PROJECT REPORT FILE

ON

PASSWORD MANAGER

Course Name : Python Lab
Course Code: 5.0CE252E02

Submitted by:

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Introduction

A password manager is a software tool designed to securely store and retrieve login credentials for various accounts. This project implements a simple GUI-based Password Manager using Python's Tkinter library. The objective is to allow users to save usernames and passwords in an organized manner, retrieve passwords easily, view all saved credentials, and safely delete entries when needed. This solves the common issue of forgetting passwords and prevents unsafe storage practices like writing passwords on paper or storing them unprotected on devices. The expected outcome is a user-friendly application with essential CRUD functionalities for password management.

Libraries / Frameworks Used

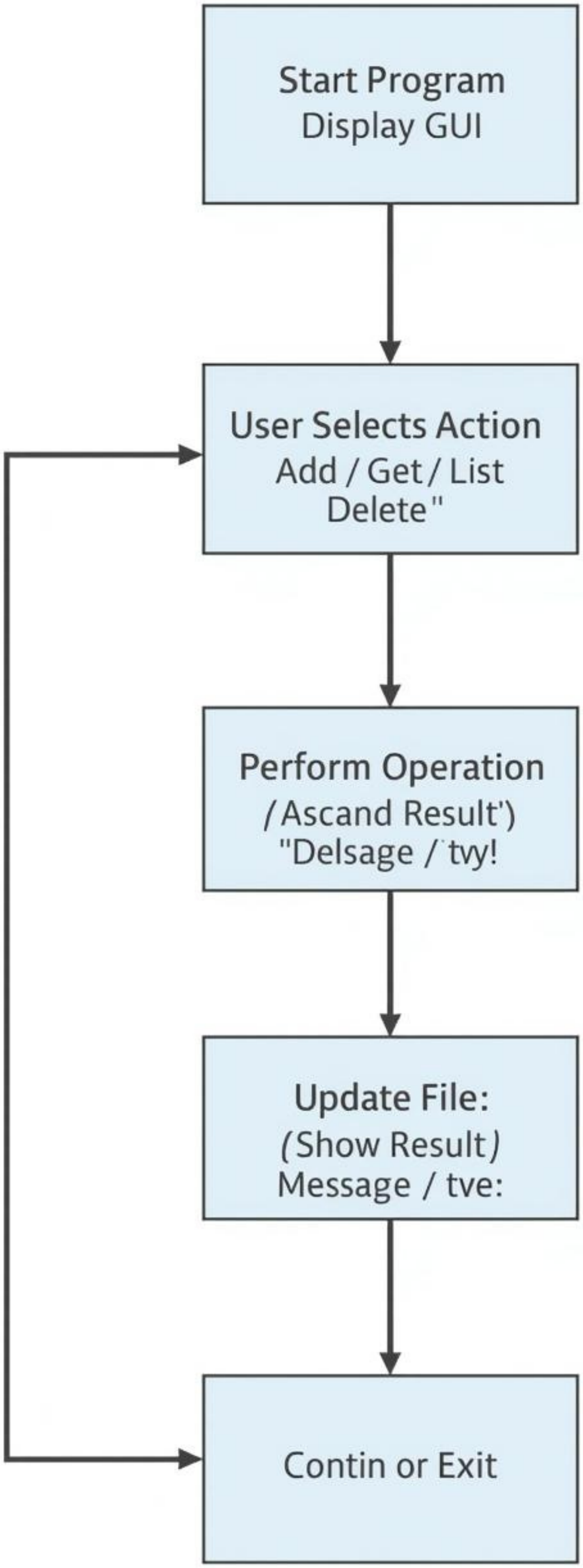
- Tkinter – for building the graphical user interface
- tkinter.messagebox – to show alert and confirmation pop-ups
- Python File Handling (I/O) – to save and read passwords in a text file
- OS module (implicitly used for file operations)

System Design / Methodology

The project workflow is as follows:

- User enters a username and password in the GUI input fields.
- The "Add" button saves these credentials into a text file (**passwords.txt**).
- The "Get" button retrieves the stored password for a given username.
- The "List" button displays all usernames and their passwords stored in the file.
- The "Delete" button removes a selected username's credentials from the file.
- Throughout all operations, Tkinter message boxes provide feedback to the user, such as confirmation or error messages.

Flowchart


Start Program
Display GUI
User Selects Action
Add / Get / List
Delete"
Perform Operation
/ Ascand Result')
"Delsage / `tvy!
Update File:
(Show Result)
Message / tve:
Contin or Exit

Implementation

The project is implemented using Python's Tkinter library for the GUI. Key implementation details include:

- Creating a main GUI window with labeled entry fields for username and password input.
- Developing an add() function to append new entries to the **passwords.txt** file.
- Writing a **get()** function to search and display the password for a specified username.
- Implementing **getlist()** to read and show all saved credentials in a formatted way.
- Creating a **delete()** function that removes the selected username's entry from the file.
- Adding buttons for "Add," "Get," "List," and "Delete," each linked to their respective functions.
- Handling file operations carefully with try-except blocks to prevent errors during reading/writing.

Sample Output Screenshots

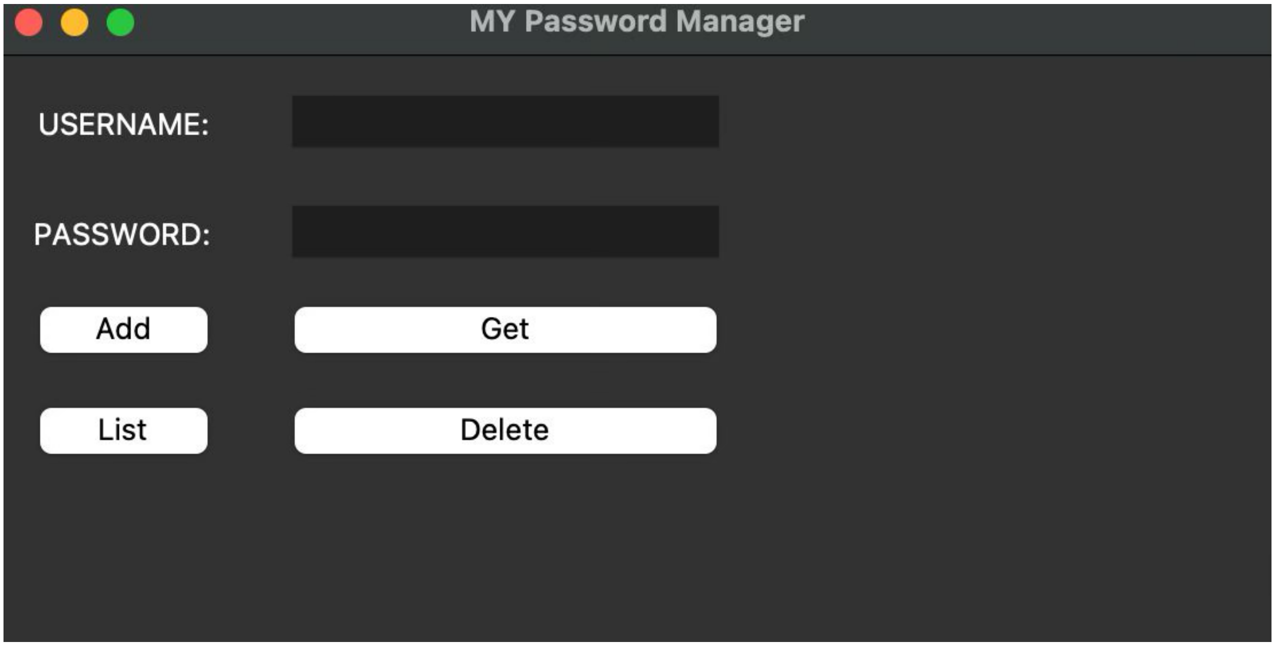
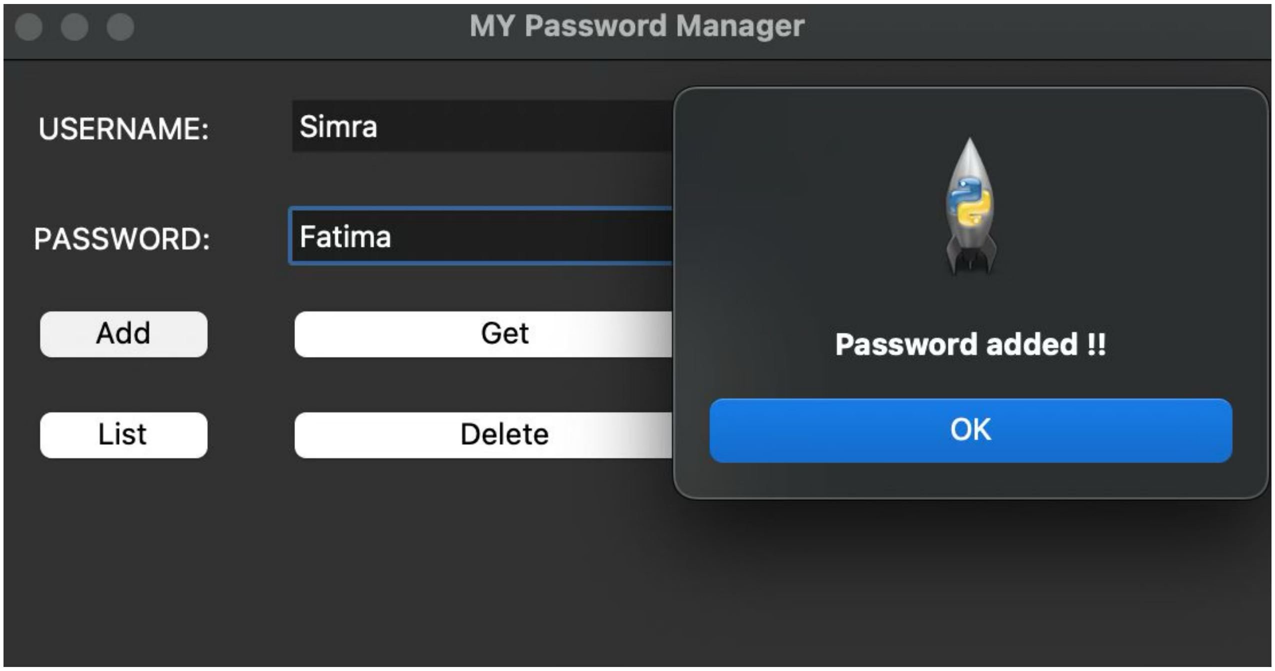


Fig.1



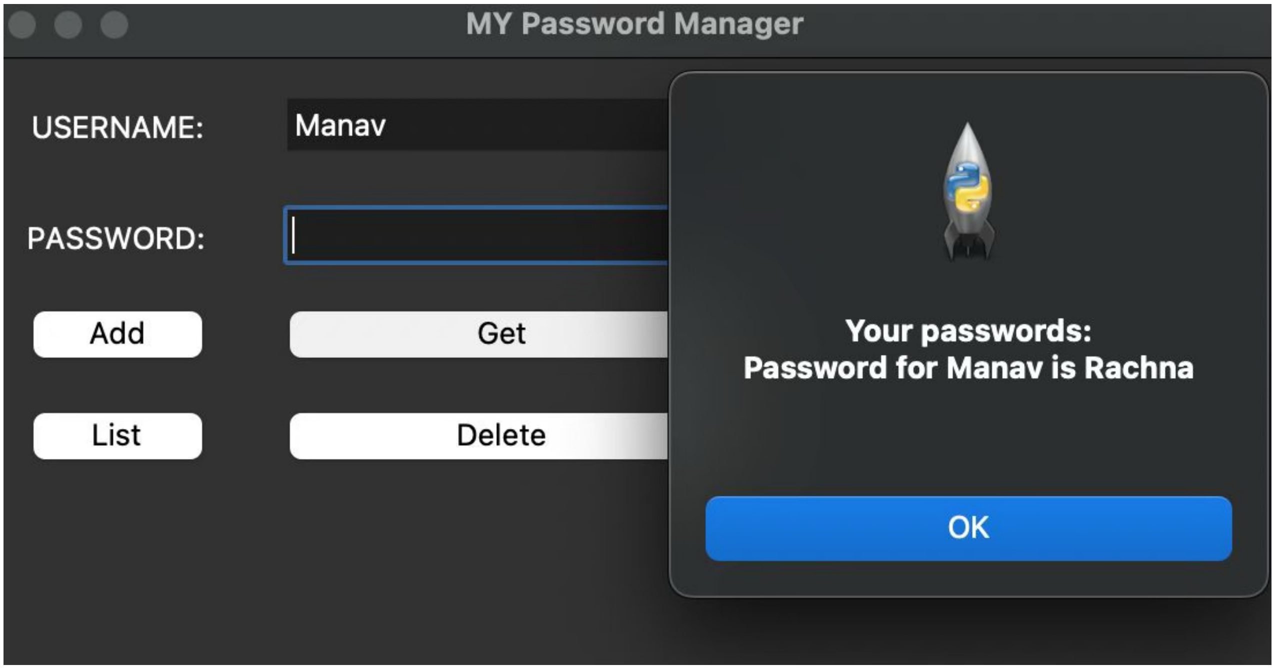
MY Password Manager

USERNAME: Simra

PASSWORD: Fatima

Password added !!

Fig.2



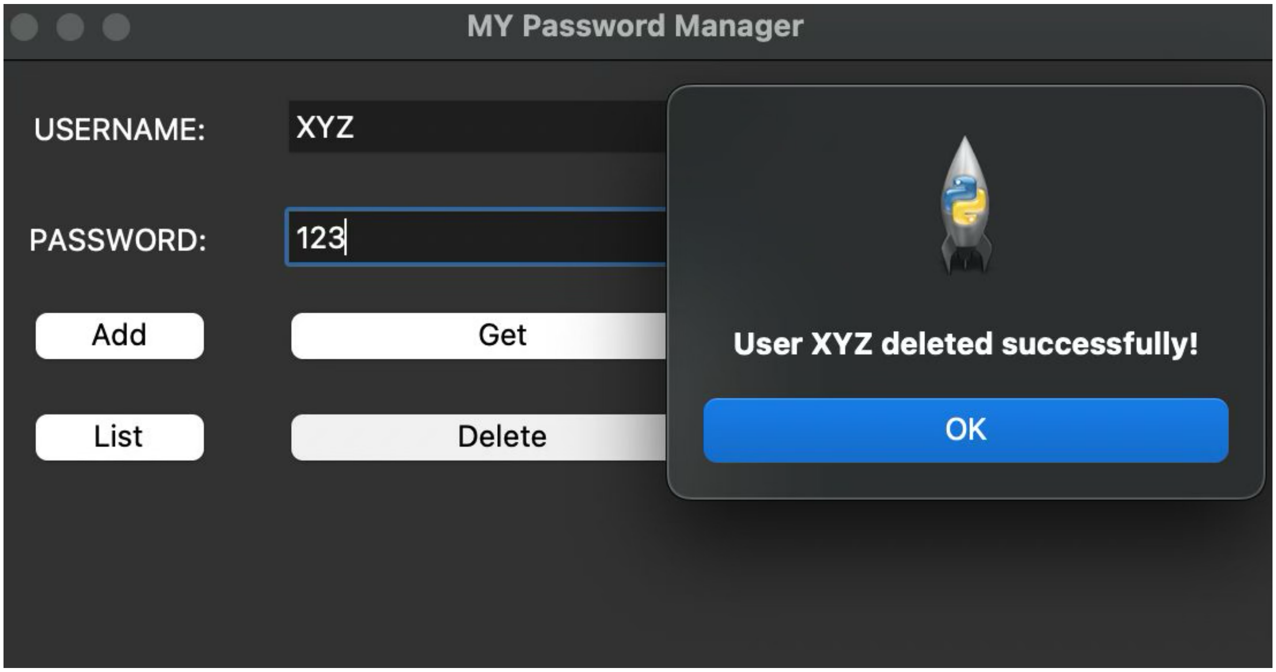
MY Password Manager

USERNAME: Manav

PASSWORD:

Your passwords:
Password for Manav is Rachna

Fig.3

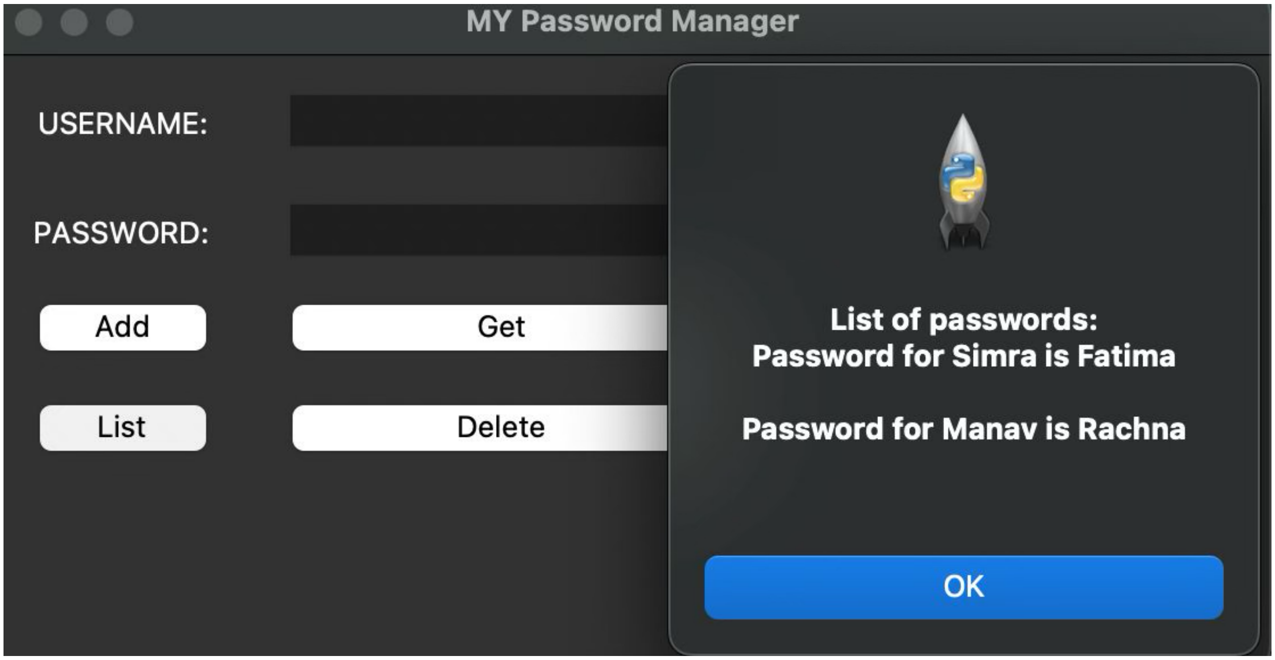


USERNAME: XYZ

PASSWORD: 123

User XYZ deleted successfully!

Fig.4



USERNAME:

PASSWORD:

List of passwords:
Password for Simra is Fatima

Password for Manav is Rachna

Fig.5