Term Project

Technical Spec

CS 151: Object-Oriented Design
Prof: Ahmad Yazdankhah

Team Number	07	**Section**	05
Team Members	1. Minh Le 2. Van Chuong Pham 3. Seyed Morsali 4. Quang Tang		
Software Name	Password Manager		

1 Introduction

1.1 Objective

This document demonstrates the recognizable classes, attributes, and methods that will appear in the implementation process up to this moment. Also, this document shows how classes and objects interact with each other when the user uses the application. This document is important for the developer to follow during the coding process.

1.2 References

UML Class diagram, sequence, and state diagram tool: Violet

https://sourceforge.net/projects/violet/

Mockup tool: Adobe Xd

https://www.adobe.com/products/xd.html

1.3 Acronyms, and Abbreviations

N/A

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2 Software Overview

2.1 Problem Statement

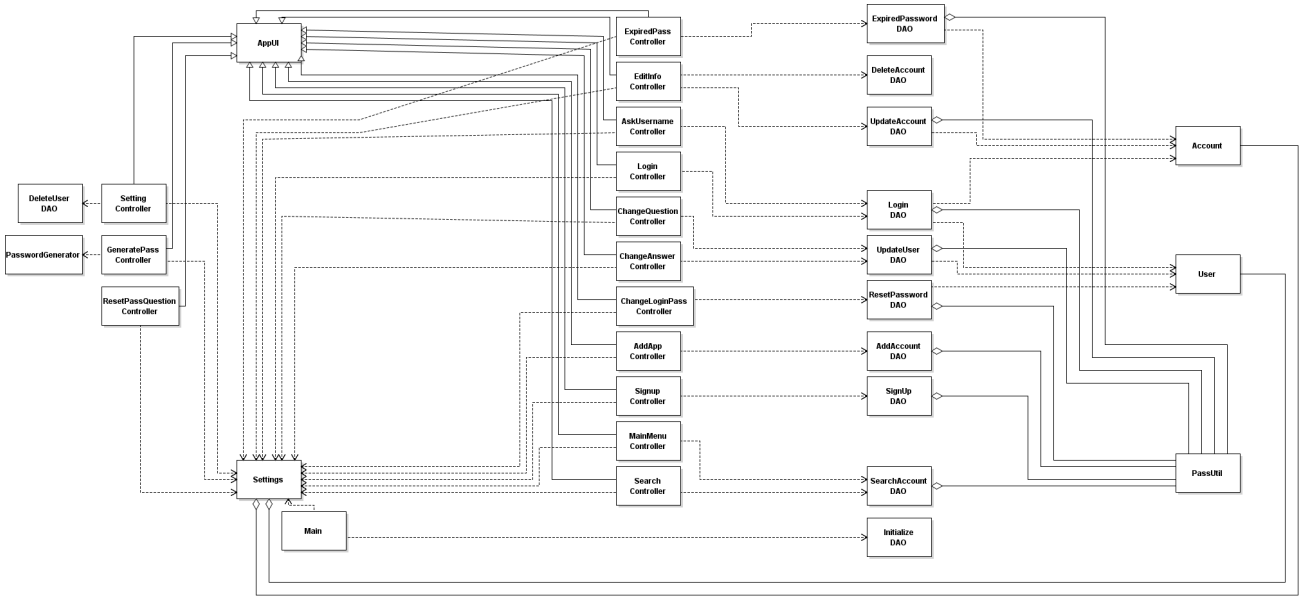
Computers and the Internet are being used extensively and the security of users' privacy has become a big issue. One of the oldest ways to provide security is using passwords. Choosing and storing passwords are hard tasks for the majority of the users and cause millions of breaches. Since the number of websites that we use every day is increasing, this causes most users to choose simple memorable passwords, store them improperly, or reuse them for many websites/applications that increase the risk of being cracked. The existing password managers are not reliable because there is always the risk of leaking our information to the developers of the software!

2.2 Scope

Target user: Everyone who has an online account and wants to increase their password security.

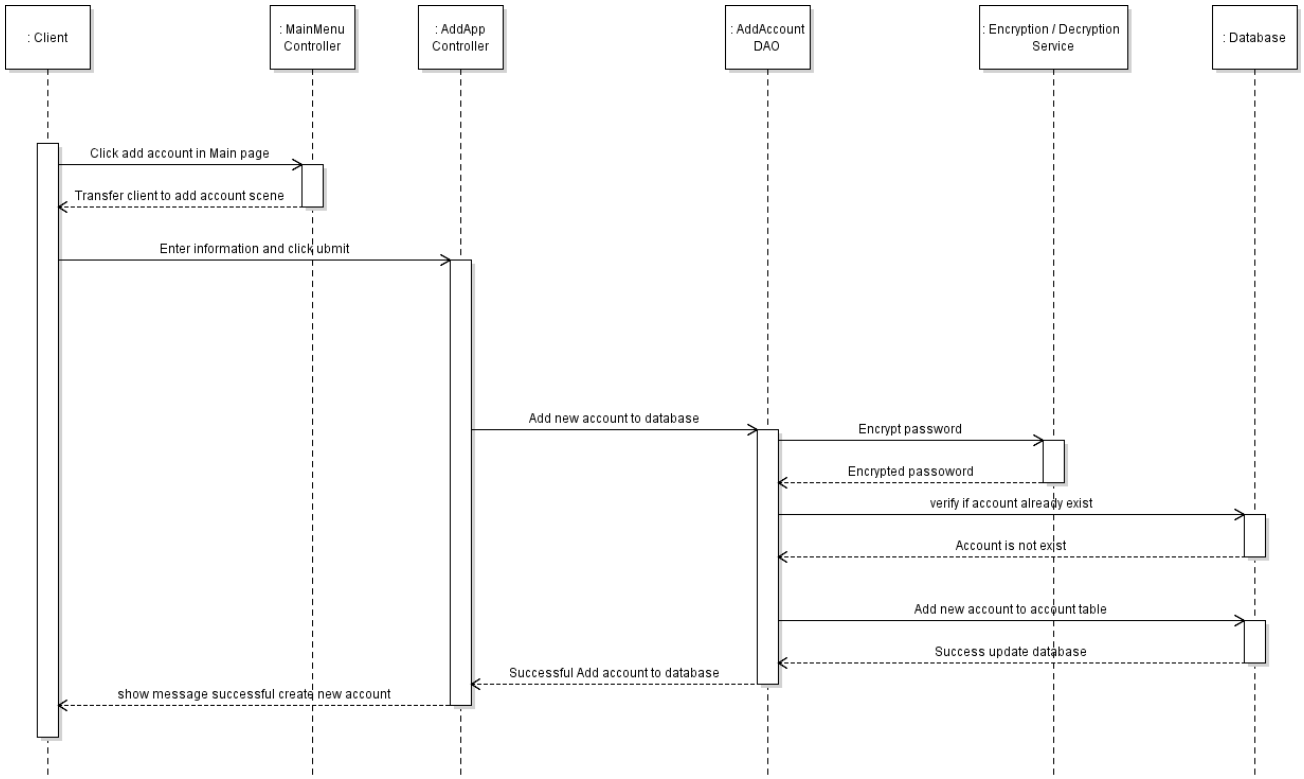
3 Detailed Design

3.1 UML Class Diagrams (for all classes/interfaces)

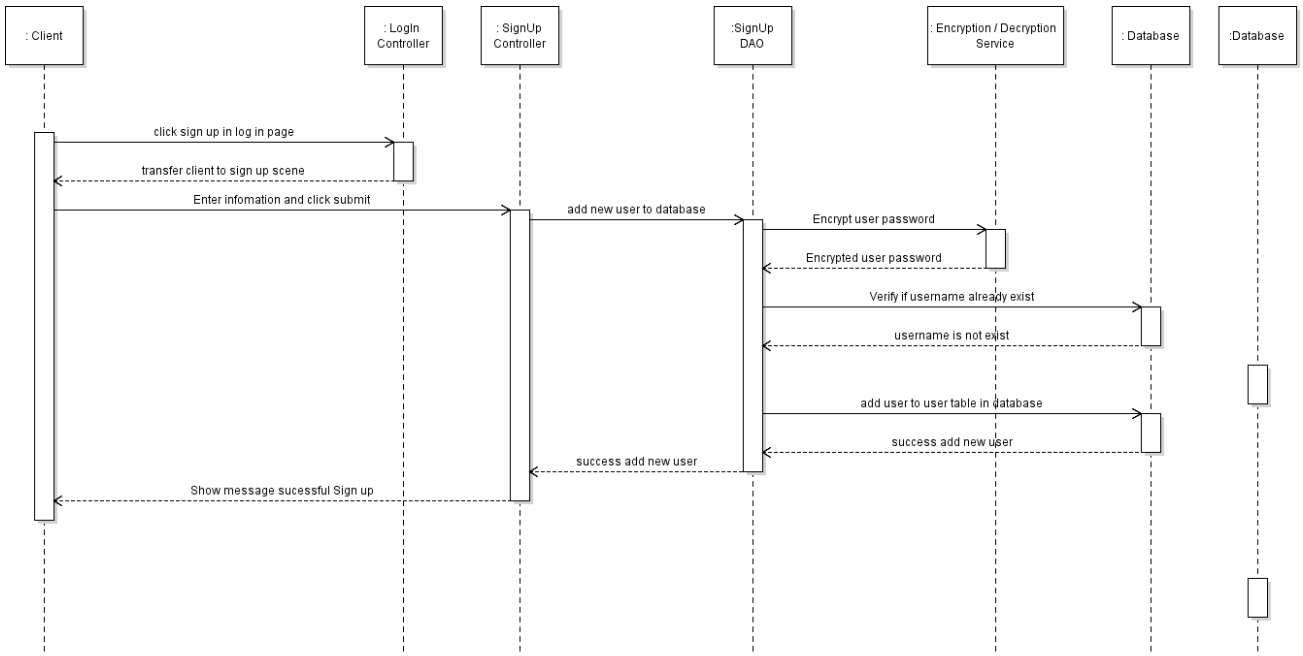


3.2 UML Sequence and/or State Diagrams (at least two)

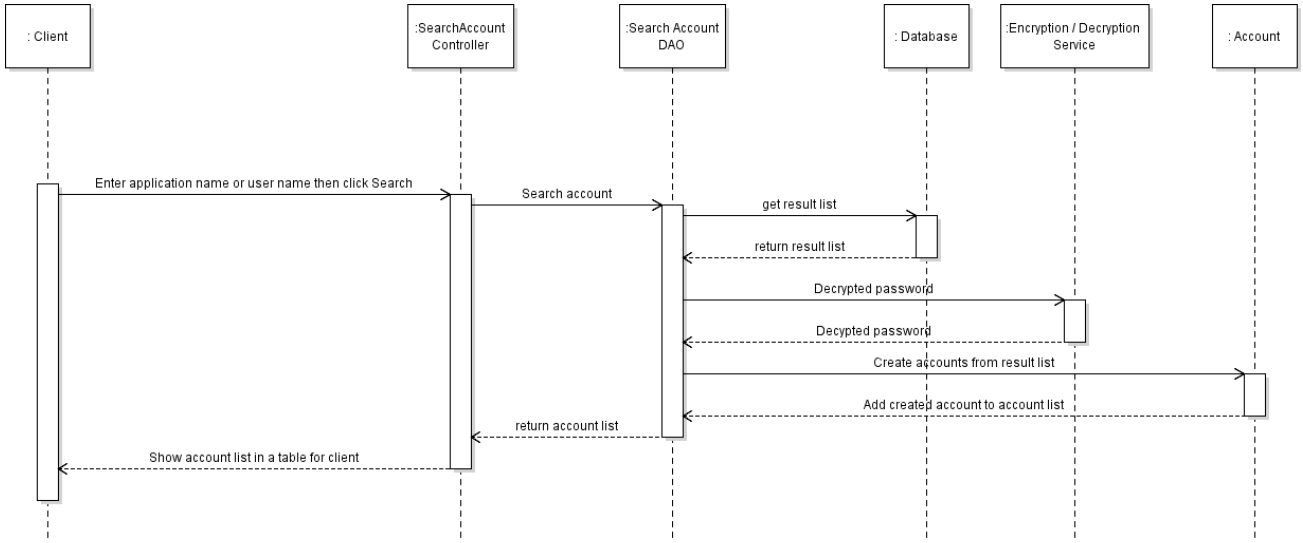
a. Sequence Diagram for adding new account



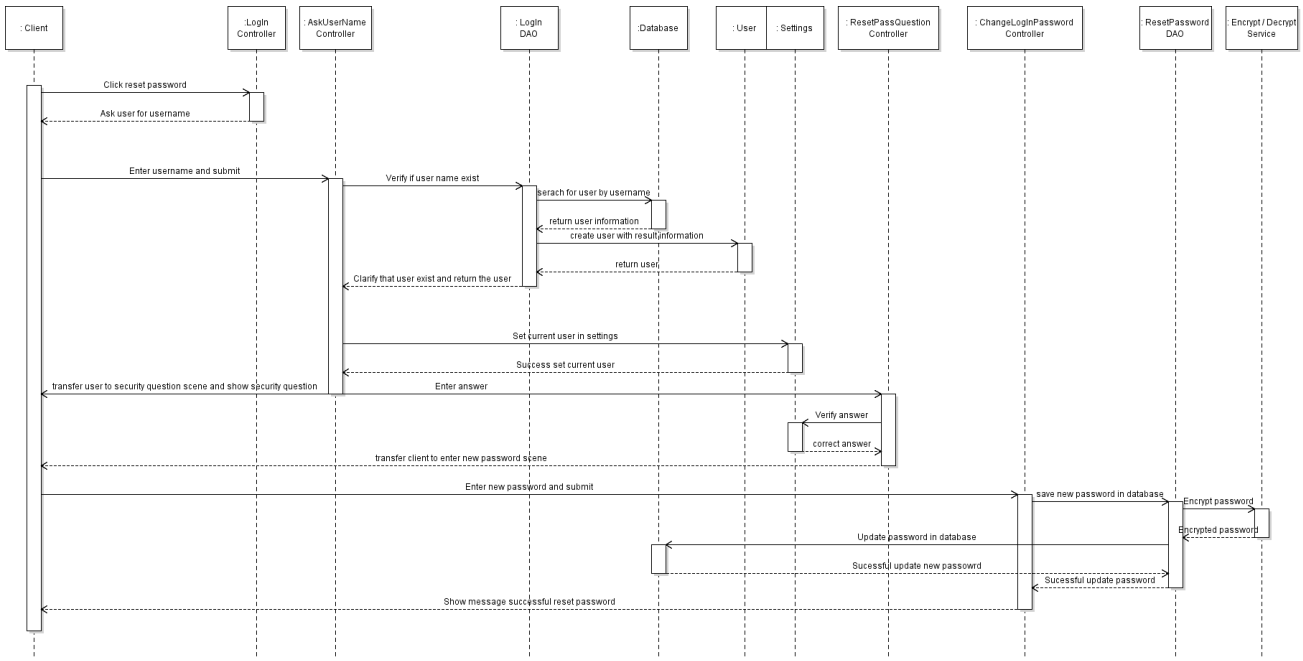
b. Sequence diagram for Sign up



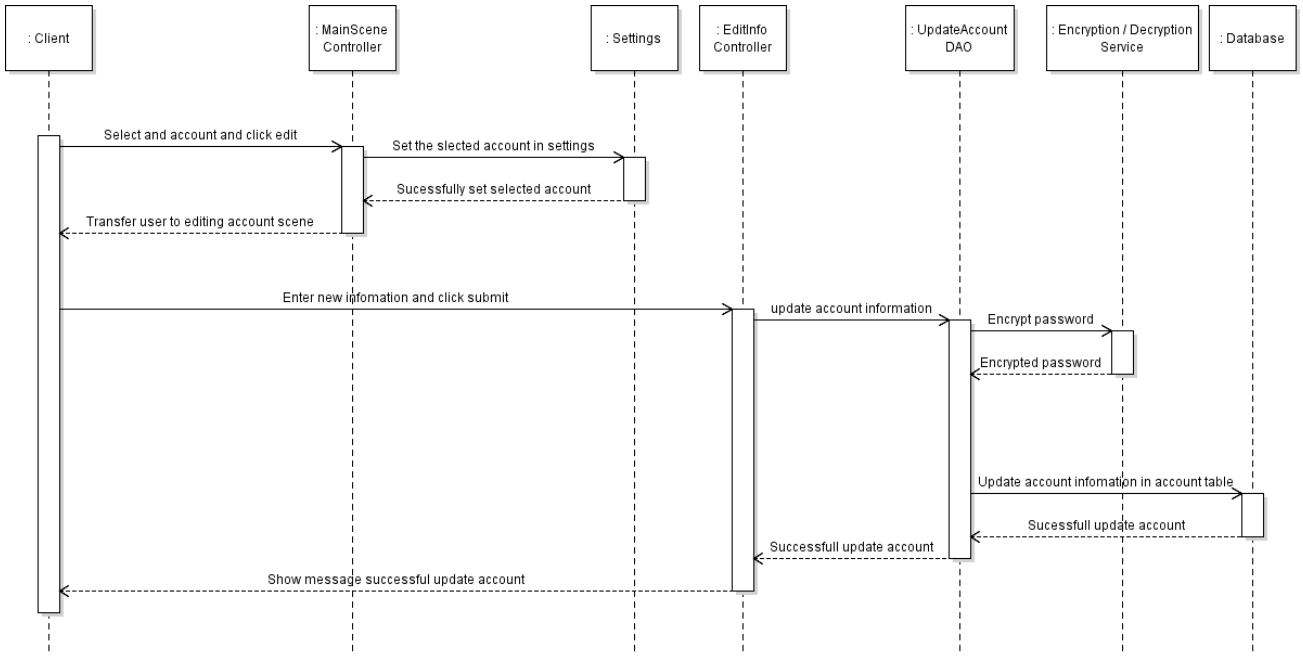
c. Sequence diagram for search accounts



d. Sequence diagram for reset user password

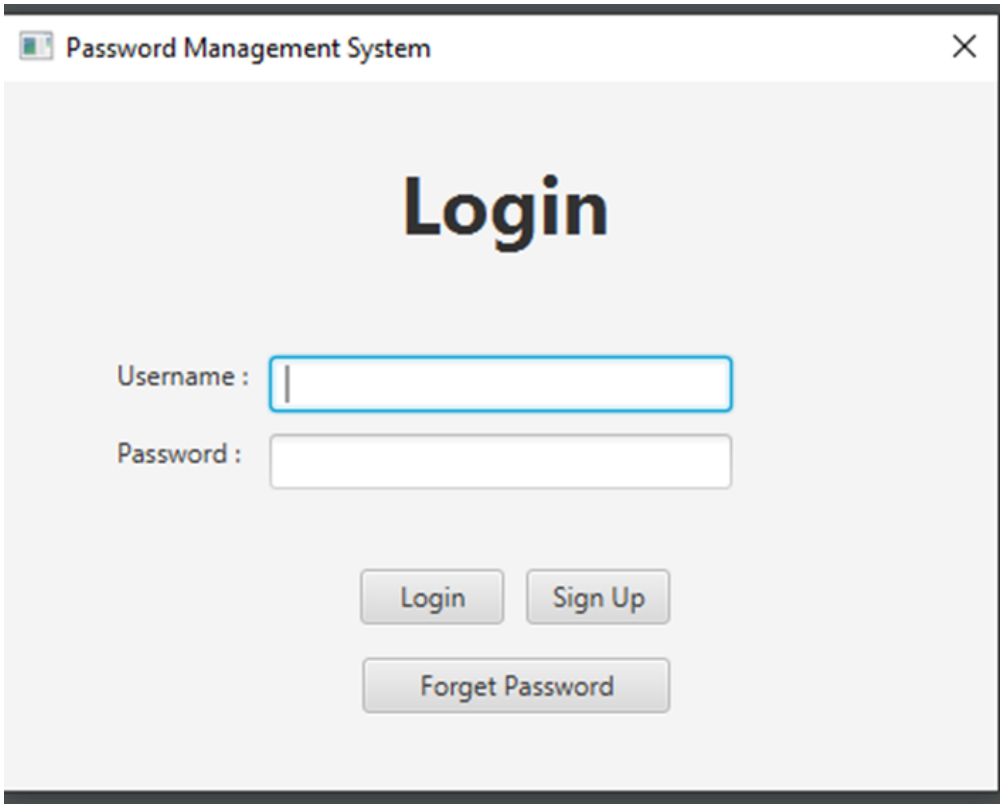


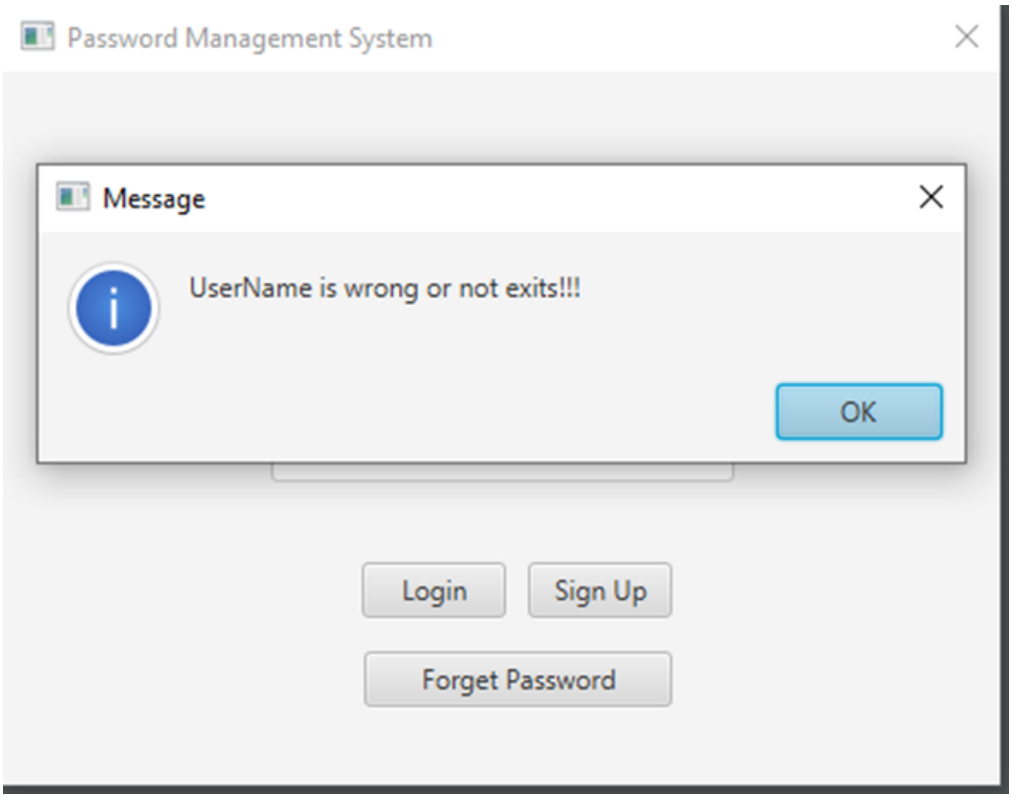
e. Sequence diagram for edit account information

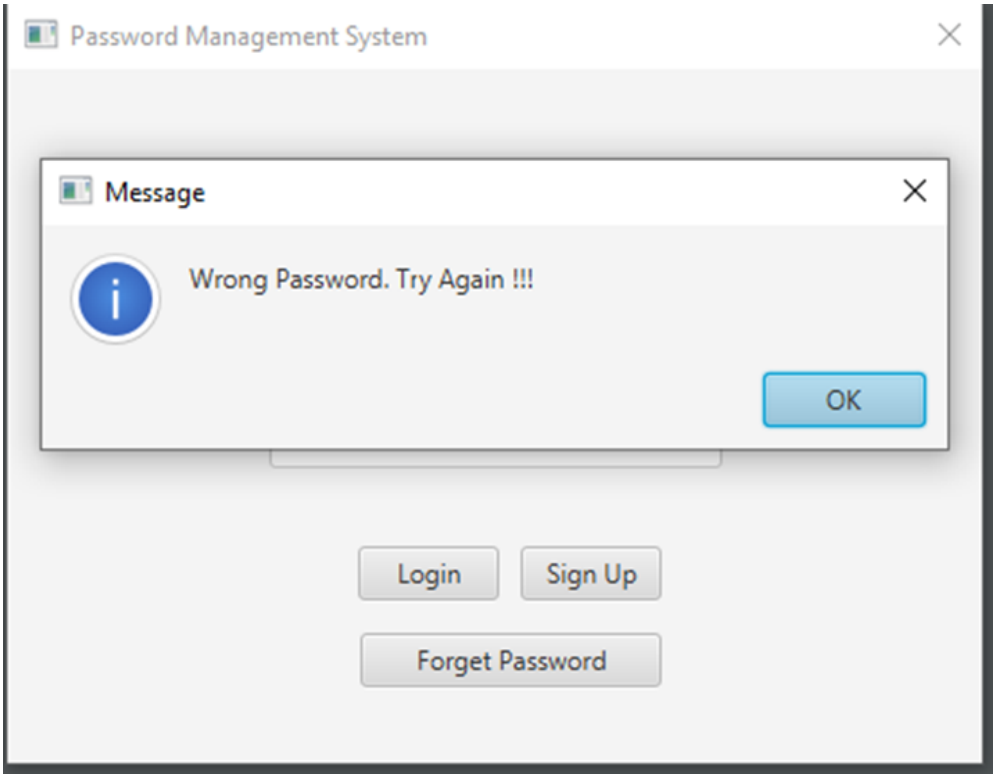


3.3 Mockups

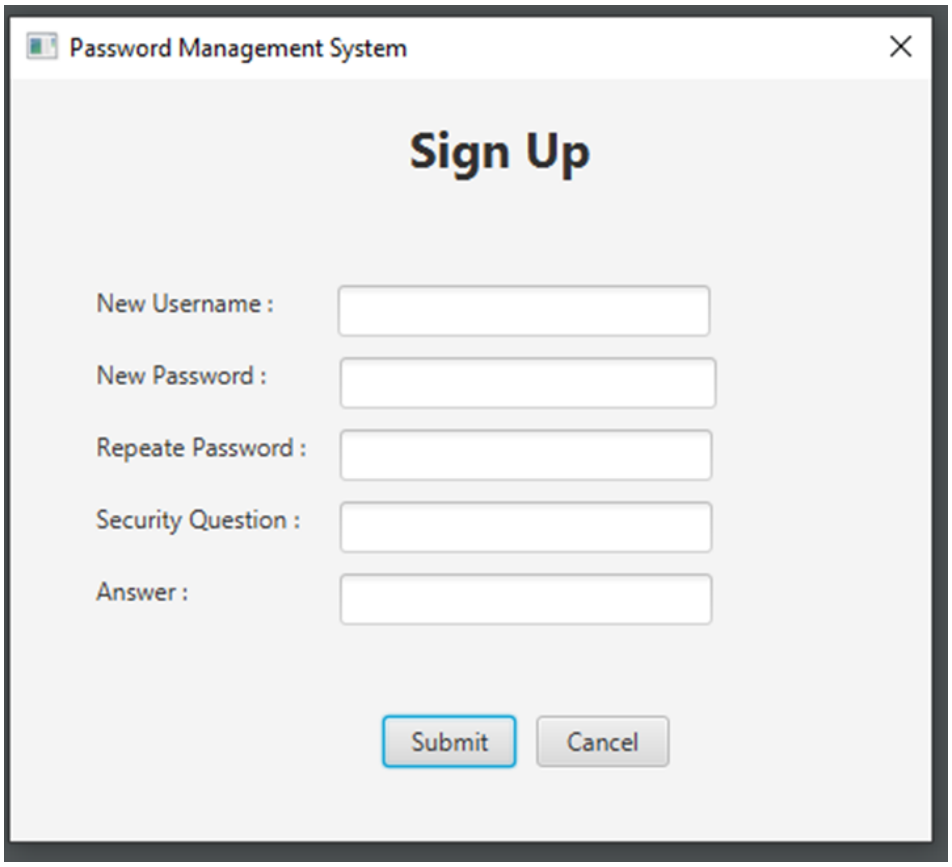
A. Login menu:

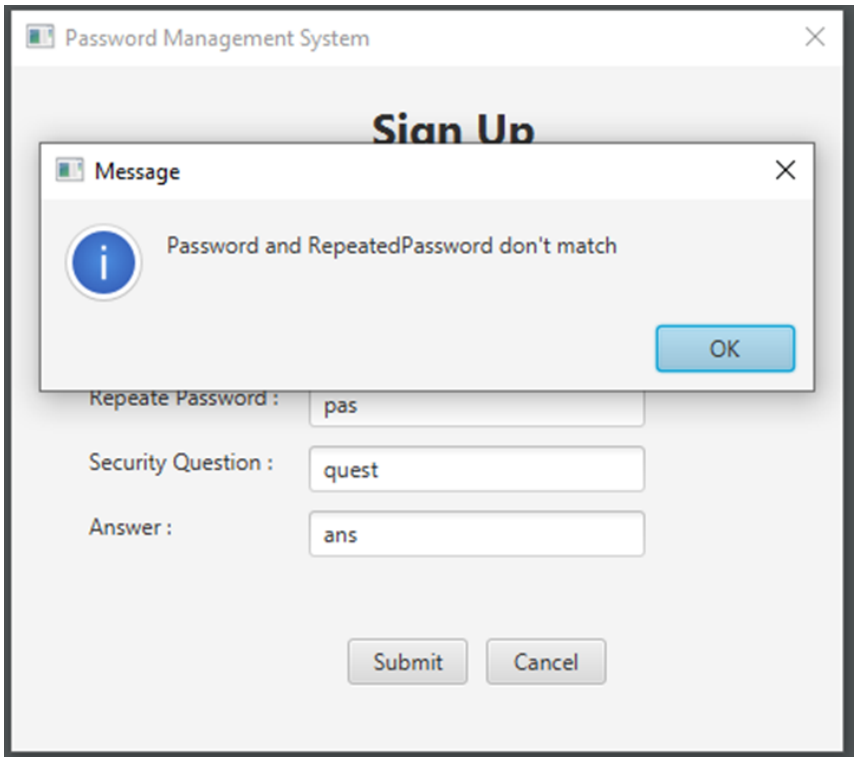


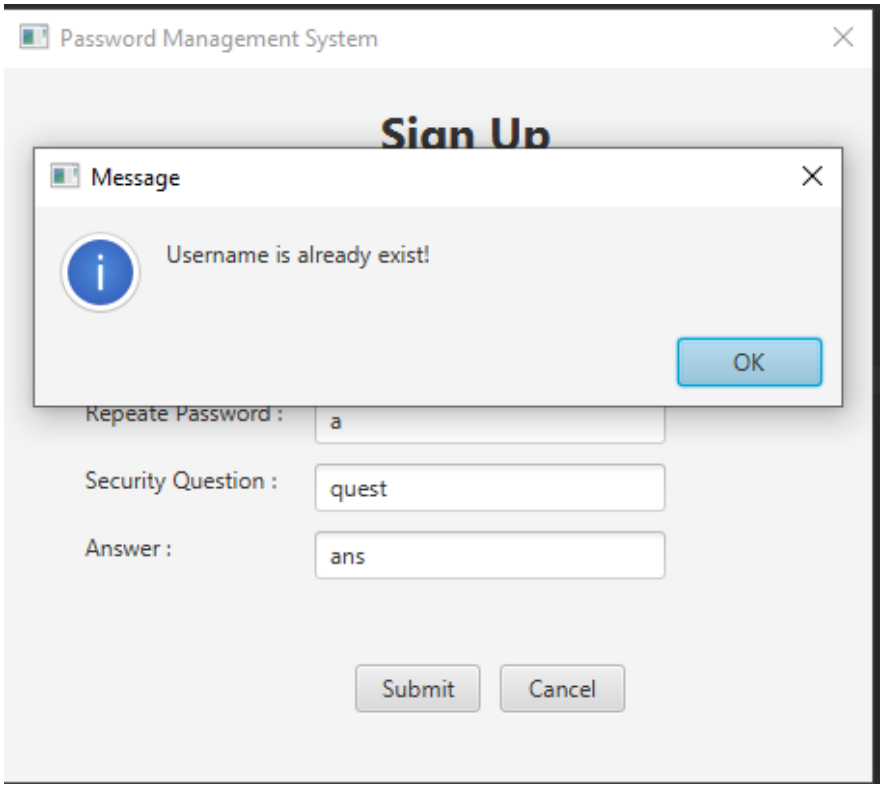


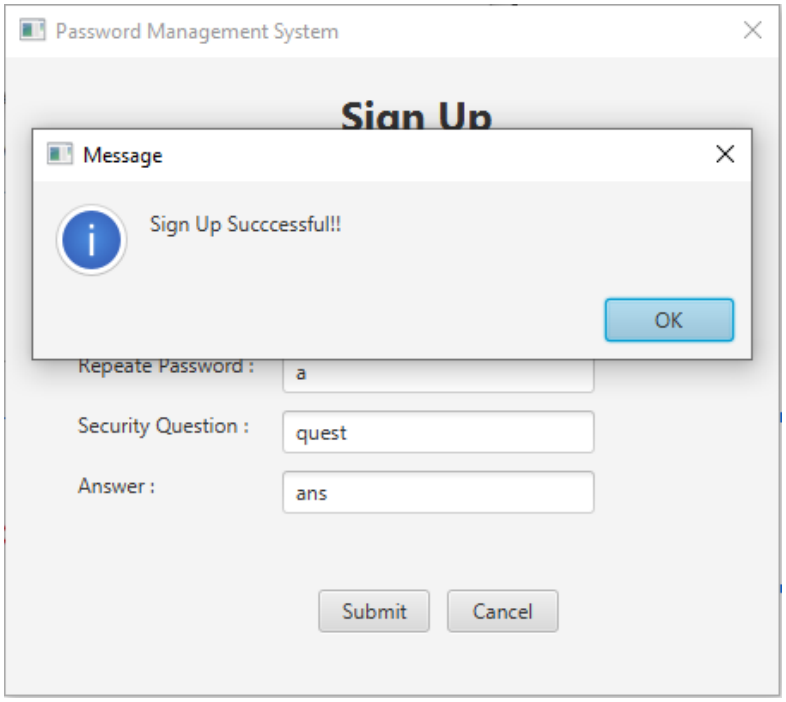


B. Sign Up menu

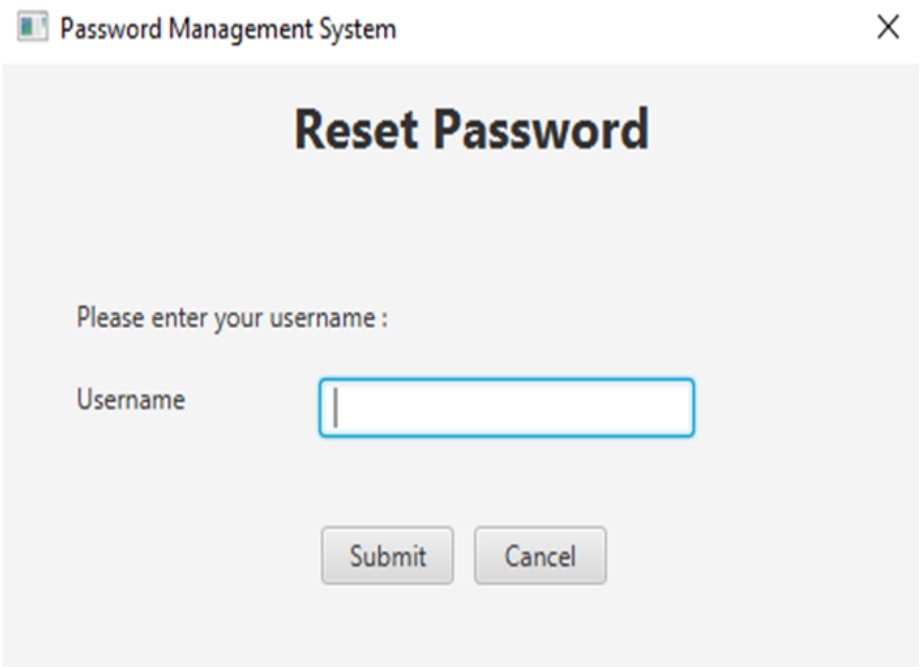

Password Management System
Sign Up
New Username :
New Password :
Repeate Password :
Security Question :
Answer :
Submit
Cancel

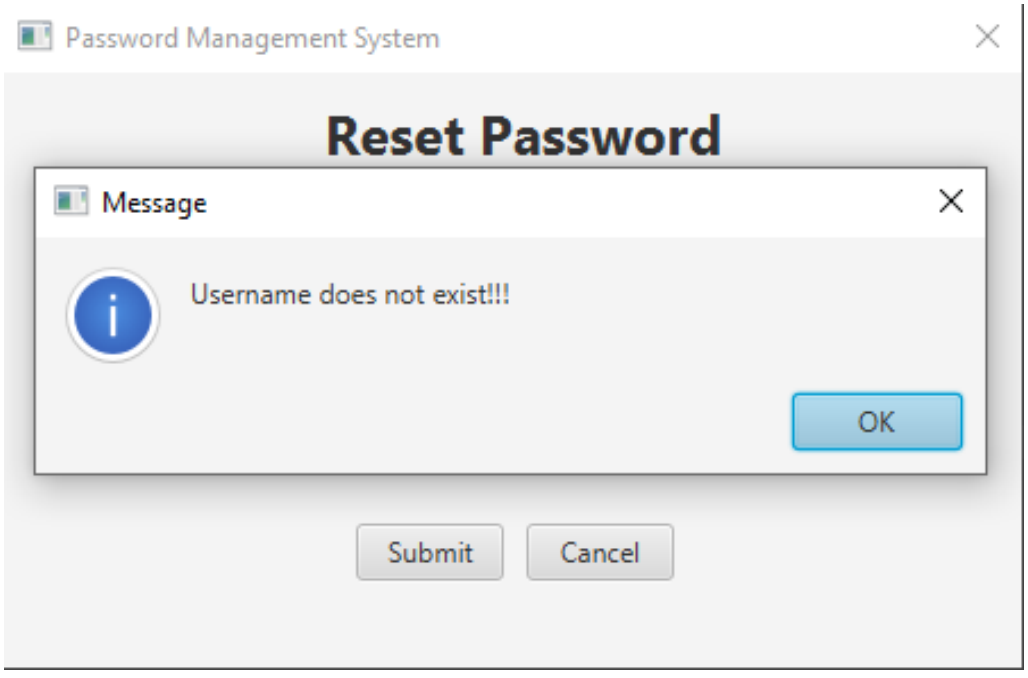

Password Management System
Sign Up
Message
Password and RepeatedPassword don't match
OK
Repeate Password :
pas
Security Question :
quest
Answer :
ans
Submit
Cancel

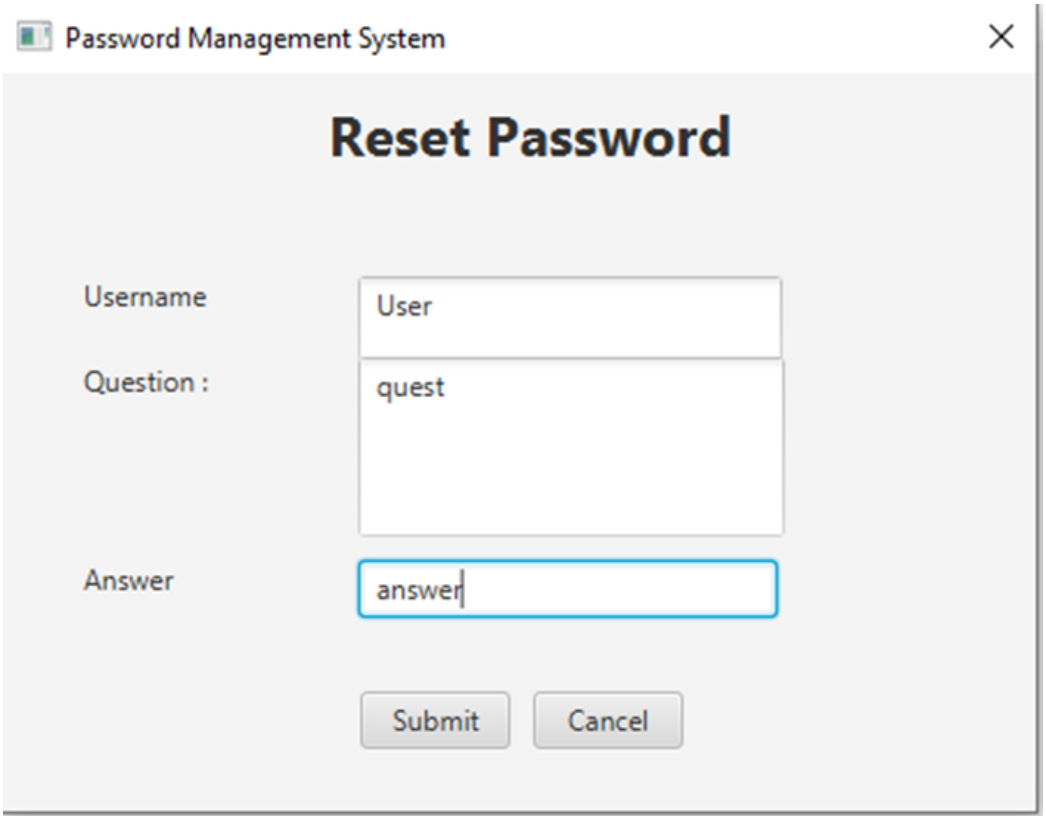


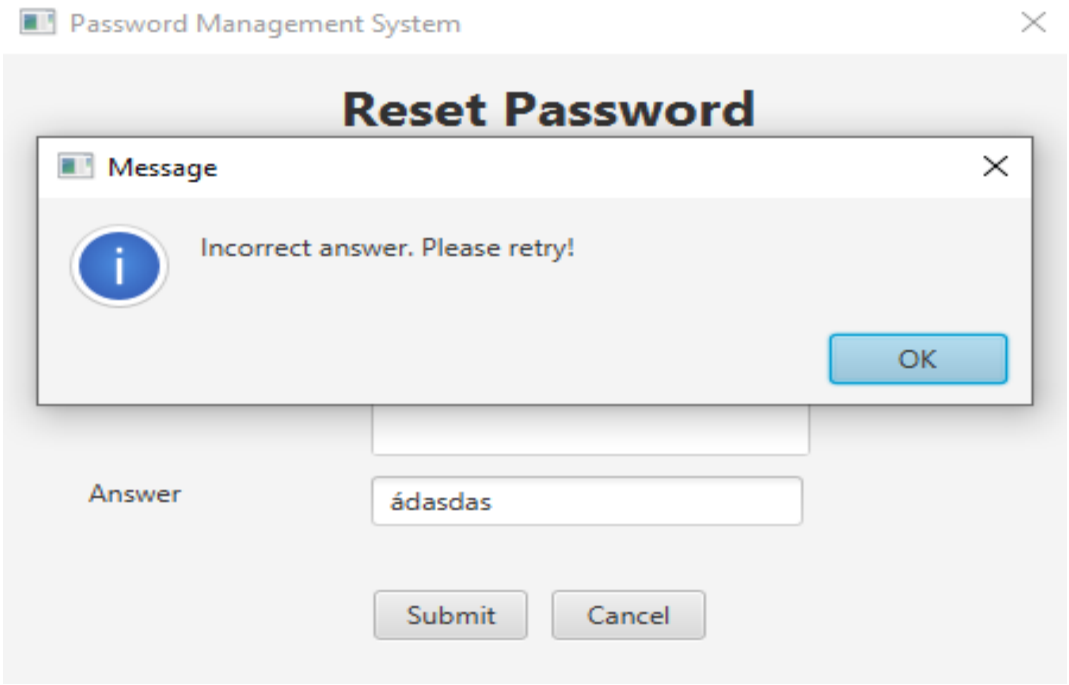


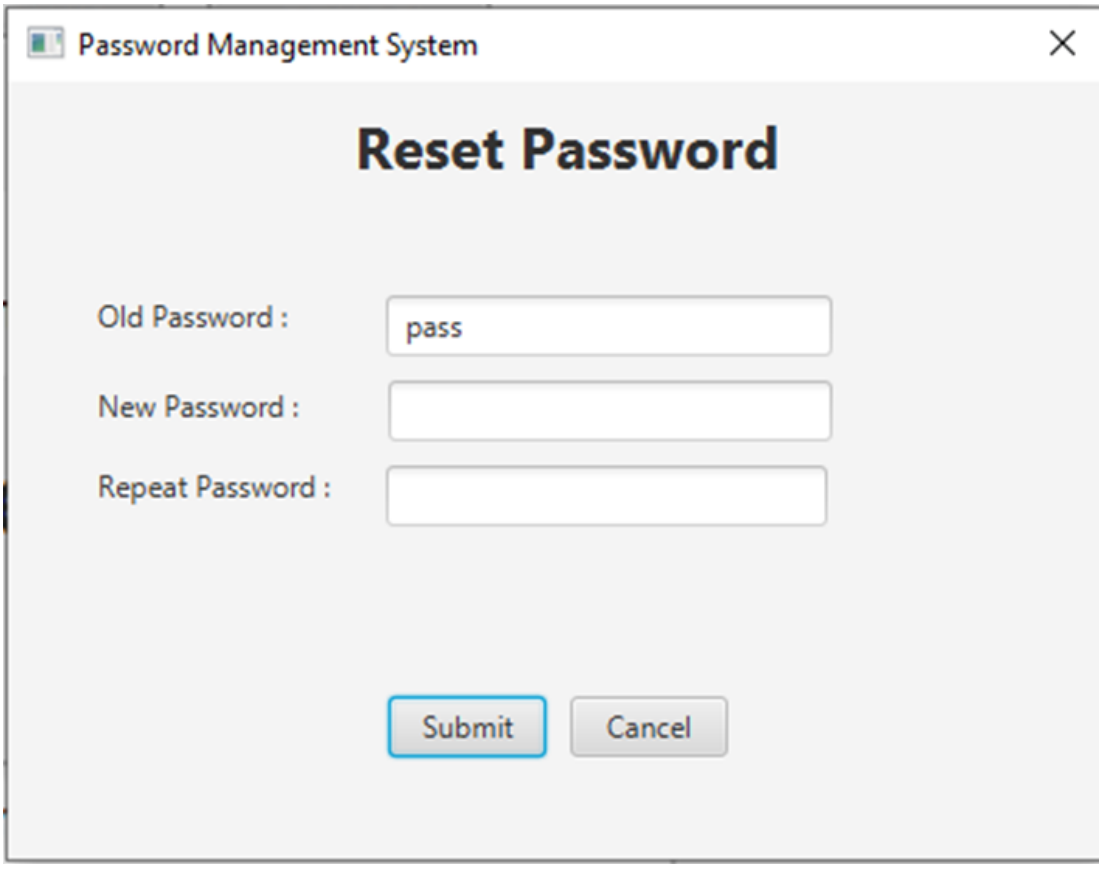
C. Reset Master Password

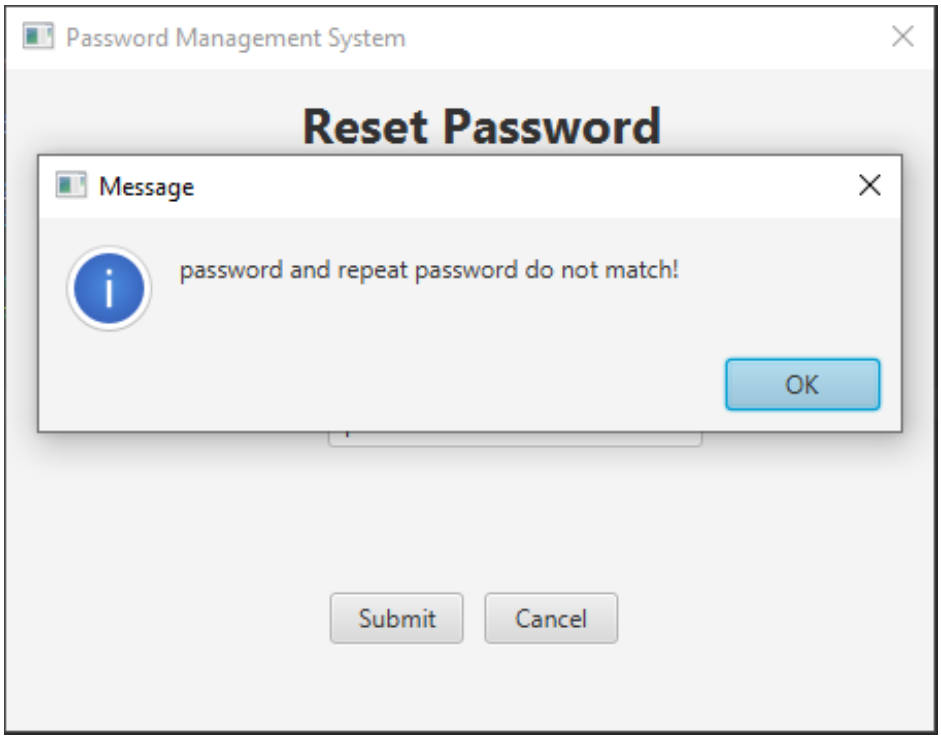

Password Management System
Reset Password
Please enter your username :
Username
Submit
Cancel


Password Management System
Reset Password
Message
Username does not exist!!!
OK
Submit
Cancel

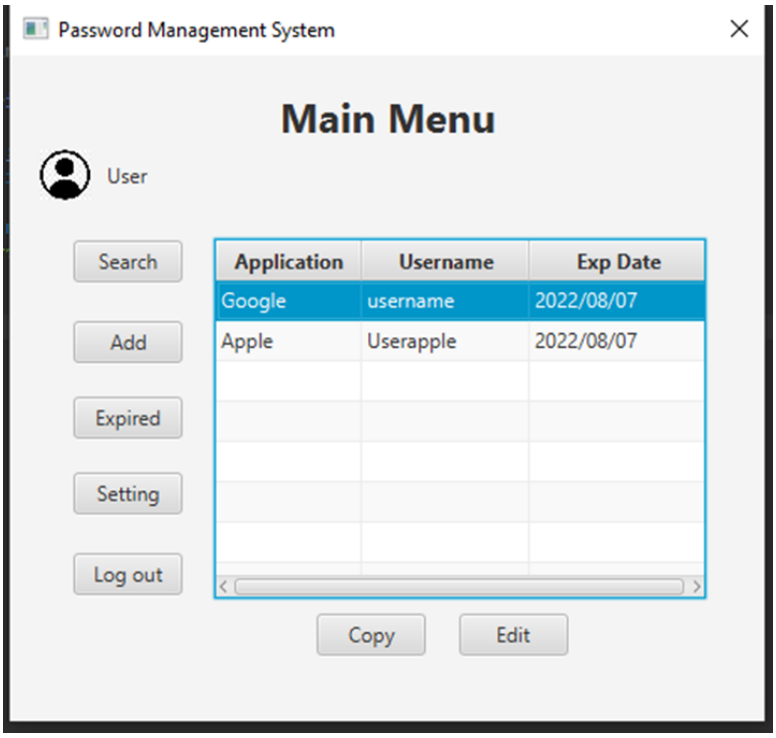

Password Management System
Reset Password
Username
User
Question :
quest
Answer
answer
Submit
Cancel


Password Management System
Reset Password
Message
Incorrect answer. Please retry!
OK
Answer
ádasdas
Submit
Cancel

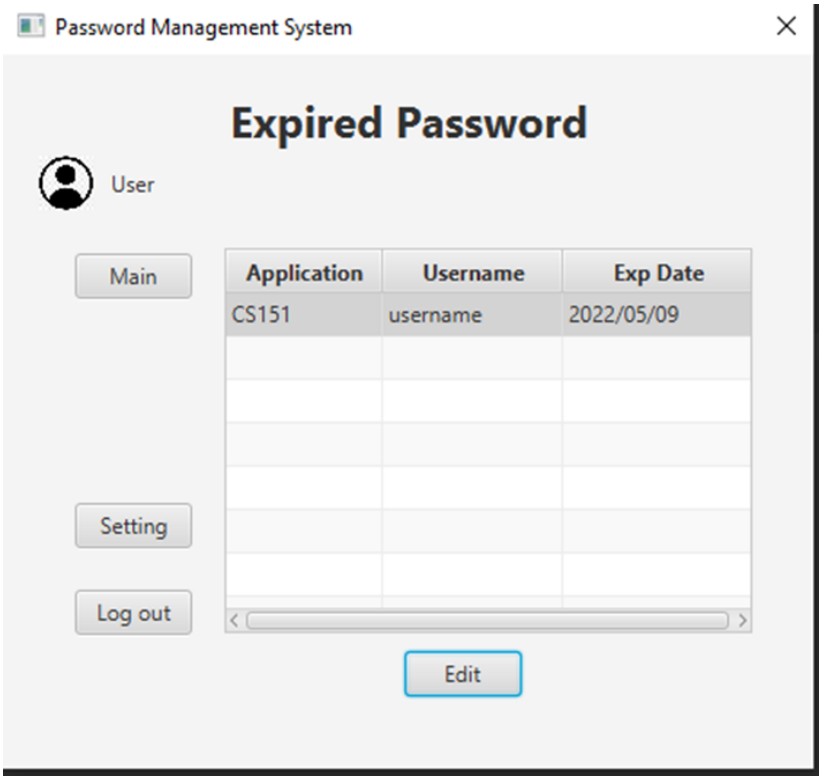

Password Management System
Reset Password
Old Password :
pass
New Password :
Repeat Password :
Submit
Cancel


Password Management System
Reset Password
Message
password and repeat password do not match!
OK
Submit
Cancel

D. Main menu:

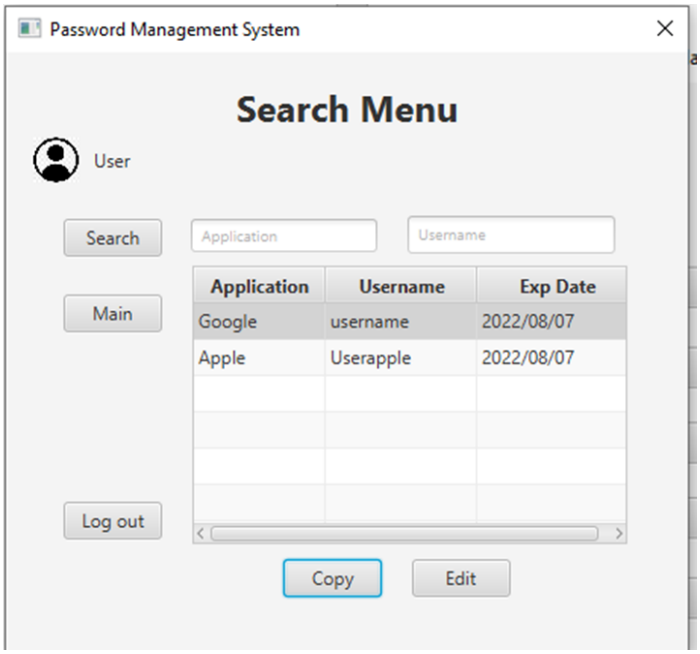


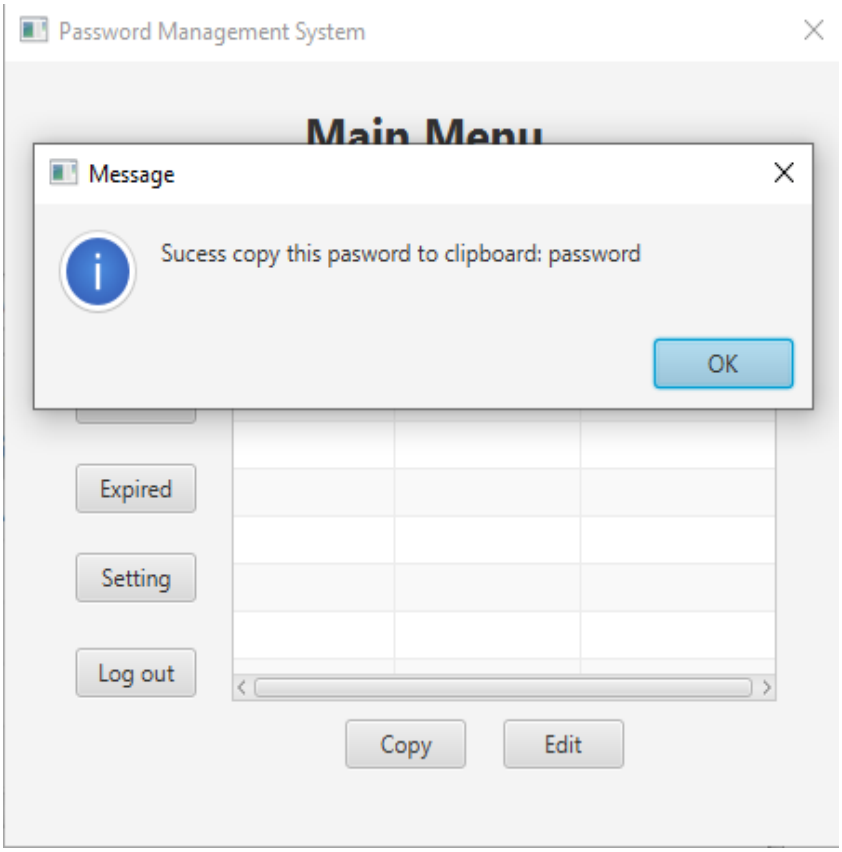
E. Expired Password menu



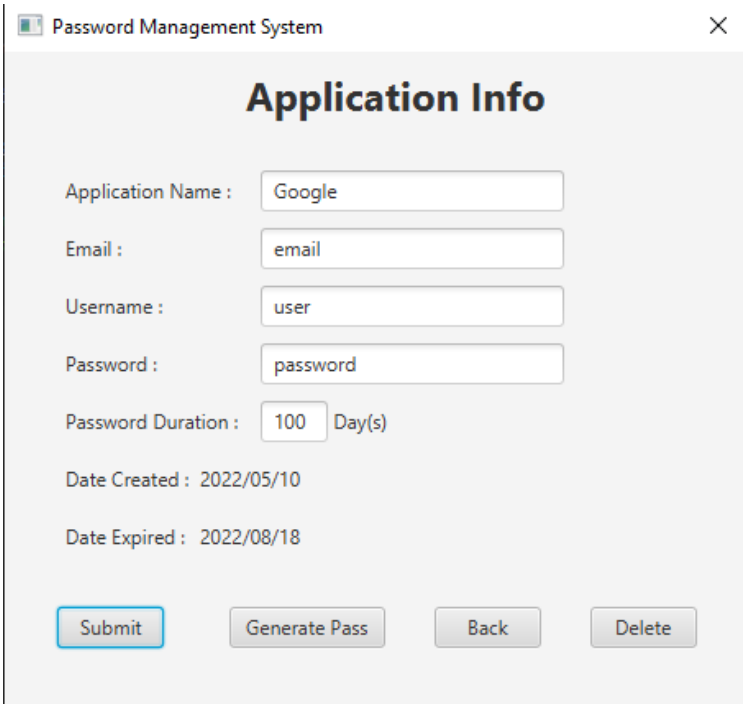
F. Search menu:

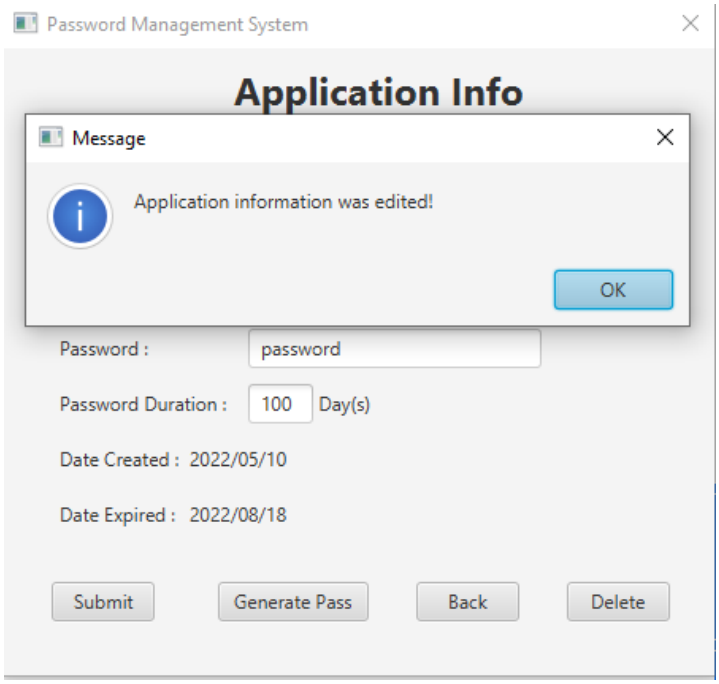
`

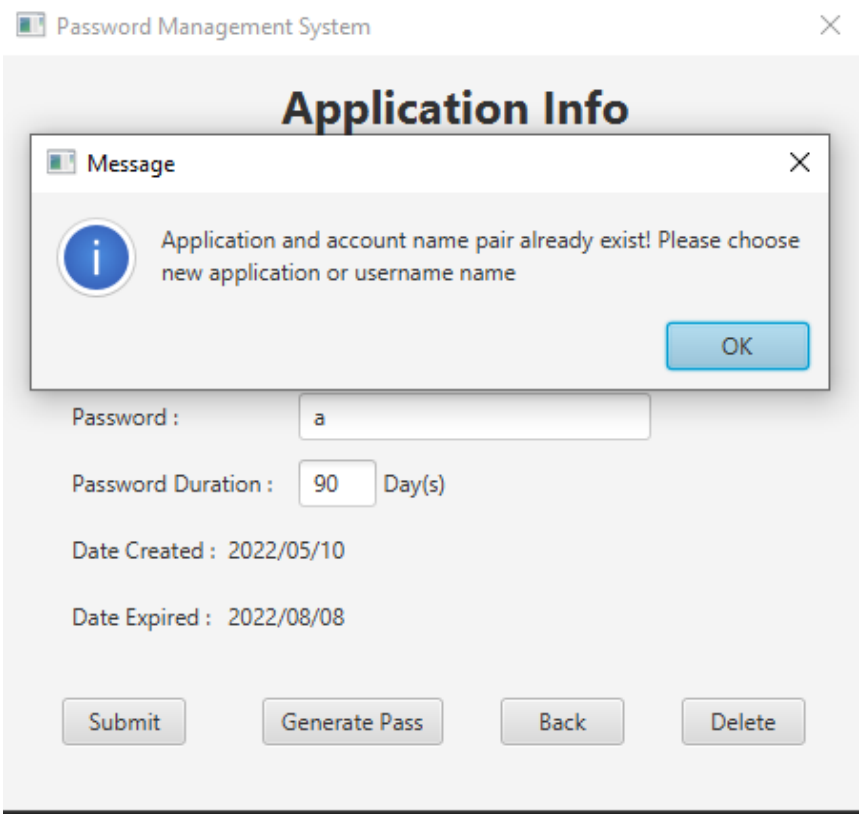


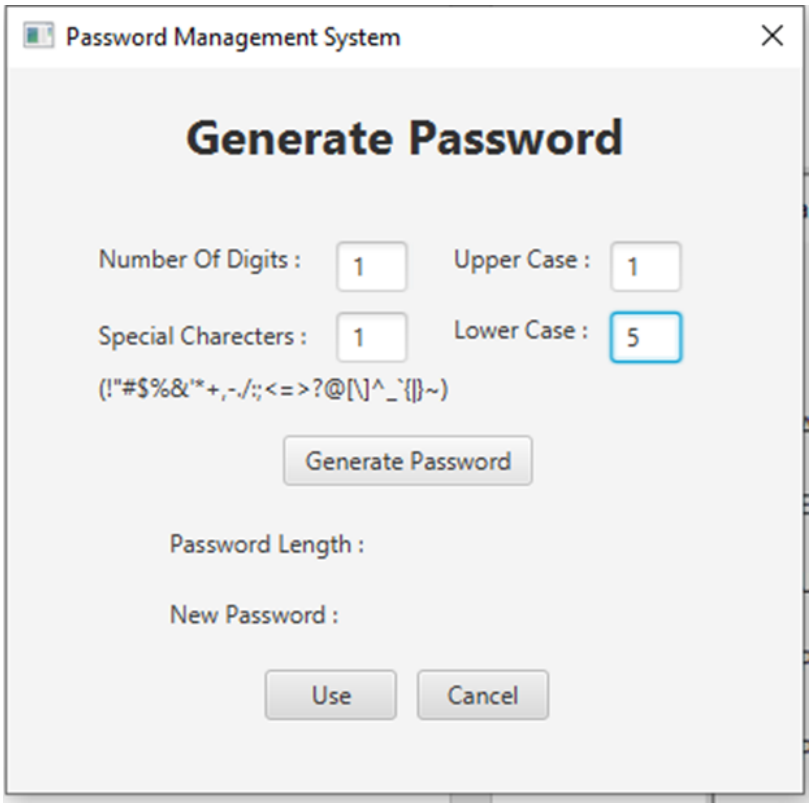


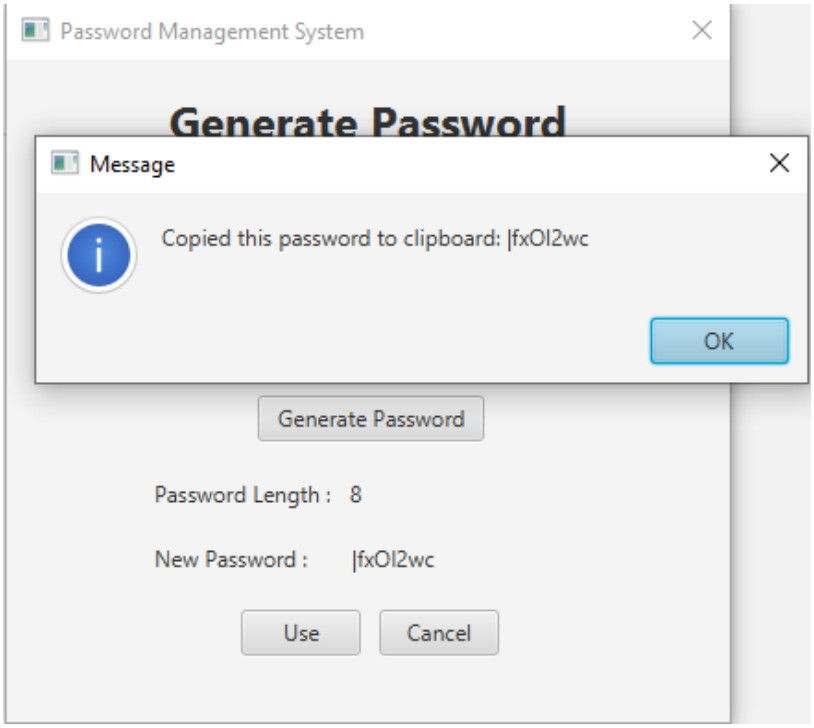
G. Application Editing menu:


Password Management System
Application Info
Application Name :
Google
Email :
email
Username :
user
Password :
password
Password Duration :
100
Day(s)
Date Created : 2022/05/10
Date Expired : 2022/08/18
Submit
Generate Pass
Back
Delete

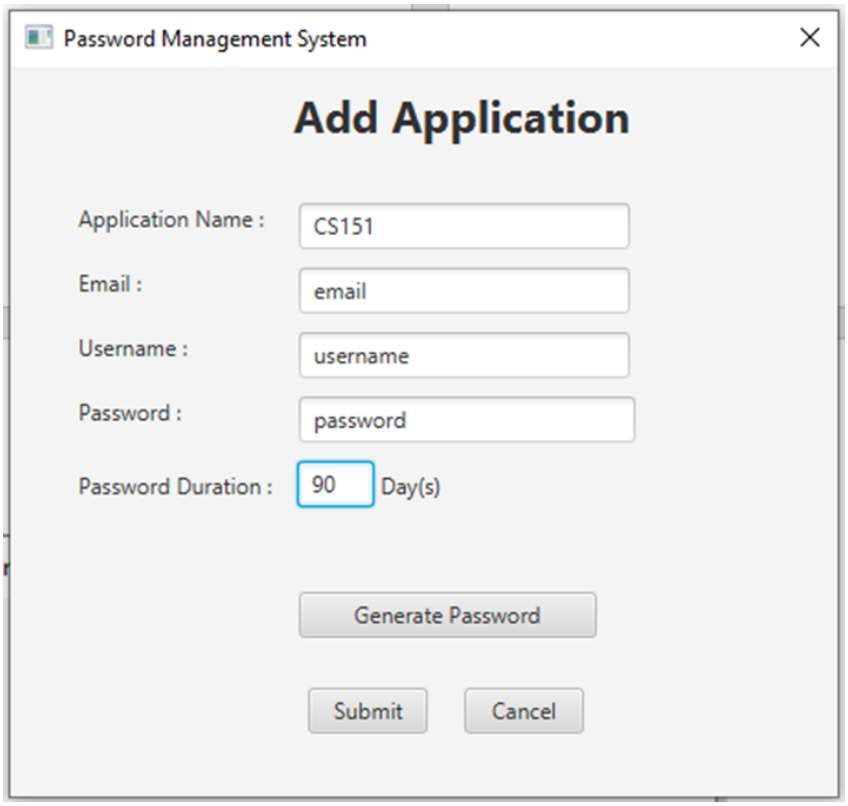

Password Management System
Application Info
Message
Application information was edited!
OK
Password :
password
Password Duration :
100
Day(s)
Date Created : 2022/05/10
Date Expired : 2022/08/18
Submit
Generate Pass
Back
Delete

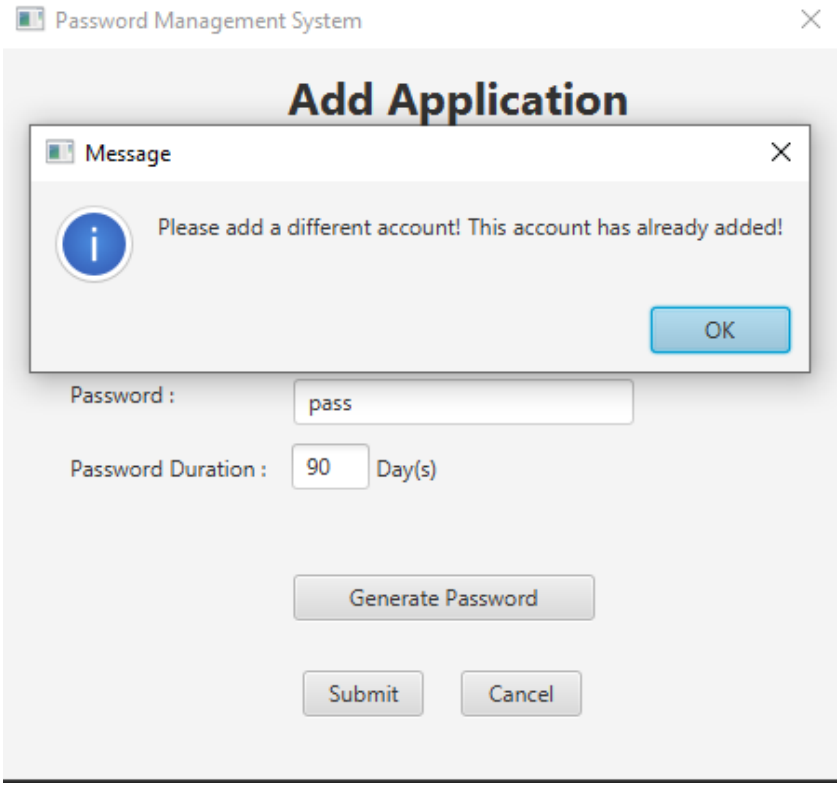

Password Management System
Application Info
Message
Application and account name pair already exist! Please choose new application or username name
OK
Password :
a
Password Duration :
90
Day(s)
Date Created : 2022/05/10
Date Expired : 2022/08/08
Submit
Generate Pass
Back
Delete

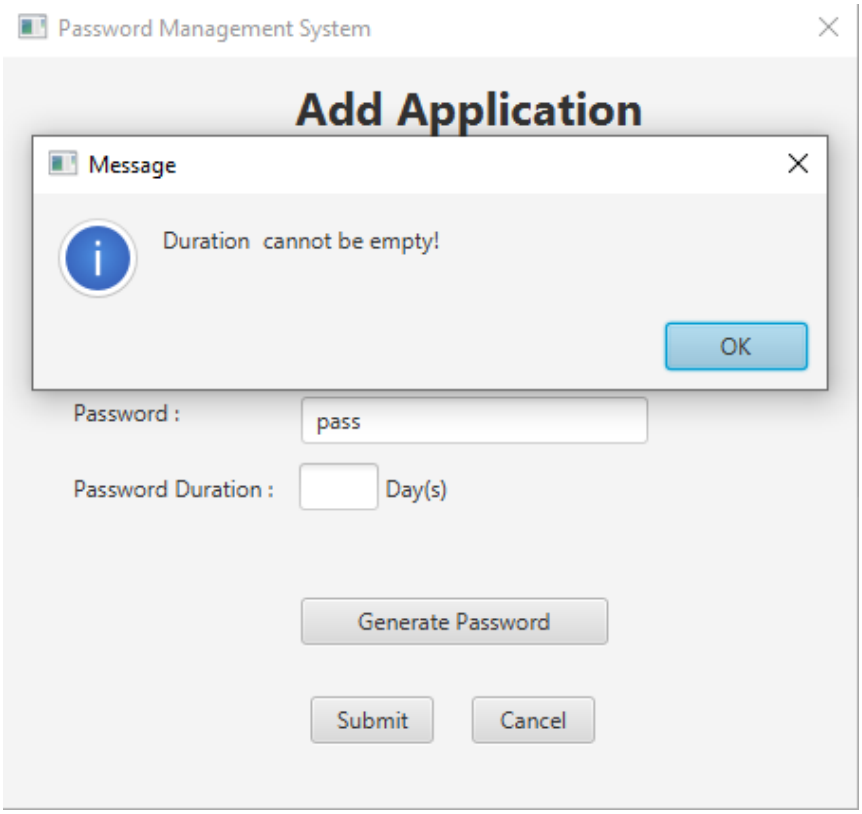

Password Management System
Generate Password
Number Of Digits :
1
Upper Case :
1
Special Charecters :
1
Lower Case :
5
(!"#$%&'*+,-./:;<=>?@[\]^_`{|}~)
Generate Password
Password Length :
New Password :
Use
Cancel

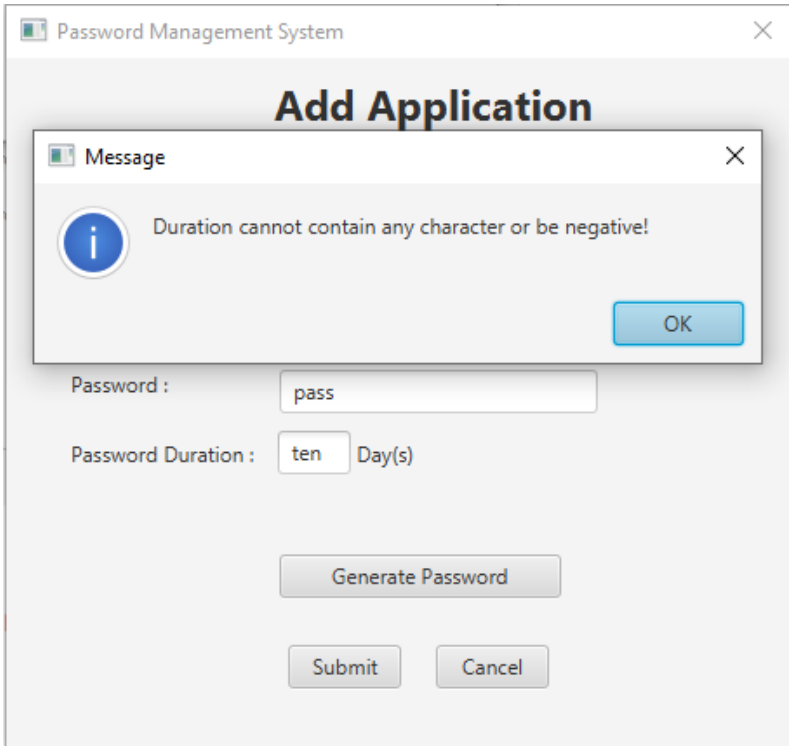


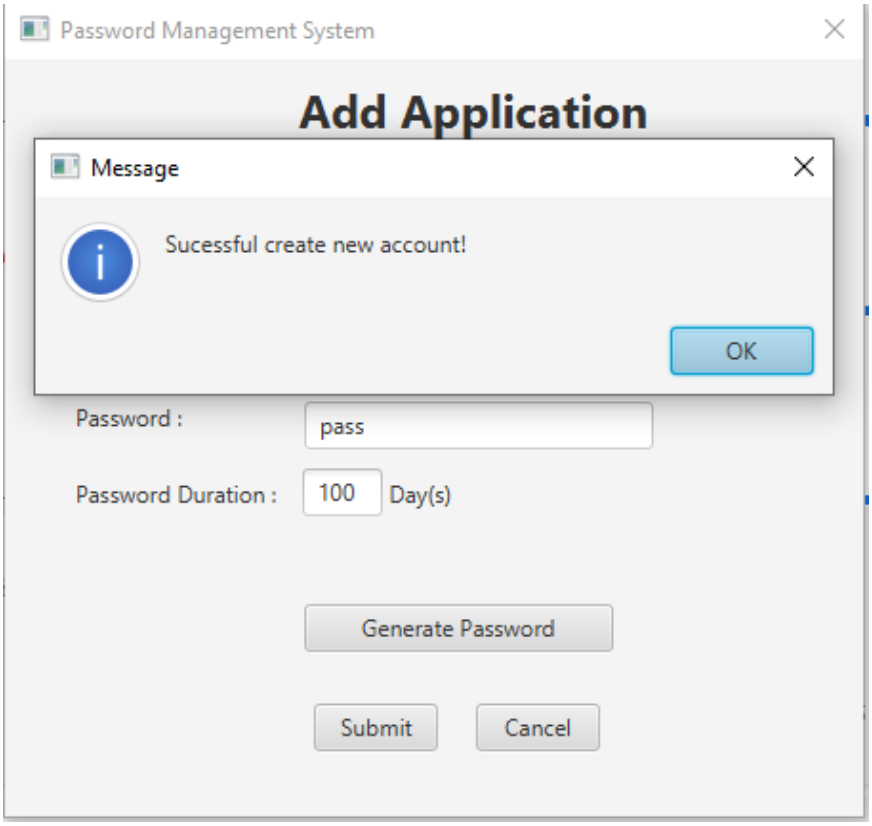
H. Add Application menu



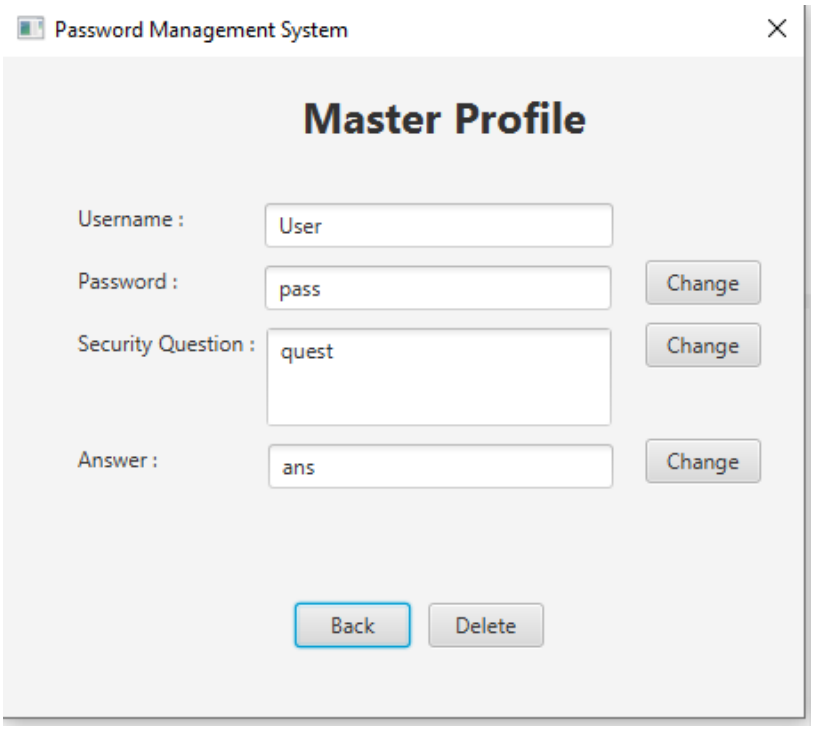

Password Management System
Add Application
Message
Please add a different account! This account has already added!
OK
Password :
pass
Password Duration :
90
Day(s)
Generate Password
Submit
Cancel

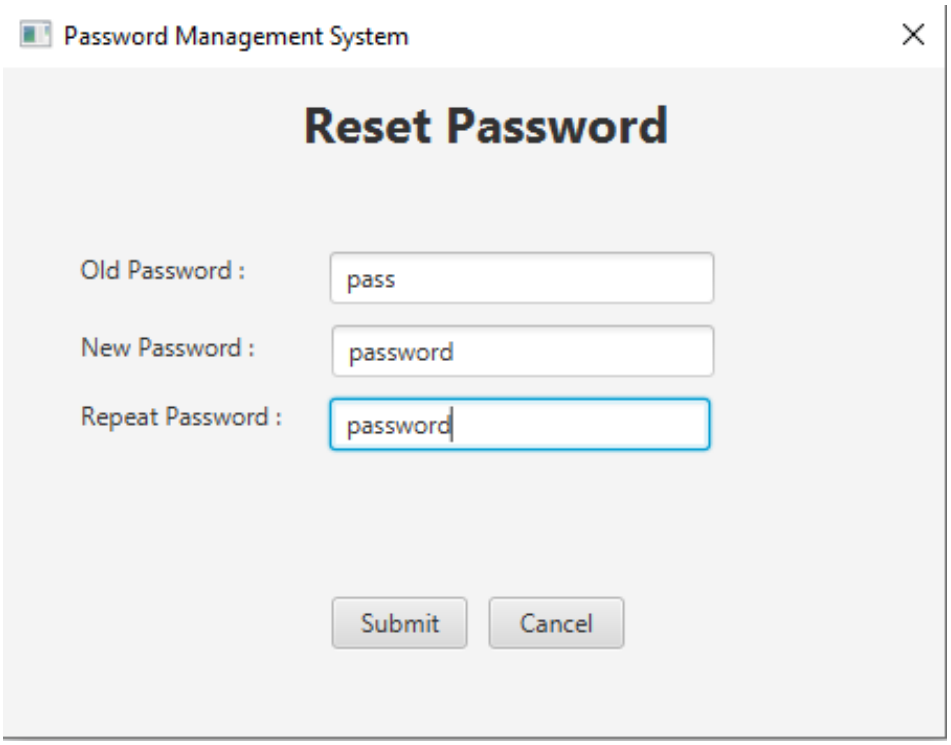

Password Management System
Add Application
Message
Duration cannot be empty!
OK
Password :
pass
Password Duration :
Day(s)
Generate Password
Submit
Cancel

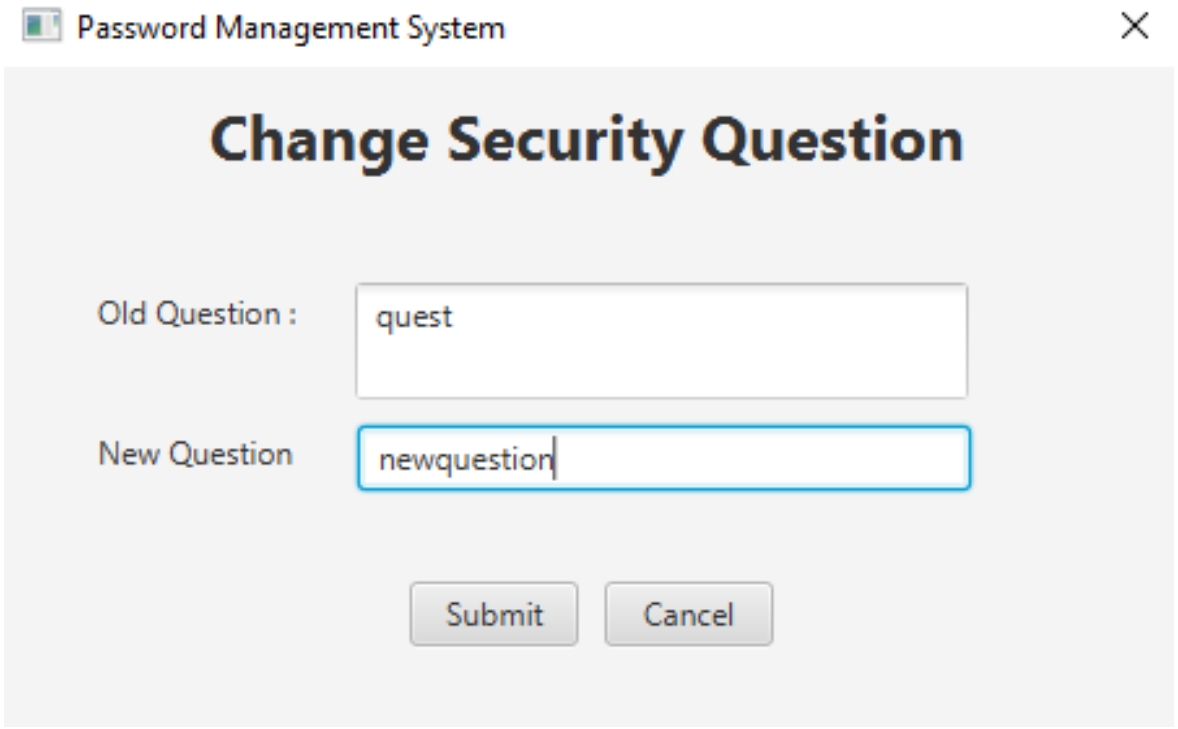


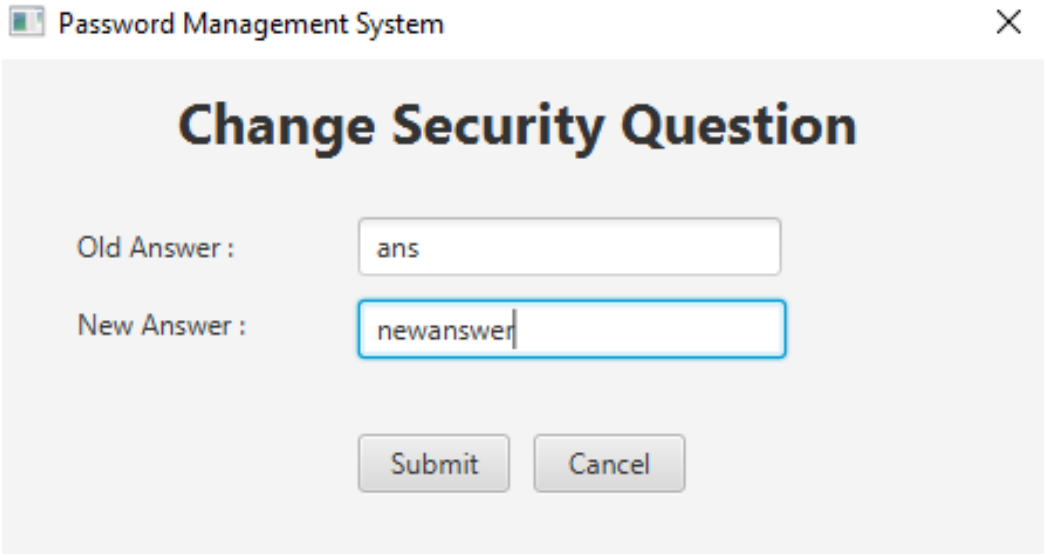


I. Setting menu:


Password Management System
Master Profile
Username :
User
Password :
pass
Change
Security Question :
quest
Change
Answer :
ans
Change
Back
Delete


Password Management System
Reset Password
Old Password :
pass
New Password :
password
Repeat Password :
password
Submit
Cancel


Password Management System
Change Security Question
Old Question :
quest
New Question
newquestion
Submit
Cancel


Password Management System
Change Security Question
Old Answer :
ans
New Answer :
newanswer
Submit
Cancel