

PASSWORD PROTECTION PROGRAM

TEAM 28 – TUPLES1

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INTRODUCTION - PURPOSE

PROBLEM

- INSECURE PASSWORD CHOICES
- POOR MEMORY

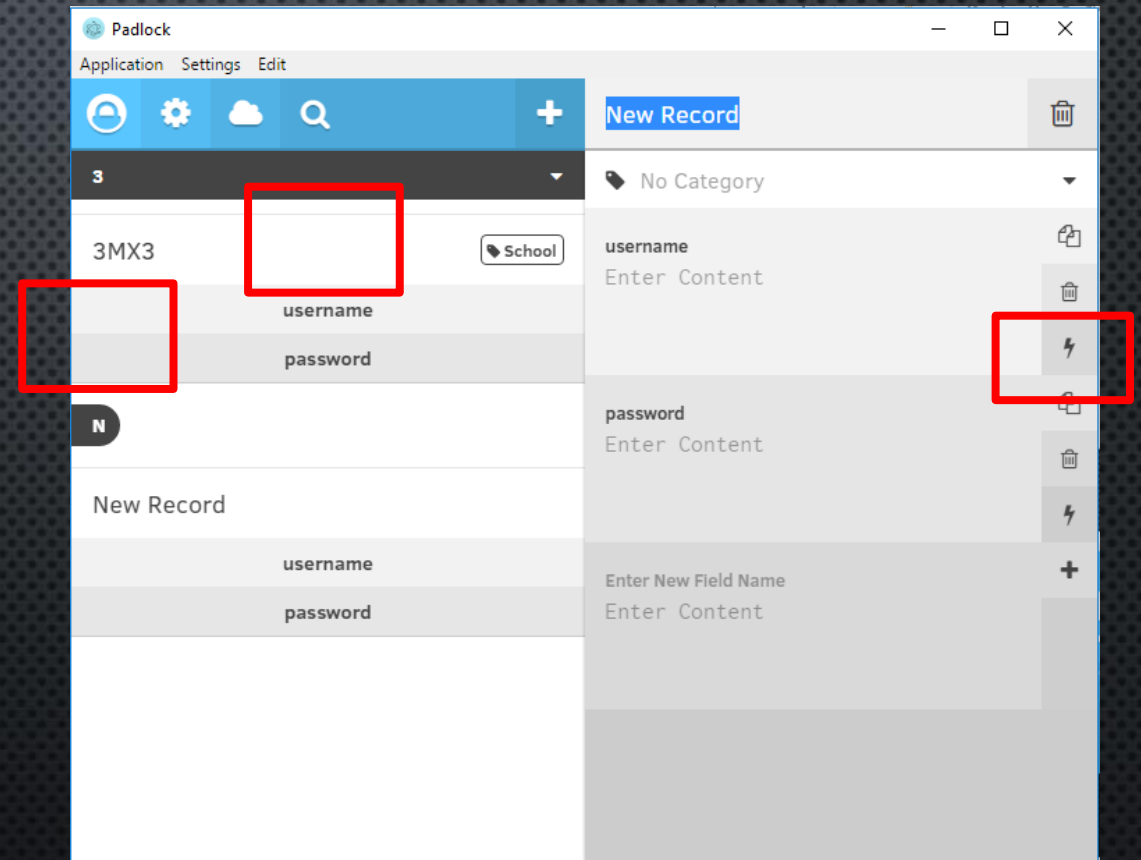
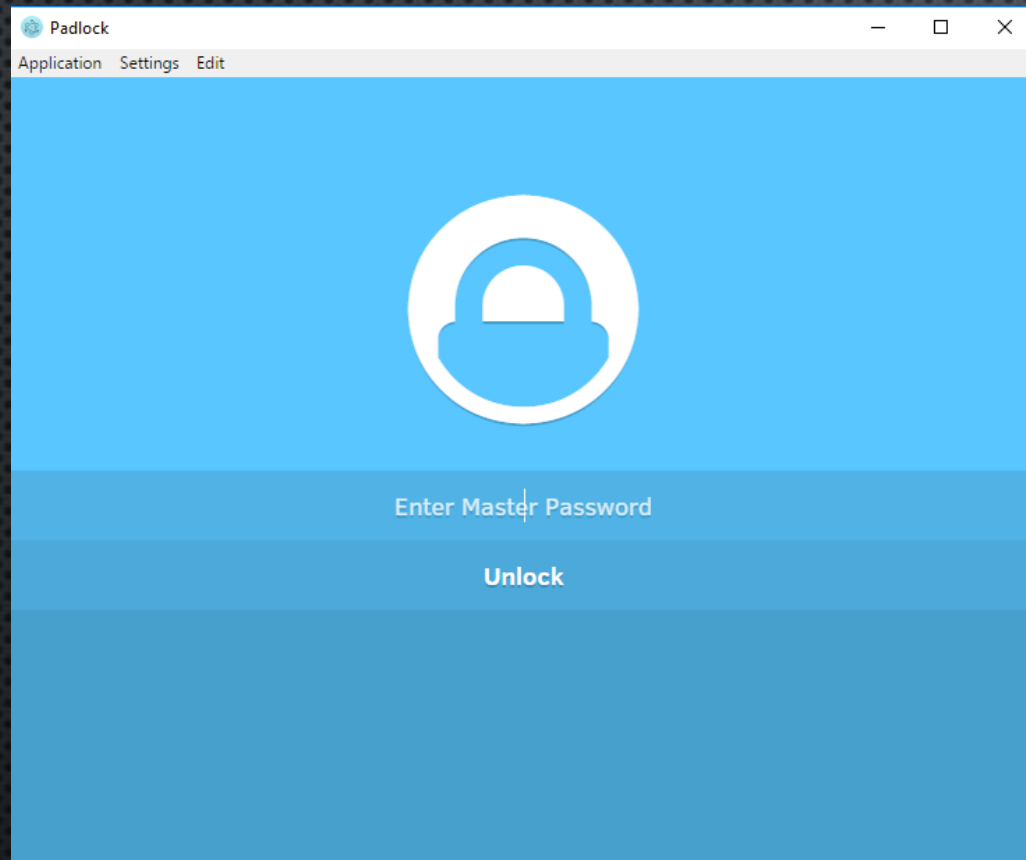
SOLUTION

- ENCRYPTED PASSWORD MANAGER
- SINGLE MASTER PASSWORD
- USER-FRIENDLY INTERFACE
- INTUITIVE

INTRODUCTION - SCOPE


- OFFLINE, DESKTOP IMPLEMENTATION
- PYTHON CRYPTOGRAPHY LIBRARY
- ONE FACTOR AUTHENTICATION

PADLOCK



DEMONSTRATION

Password Protection Program



Welcome to the Password Protection Program

Enter your master password

Submit

Password Protection Program

Enter relevant information ?

Name

Type


Username ⚡

Password ⚡

Submit

Master 👁

3MX3 👁 🗑



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

- GUI – TKINTER
 - SU ADD STUFF
- DATABASE – PEEWEE
 - JO ADD STUFF
- ENCRYPTION – CRYPTOGRAPHY
 - KEY USING KEY STRETCHING, KEY DERIVATION FUNCTION PBKDF2HMAC
 - FERNET LIBRARY (AES)

NON-FUNCTIONAL REQUIREMENTS

- USABILITY
 - INTUITIVE
 - INSTRUCTION/ USER MANUAL
- APPEARANCE
 - MINIMALISTIC (NOT MANY SCREENS)
 - SEPARATE SECTIONS

QUALITIES

- USER-FRIENDLY
 - NO PRIOR INSTRUCTION NECESSARY FOR USE
- ROBUST
- MAINTAINABLE
 - MODULAR
- SECURE
 - CRYPTOGRAPHY LIBRARY

TESTING

- GUI
 - AUTOMATED AND MANUAL TESTING
- DATABASE
 - AUTOMATED TESTING
- ENCRYPTION AND RANDOM PASSWORD GENERATION
 - AUTOMATED TESTING
 - CANNOT TEST SECURITY OF CRYPTOGRAPHY LIBRARY

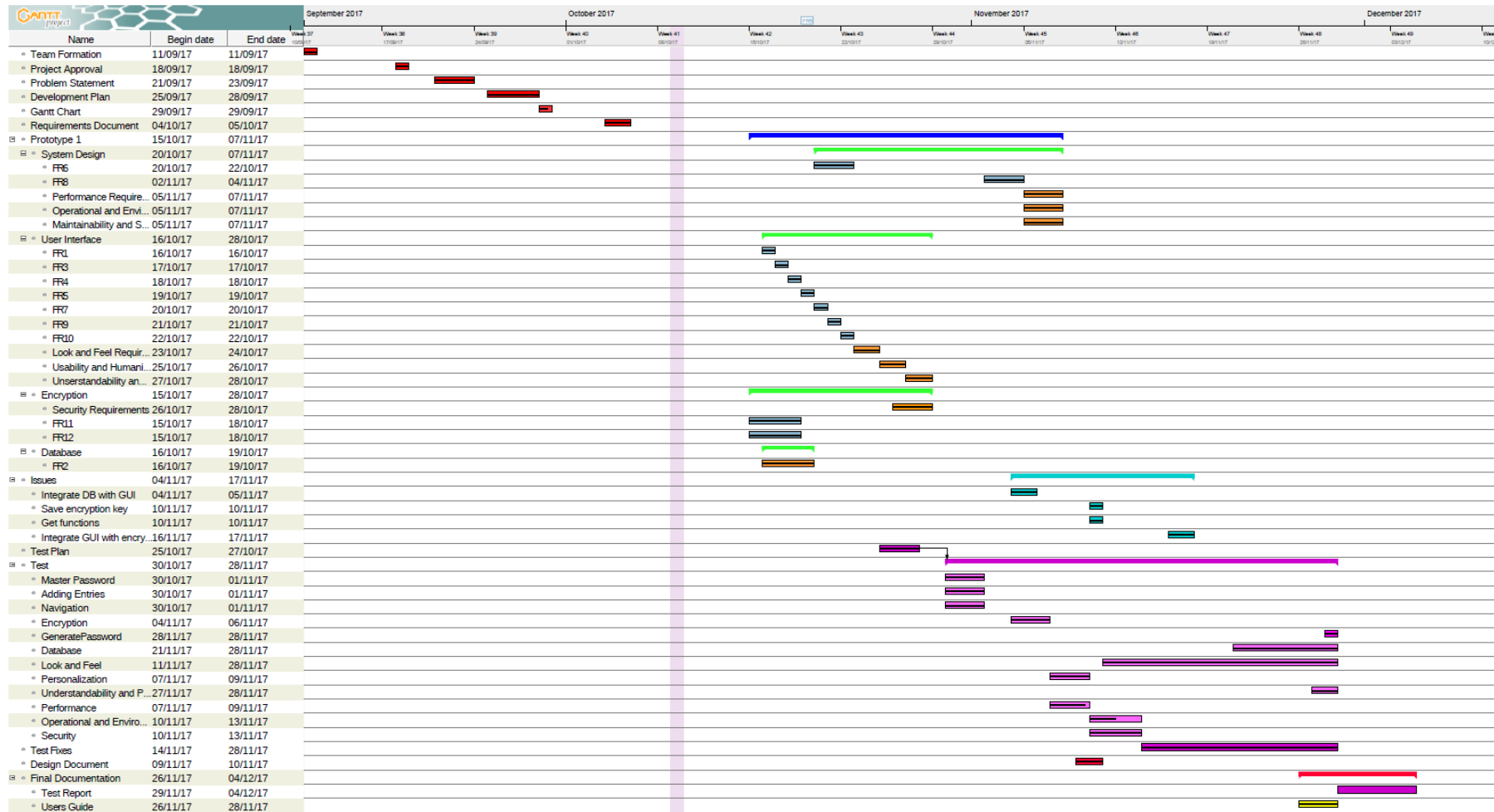
PROJECT SCHEDULE

PasswordProtectionProgram

28-Nov-2017

Gantt Chart

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FUTURE PLANS

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