

LOGS GUI

This code uses the following libraries:

- OpenCV (CV2)
- face_recognition
- numpy
- tkinter
- OS
- time
- random
- sqlite3

Libraries- How? Where? Which?

- **OpenCV**: This is primarily used to handle the webcam access of the system and real time face capture. It also converts the color format into one compatible for face_recognition.
- **face_recognition**: It compares the live webcam input with the stored face recognition data. It is responsible for the face lock feature.
- **numpy**: It saves, loads and handles the face encodings in the form of numeric arrays as 'face_data.npy' binary files.
- **tkinter**: tkinter is imported as tk, and from the tkinter library, we import messagebox and simpledialog.
 - **tk**: It serves as the main GUI framework for the application
 - **messagebox**: It is used to create the pop ups while closing the window, to show an error message etc. while the code is running
 - **simpledialog**
- **OS**: It is used for folder/file handling. Creates a Logs directory for storing the data base.
- **time**: It is used to set the time in which the face recognition runs
- **random**: It is used to display one of the poems randomly on the face recognition window.
- **sqlite3**: It helps to manage, create the local database to store entries. Provides the SQL commands for creating, inserting, updating, and deleting the diary entries.

Why this code?

Every code has a story, and so does this one...

As I grew up, I realized that maintaining a diary is not about being cool or a compulsion. It is just an optional task of self-discipline, and self-reflection, that is best incorporated in one's daily life. However, in a physical copy, little does the privacy survive when you live in a joint Indian Marwari family. By the dinner, what was written in it would have already reached that one cousin who I have never met. Not the best experience, though lowkey iconic.

This compelled me to shift my diary from a pen and a notebook to digital. Then, I thought, why not my own code: not like anyone who has access to my laptop other than me will check out my python IDLE in search of my secrets, right?

Future Upgrades

- An option to add dates to entries, tags to entries and colors to them as well-based on the mood.
- Themes for the GUI application
- A search bar to navigate through the logs/diary entries
- Option to add voice notes and images
- The option to add stickers, texts in different fonts- the ability to make it look like a journal.

Citations

<https://www.python.org>

<https://pypi.org>