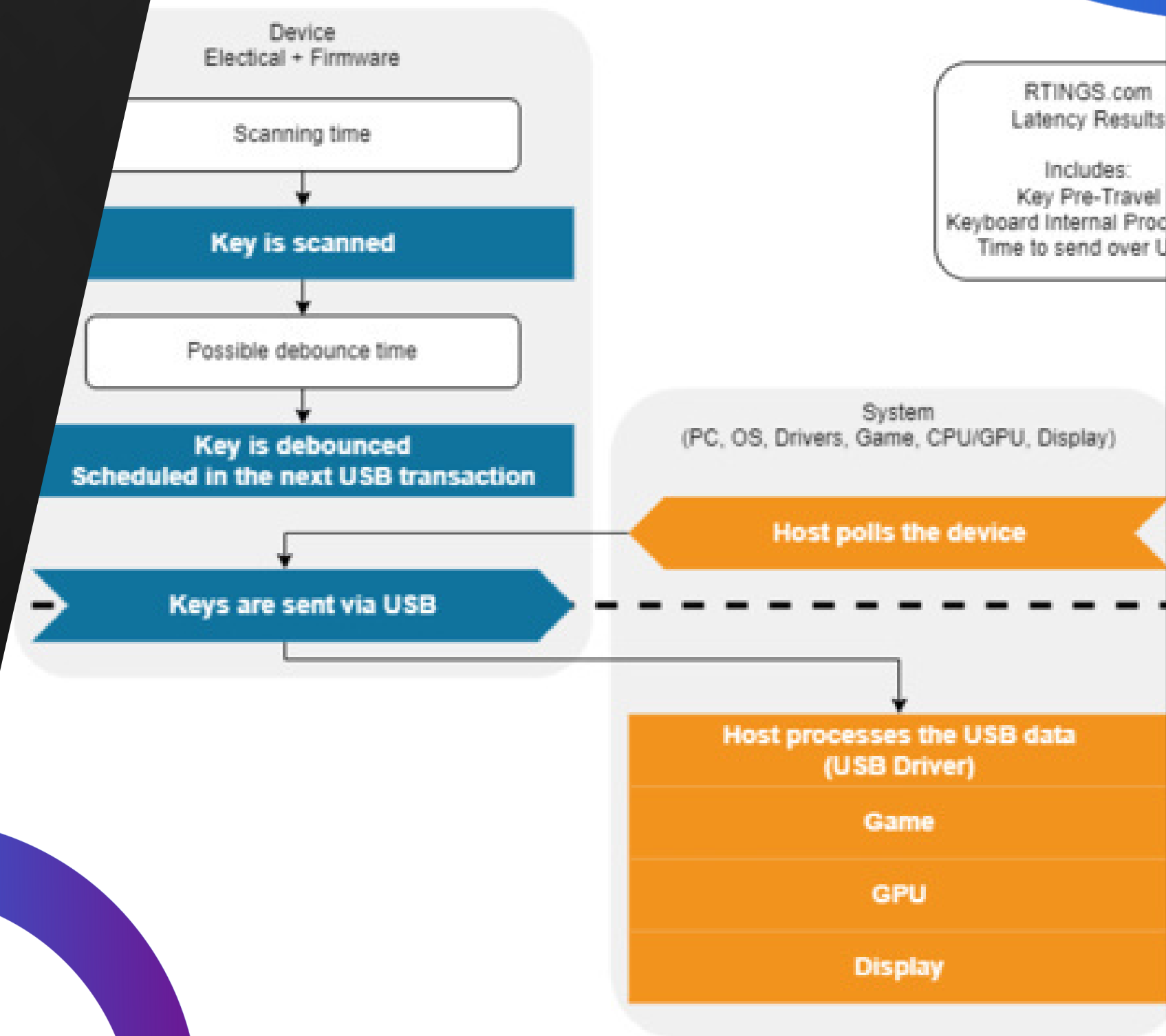


ABSTRACT

- *Our project title is Keylogger detection system.*
- *Keyloggers are malware programs which can infect your system and tracks all the data using your keystrokes.*
- *We used several techniques to identify the keylogger embedded in system.*
- *They can be of both hardware and software type which can be embedded in non-suspicious softwares.*
- *With a broader perspective we have goal to embed our code with anti-malware softwares and redirection of direct identification and removal of keyloggers.*
- *Also with use of process analyzing and web-extension we can have a keylogger detector for web applications.*

Keylogger Indepth:

- Keylogger are malicious programs which traces your keystrokes input from keyboard , analyse them and transfer the crucial data to suspicious person.
- These keyloggers can be contagious and infects the connected devices and are of both hardware type in which keylogger are embedded to firmware itself and in softwares they are included in code of non-suspicious softwares.
- Also using access to network the deduce your critical data and compromise them.
- These are really complex chunk of code which need high processing, memory, storage, and this can cause lagging between keystrokes to display of the input.
- Where as our program is simple , low processing ,high efficiency code which can easily detect the keylogger infested in the user system.

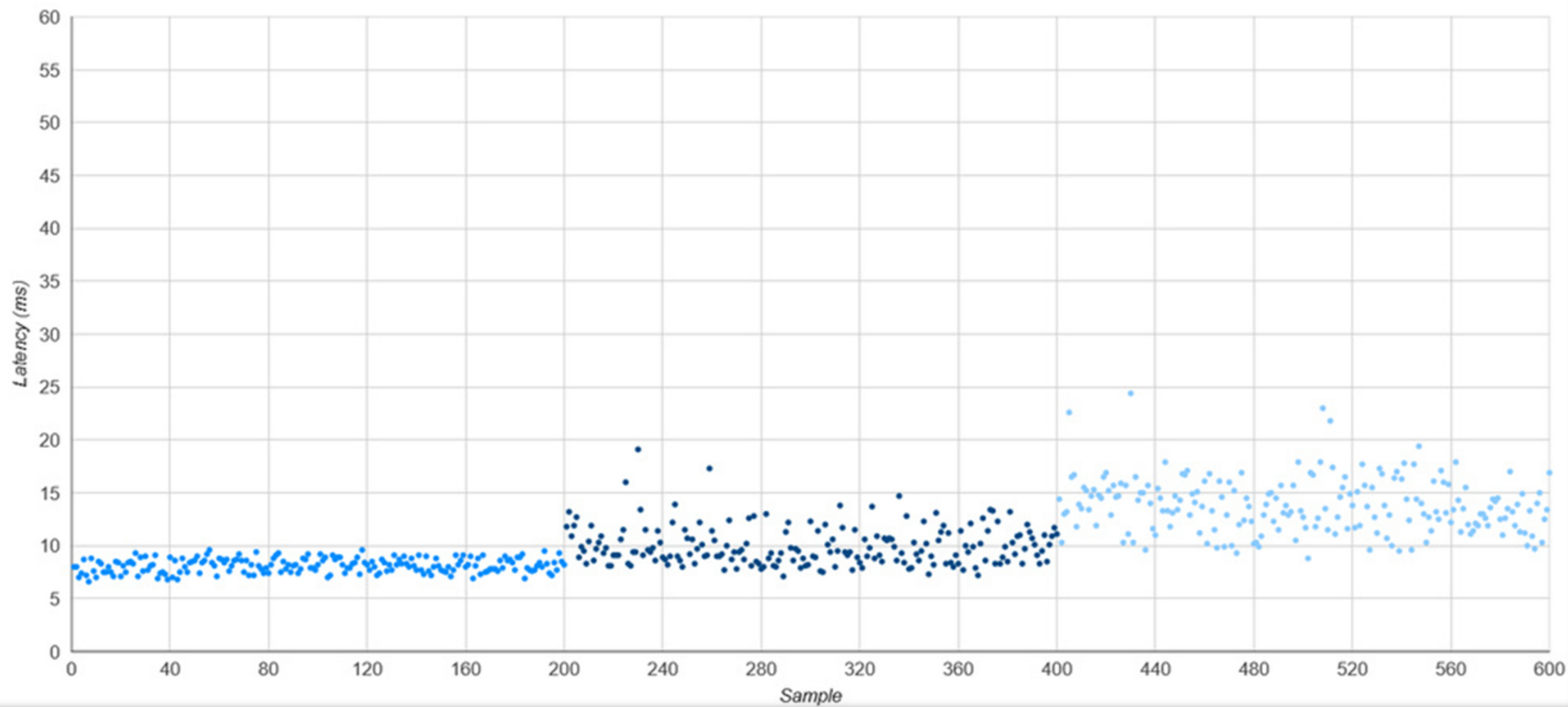


Latency and Testing Data

- We use keyboard Latency term for time it takes from when a key is pressed to when the computer receives the signal and display on the screen and used this to develop our program.
- We used the “Keyboard latency test” from [Rtings.com](https://www.rtings.com/keyboard/tools/latency-test/) website to improvise our code with tested data.
- We also considered Single key latency termed for : the duration it takes for a single key to register on your computer with all supported connection types , and Multi Key latency termed for : duration it takes for a key to release to be registered by your computer with expected connection type.
- Also considering the test result we estimated our program to set limit of keystrokes speed as 140 ms.
- Pre-time travel: A preliminary analysis of the historical data for the test section indicates that the delay during the evening peakworking area.

Sample	Human Latency (ms)	Solenoid Latency (ms)
1	-2.755	-2.138
2	-3.187	-2.265
3	-3.117	-2.138
4	-2.160	-2.092
5	-4.399	-2.251
6	-3.73	-2.288
7	-4.131	-2.044
8	-5.326	-2.239
9	-4.216	-2.123
10	-1.533	-2.146
Average	-3.4554	-2.1724

- ☒ Wired
- ☒ Wireless
- ☒ Bluetooth



Idea/Approach Details

- Our code uses Python as base language which is really fast and efficient for our program execution.
- In this many libraries like: time, threading, ctypes, webbrowser and pyinstaller are used.
- Also for further accessibility we converted the code to .exe file which has much greater portability for users and has low size which make it fast and user-ready to download.
- Here .exe file can be provided with or without console such that user has leverage over the administration of program.
- The base IDE used for complete coding is VScode.
- We also used web-hooks for redirection of program to web-browsers.
- We used the Pre-time travel and Keyboard Latency concepts to improvise our code which makes it more reliable and user-efficient.



Strategies



Competitive

We are considering our program design to provide web-browsers supports as in extensions and redirection to the pre-existing anti-malware program on detection of suspicious activities.



Execution

Our program has really low size which makes it faster in downloading anytime, anywhere which provide much flexibility to our program.



Marketing

By providing premium version of our anti-keylogger which includes the software itself embedded with code, where on detection it automatically removes the malicious part of code.

THANK YOU

For watching this presentation



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Complete source code: https://github.com/Haksham/Keylogger_Detector



Refrence from: Rtings.com

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