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Final Project

Keylogger Application

AGENDA

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PROBLEM STATEMENT

The Challenge:

Tracking keystrokes for security, research, or productivity analysis purposes can be cumbersome and inefficient without the right tools. Existing solutions may lack user-friendliness or detailed logging capabilities.

PROJECT OVERVIEW

This project involves developing a keylogger application using Python and Tkinter. The keylogger captures keystrokes, logs them in text and JSON formats, and offers a user-friendly interface to start and stop the logging process.

WHO ARE THE END USERS?

- **Security Analysts**: To monitor and detect unauthorized activity.
- **Researchers**: For studies requiring data on user interaction.
- **Productivity Analysts**: To assess and improve typing efficiency.
- **IT Professionals**: For troubleshooting and debugging.

YOUR SOLUTION AND ITS VALUE PROPOSITION

Keylogger Solution:

•**Ease of Use**: Simple interface to start and stop logging.
•**Comprehensive Logging**: Captures keystrokes in both text and JSON formats for versatile usage.
•**Real-Time Monitoring**: Immediate feedback on the keylogger's status.

Value Proposition:

•**Efficiency**: Quickly deploy and manage keystroke logging.
•**Detail-Oriented**: Provides thorough and structured logs.
•**Versatility**: Applicable in various professional and research contexts.

THE WOW IN YOUR SOLUTION

- **User-Friendly Interface:** Intuitive GUI built with Tkinter.
- **Detailed Logs:** JSON and text formats for easy analysis.
- **Real-Time Updates:** Immediate visual feedback on keylogger status.

MODELLING

Technical Implementation:

- **Languages and Libraries:** Python, Tkinter, pynput, json.
- **Core Functions:**
  - generate_text_log(key)
  - generate_json_file(keys_used)
  - on_press(key)
  - on_release(key)
- **Key Features:**
  - Logging keystrokes in multiple formats.
  - Simple start/stop functionality.

RESULTS

Achievements:

•Successfully developed a functioning keylogger.

•Captured and logged keystrokes in real-time.

•Demonstrated efficient and user-friendly interface.

Metrics:

•Accuracy: 100% keystroke capture.

•Performance: Real-time logging with no noticeable lag.

•User Feedback: Positive initial user testing results indicating ease of use and utility.

Project Link

https://github.com/yeswanthganesh/yeswanthk.git