

PASSWORD PROTECTION PROGRAM

TEAM 28 – TUPLES1

SUHAVI SANDHU | SHABANA DHAYANANTH | JOSEPH LU

INTRODUCTION - PURPOSE

PROBLEM

- INSECURE PASSWORD CHOICES
- POOR MEMORY
- DON'T CHANGE PASSWORDS

SOLUTION

- ENCRYPTED PASSWORD MANAGER
- SINGLE MASTER PASSWORD

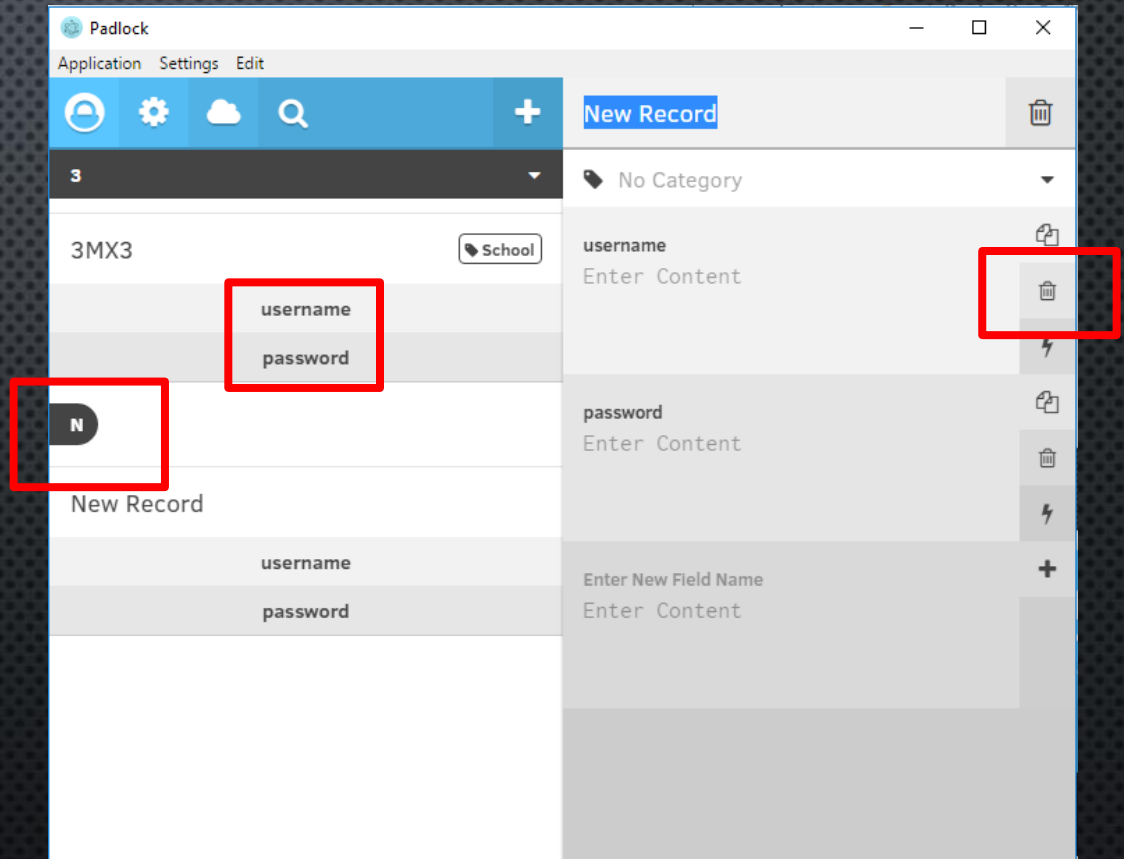
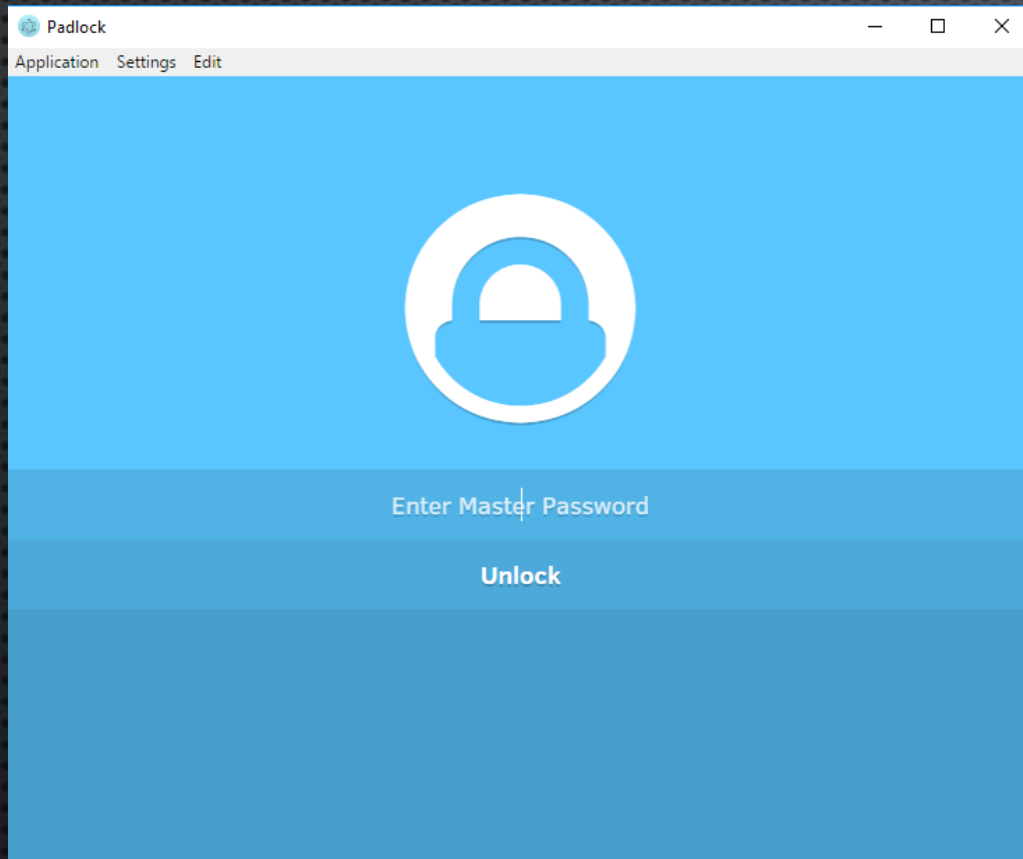


INTRODUCTION - SCOPE

- OFFLINE, DESKTOP IMPLEMENTATION
- ONE MASTER ACCOUNT
- ONE FACTOR AUTHENTICATION
- ALL IMPLEMENTATION USING PYTHON LIBRARIES
- PYTHON CRYPTOGRAPHY LIBRARY




PADLOCK



DEMONSTRATION

Password Protection Program



Welcome to the Password Protection Program

Create a master password to start using the application. Must have lowercase, uppercase, numbers and at least 8 characters

Submit

Password Protection Program

Enter relevant information ?


Name


Type

Username ⚡

Password ⚡

Submit

Master 



Welcome to the Password Protection Program

- 1) Add entries on the top-left hand corner!
- 2) Generate a username/password using the lightning icon.
- 3) View entries by clicking the buttons with an eyeball.
- 4) Edit entry by viewing and updating on this side of the screen.

NOTE: If you are still having trouble, read the user manual by clicking below.

User Manual

IMPLEMENTATION

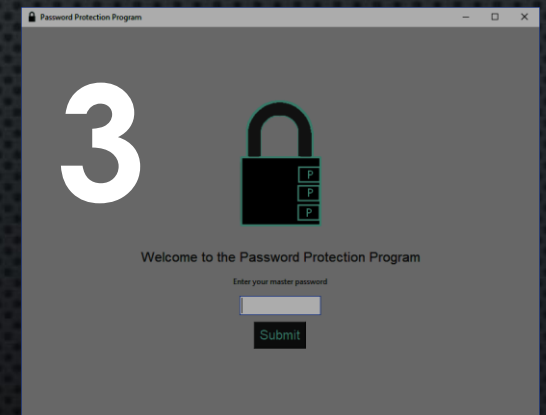
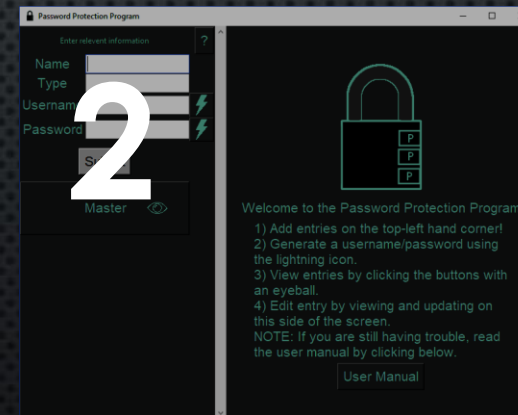
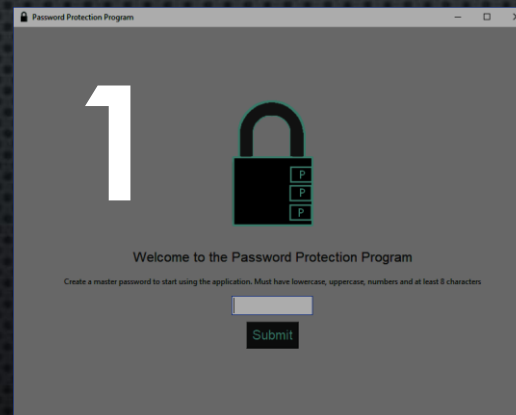
- ENCRYPTION – CRYPTOGRAPHY
 - KEY USING KEY STRETCHING (PBKDF2HMAC)
 - FERNET LIBRARY (AES)
- DATABASE – SQLITE, PEEWEE
 - INSERT, GETS (4), DELETE, UPDATE
- GUI – TKINTER
 - EASY TO USE BECAUSE HIGHLY DOCUMENTED
 - HIGH FAN IN

NON-FUNCTIONAL REQUIREMENTS

- USABILITY
 - INTUITIVE
 - INSTRUCTION/ USER MANUAL
- APPEARANCE
 - MINIMALISTIC (NOT MANY SCREENS)
 - SEPARATE SECTIONS
- SECURITY
 - INACTIVITY TIMEOUT
- ROBUST
- MAINTAINABLE
 - MODULAR

NOTE: If you are still having trouble, read the user manual by clicking below.

User Manual



TESTING

- GUI
 - AUTOMATED AND MANUAL TESTING
- DATABASE
 - AUTOMATED TESTING
- ENCRYPTION AND RANDOM PASSWORD GENERATION
 - AUTOMATED TESTING
 - CANNOT TEST SECURITY OR RANDOMNESS

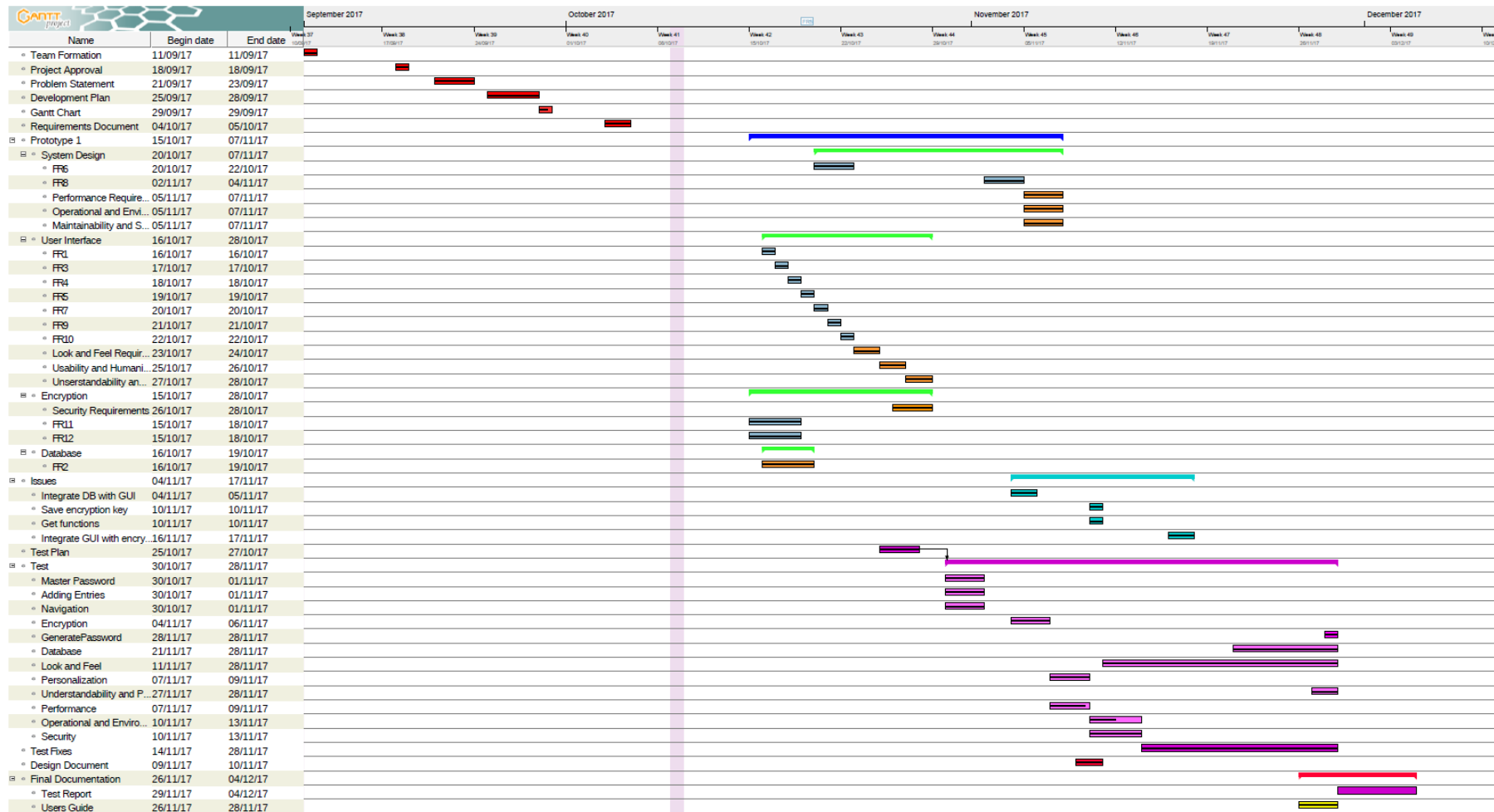
PROJECT SCHEDULE

PasswordProtectionProgram

28-Nov-2017

Gantt Chart

6



FUTURE PLANS



- “FORGOT MASTER PASSWORD”
 - POSSIBLY 2 FACTOR AUTHENTICATION
- SECURITY REQUIREMENTS FOR CHANGING MASTER PASSWORD
- SORTING BY ACCOUNT TYPES
- SEARCHING

Name	Master			
Type	Master			
Username	<input type="text"/>			Update
Password	2 <input type="text"/>			Update

Changes made!

THANK YOU FOR LISTENING 😊

ANY QUESTIONS?