

Computer Surveillance System

Ruchi Jain¹, Dr. Mohd Amjad²

M.Tech Scholar¹, Sr. Assistant Professor²

*Department. of Computer Science Engineering/Information Technology,
Al-Falah School of Engineering and Technology¹, Jamia Millia Islamia New Delhi²*

Abstract—In this paper we will characterize different ways to keep track of all the activity done on computer and how these tracked records are saved and further accessible to administrator. Computer Surveillance System gives parent's opportunity to keep an eye on their kid to check what their kid is doing in their absence. Also Computer Surveillance System gives opportunity to manager to check their employees whether they are doing their work properly or busy in doing chatting etc.

Keywords: Keylogger, Screenshot, Clipboard, Recorder, Surveillance, record.

All the developed modules are added to the startup program so that when every time window is started we do not need to start this project again and again.

I. INTRODUCTION

Computer Surveillance Systems are used for the purpose of the observing the activities done on the computer. Computer Surveillance is a tool which is used to record and monitor all activities done on target computer. It can be used for various purposes like parents to keep an eye on their children what they are doing in their absence [2][11] or for business purpose to determine what their employees are doing.

II. RELATED WORK

This paper presents and discusses various methods that are used to track and record different type of activities done on computer. This process can be done in 3 ways

- 1) Keylogger
- 2) Screenshot
- 3) Clipboard Watcher

Keylogger: It tracks and records all keys pressed on the keyboard. After tracking and recording it saves all data in notepad file at specified location provided in the database. Size of the notepad file is specified by the administrator during the installation of project

Screenshot: It takes screenshot of active window after a given interval of time. After taking screenshot it saves all screenshot in a folder at specified location provided in the database. Time interval is specified by the administrator during the installation of project

Clipboard Watcher: It tracks and records all the cut and copy operation performed. After tracking and recording it saves all data in notepad file at specified location provided in the database. Size of the notepad file is specified by the administrator during the installation of project.

All the developed modules are hidden so that no one will be able to detect. If it is detected by user then he/she can modify the data or can delete the data

III. KEYLOGGER

Keylogger [3] is an activity which is used to record all the keys pressed on keyboard. It may be alphabetic keys, numeric keys, function keys or any combination of keys etc.

Types of Keylogger [9]

1. Hardware Key-logger
2. Software Keylogger

Hardware Key-logger

Hardware Key-logger is used to [5][13] record all the key pressed on keyboard i.e. hardware Key-logger is installed between USB and keyboard plug. If user notices the hardware Key-logger then they may remove it.



Fig.1 it shows how Hardware Keylogger is installed

Software Key-logger

Software Key-logger [6][10] records all keyboard activities by installing software on the target computer. It can be used local Keylogger or remote Keylogger. Local Keylogger tracks only local monitors and are completely undetectable whereas remote Key-logger[12] tracks remote monitor but they are not capable of recording data properly.

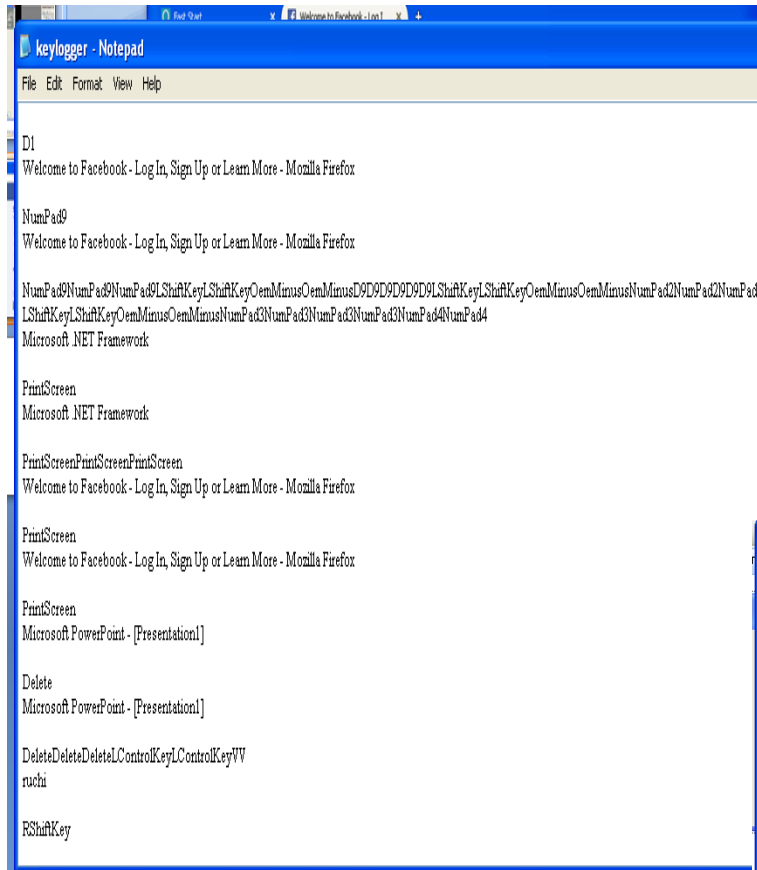


Fig.2 Screenshot of tracked record by Keylogger which is saved in notepad

IV.SCREENSHOT

Screenshot is a process [1][8] which takes screenshot of active window in a given time interval which is stored in the jpeg format in the specified location, which is used to check what kind of video they watch or while chatting what reply they receive or it maintains a visual log to give a complete overview of person's online activity. It gives as overall visual log of all the activity which is performed on the specified computer.

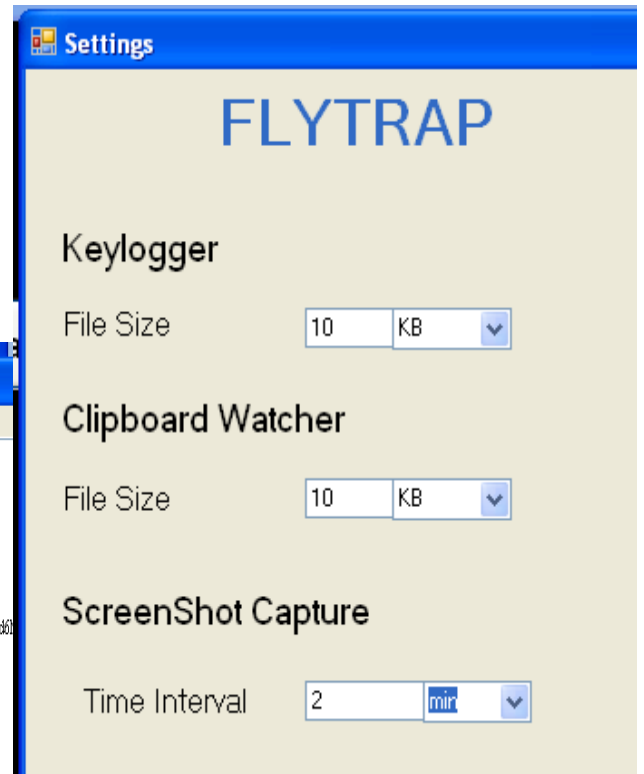


Fig.3 Screenshot of setting for file size and time interval provided

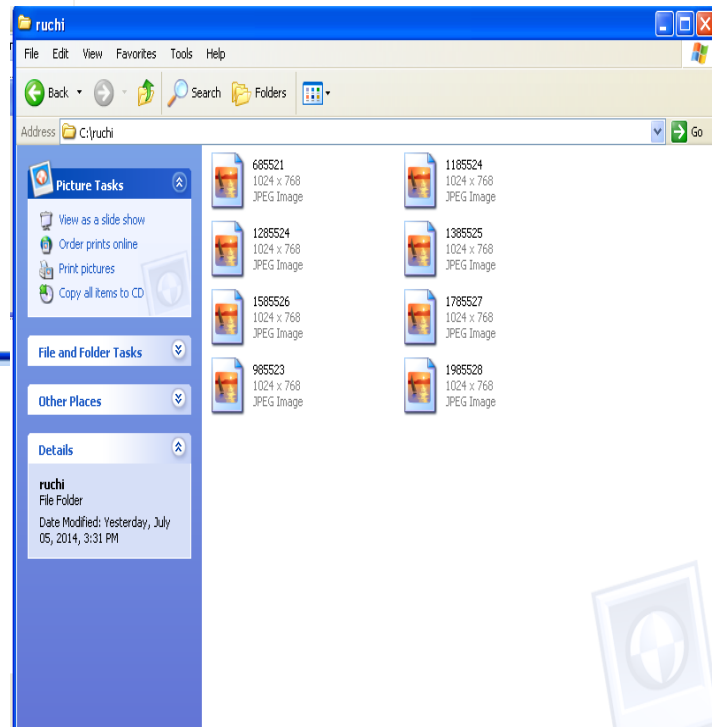


Fig.4 Folder where all Screenshot are saved

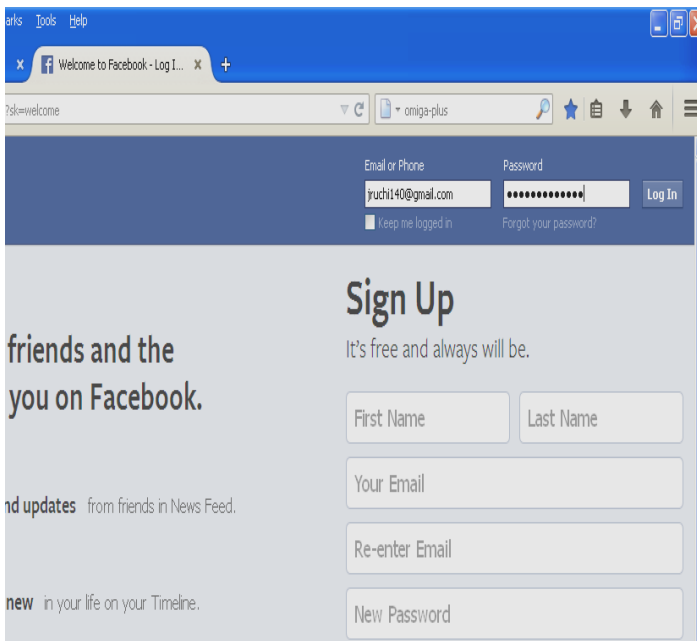


Fig.5 Screenshot taken at regular interval

V. CLIPBOARD WATCHER

Clipboard watcher [4][7] is used to record the cut and copy operation and also it tracks from which file cut and copy operation is performed at what time.

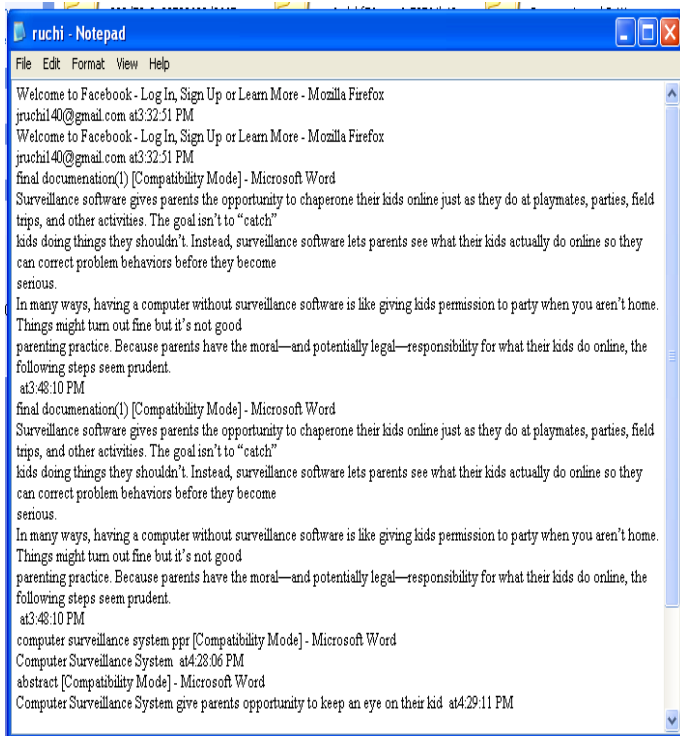


Fig.6 Screenshot of tracked record by Clipboard Watcher which is saved in notepad

VI. CONCLUSION

We have developed a Module in this research paper for the computer surveillance system, which may be applied to keep track and record all activities performed on the computer. Computer Surveillance System provides the user with the flexibility to view the target computer in many ways, running individually or simultaneously. This could be implemented in the web based scenario to monitor the activity of any kind of user and the type of application used by them for the user activity monitoring.

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