SDLC

(Software Development Life-Cycle)

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SDLC

(The software development lifecycle (SDLC) is the cost-effective and time-efficient process that development teams use to design and build high-quality software. The goal of SDLC is to minimize project risks through forward planning so that software meets customer expectations during production and beyond.)

USER REQUIREMENT

(Recognition of the end-user’s need)

A password manager is a computer program that allows users to store and manage their passwords for local applications or online services such as web applications, online shops or social media. Password managers can generate passwords and fill online forms.

The security structure of any organization or individual requires password management. IT professionals and many individuals now face a problem in managing passwords because more platforms, applications, and services demand authentication.

Companies should establish access rights division inside their password management system to ensure that sensitive data is kept secure. In order to do this, users must be divided into several groups according to their roles and responsibilities, and then the proper access permissions must be given to each group specifically.

A password management system also ensures that the password entered in stored in a format such that it cannot be stolen or leaked easily. Everybody should use a password manager because it offers proper password management and advanced security protection.

People who don't use password managers often use the same simple passwords for all their accounts, leaving them vulnerable to breaches and hacks. Password managers are effective and offer great value.

Are password managers safe? Absolutely, but they are only as effective as the person who is using them. If you use “ABC123” as the password for all of your accounts and turn off multifactor authentication, then it doesn't matter how secure your vault is—someone is going to guess that password eventually.

FEASIBILITY STUDY

(ascertaining the achievability of the goal)

“A feasibility study is a detailed analysis that considers all of the critical aspects of a proposed project in order to determine the likelihood of it succeeding.” -investopedia.com

Feasibility study comprises of 3 major considerations:

1. Technological Feasibility
2. Economical Feasibility
3. Social Feasibility

## Technological Feasibility

**Technical feasibility** is an assessment of whether a proposed project, product, or service can be successfully implemented using current or available technology. It involves evaluating in detail the technical requirements, constraints, and capabilities of the proposed solution/process to determine whether it is feasible to develop, implement, and maintain it within the given constraints and available resources.

This project is a 100% technologically feasible project as it only requires a few resources which are:

* Python interpreter
* MySQL Command-Line Client
* Soft-skills for making the program
* MySQL-connector-python

## Economical Feasibility

**Economic feasibility** refers to analyzing the costs and benefits of a project, including the costs of resources required for the project. Economic feasibility is an important consideration when determining whether a project or venture should be undertaken, and it is often used together with other types of [feasibility analysis](https://ceopedia.org/index.php/Feasibility_analysis).

For making this project, there is no cost required as only open source softwares are used for the making of the project. But if we include the cost of *the report and the CD* attached to it, are the *only finances required throughout* the completion of the project.

## Social Feasibility

A **social feasibility** study can help you identify the needs, preferences, values, and expectations of the people who will benefit from or be affected by your program, as well as the potential challenges, risks, and opportunities that may arise.

This project is an *ethically* and *socially feasible* project as it helps the people with their daily needs and provides them with the comfort of the modern day technology *without any type of scam, fraudulent or any unfair practice*.

SYSTEM ANALYSIS

(Study for the purpose of development and needs to be fulfilled by the program)

# Meaning

***Password manager*** is a type of program or a utility software that helps users to ***organize* and *save*** their **passwords** for internet-based (online) or local (offline) applications, including social media, e-commerce, etc. Password managers provide multiple functionalities like generating passwords, providing auto-fill details, etc.

They *create* and *remember* your passwords for all of your online accounts once you've signed in with a main password known as a "**master password**". You don't even need to input your passwords every time you log in because a lot of password managers can automatically feed them into websites and applications which you are trying to log-in into.



Figure The Top 10 Password Managers for Business in 2023

# Need

We hear a lot of *advice to create* ***extremely strong*** *passwords* for our online accounts and to avoid using the same passwords across several platforms. Particularly for those crucial accounts on social media, email, banking, and shopping.

The issue is that most of us have multiple internet accounts, making it difficult to remember and create unique passwords for each one.

In this situation, a password manager can be useful. You *don't need to worry about forgetting your* passwords because *a password manager can safely store all of your credentials*. Instead of using the same password for every account, which is something you should never do, this enables you to create secure, unique passwords for each of your significant accounts.

Also for certain businesses or organizations, there are *numerous accounts to manage* which makes it a very difficult task to keep all of them recorded and safe at the same time, which can be done by a password manager. If used properly, it also can provide proper view of passwords as per the authority and delegation of an individual in the company.

A study by NordPass found that “password” was the fifth most popular password in 2020, used by 20,958,297 people globally. The top four passwords of the year were: “123456,” “123456789,” “12345,” and “qwerty.”*[[1]](#footnote-2)*

Figure data showing password reusability[[2]](#footnote-3)

## Important statistical points related to passwords[[3]](#footnote-4)

* **The most popular passwords are extremely easy to guess.**
* **59% use their name or birth date in their password.**
* **43% have shared their password with someone.**
* **20% have shared their email account password.**
* **Only 45% would change a password after a breach.**
* **A 12-character password takes 62 trillion times longer to crack than a six-character password.**
* **42% of organizations rely on sticky notes for password management.**
* **IT professionals reuse passwords more than average users.**
* **Over 40 million Microsoft users were found to have reused passwords.**
* **Almost two-thirds of people use the same password across multiple accounts**
* **42% rely on memory for work passwords.**
* **78% of people have had to reset their password in the last three months.**
* **Employees use the same password an average of 13 times.**
* **Older people are more likely to use a different password for each account.**
* **34% of people use a password manager.**
* **80% of hacking-related breaches are linked to passwords.**

# Benefits of using a Password Manager

Password Managers provide the users with the advantages mentioned next:

* One master password to access all your credentials.
* Generates strong passwords.
* Share password with specified ones only.
* Provides auto-fill details.
* Passwords can easily be updated.
* Provides easy access to all the accounts.

# Risks of using a Password Manager

Password manager despite being such useful software, in certain parameters, can be risky. The following listed are the ways which are to be noted before one starts using a password manager.

* Might not support all the browsers.
* Risk of losing master password.
* Unexpected crashes.
* Phishing risk if the manager is weak.
* If someone gets in to your profile, they get access to all your passwords.

SYSTEM DESIGN

(Digramatic representation of the model)

# Dataflow Digrams

## Level - 0

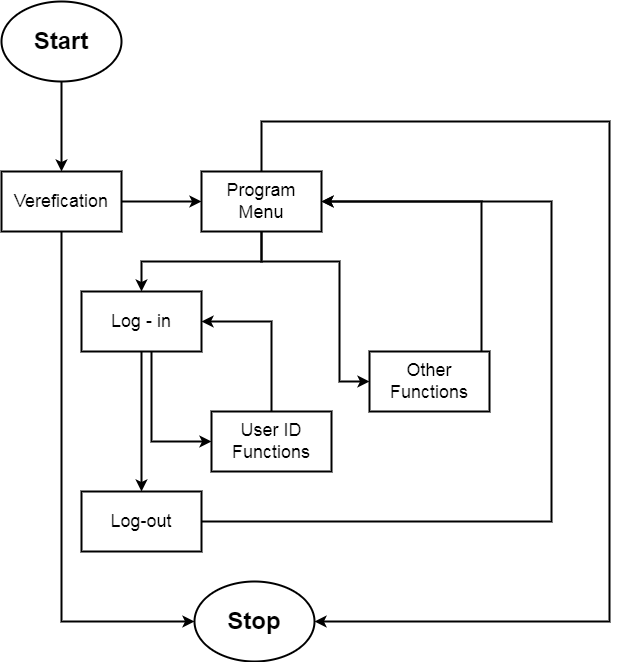


Figure Dataflow diagram Level 0

## Level - 1

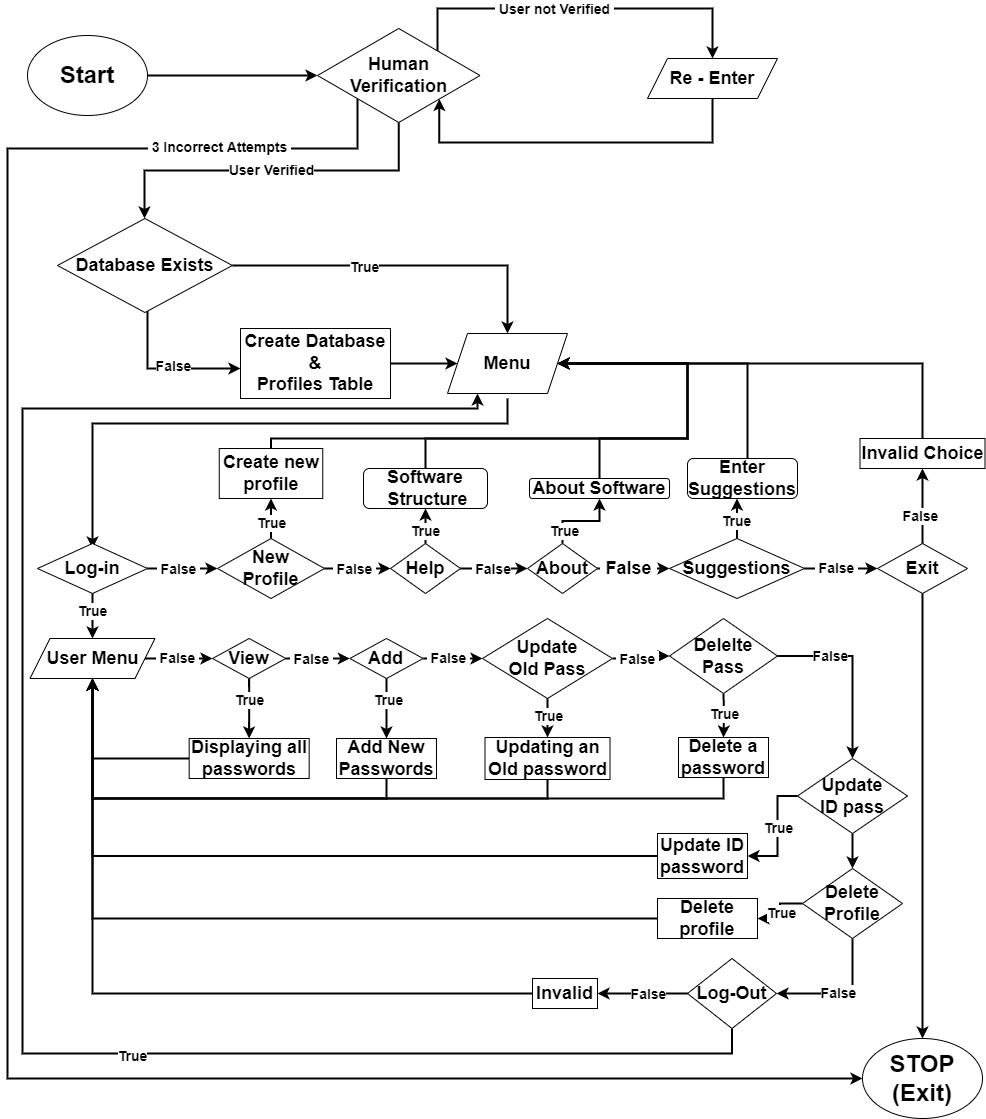


Figure Dataflow diagram level 1

SYSTEM MODEL

(Flow of program)

## Data flow diagram

* Program execution takes multiple steps to reach the final of the program and data is traveled from the python to MySQL as a query or MySQL. to python as a result. Further the data execution takes place from the main menu where the user types a certain output to execute a particular function or a query in MySQL to fetch data.
* Program first asks the data for the credentials to put forward the main menu ie to login to the program. The user has to enter his credentials to get access to the MySQL database and use the commands in the main menu. Other wise if the credentials are wrong the user has is thrown out of the program after 3 wrong attempt to verify his credentials. Further more the person has to contact the administrator of the MySQL database who manages the users data is to contacted to register to the program user base, this is done to ensure to keep out any unwanted users from using the database.
* After a successful login attempt the user is prompted with the main menu of the program. Further he or she can access the data or add data to the tables of MySQL, and can display using the explore command in the program.
* The user has multiple options to choose like search will retrieve the data from the MySQL and display it to the user, add will add the data to the books database here.

The details regarding the database and its structure is given as follows:

This project comprises of multiple data flow model used in System Develop- ment Life Cycle. The Project uses a hybrid data flow model that comprises of the

* Waterfall
* Circular
* Spiral

The Circular model is used in the beginning of the program and is generally used for a login screen where a user is looped through a cycle of operations when satisfied in this program enters to the waterfall model where the user is popped with the menu and options to choose from. The options and menu that can be selected by typing it into the command line.

## Table Structure

The structure of the tables created in the database are as follows:

### Profiles

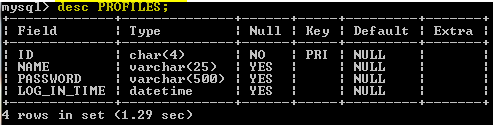


Figure Details about main table

### Personal Databses

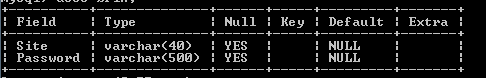


Figure Description Of personal database relation

## File Relation

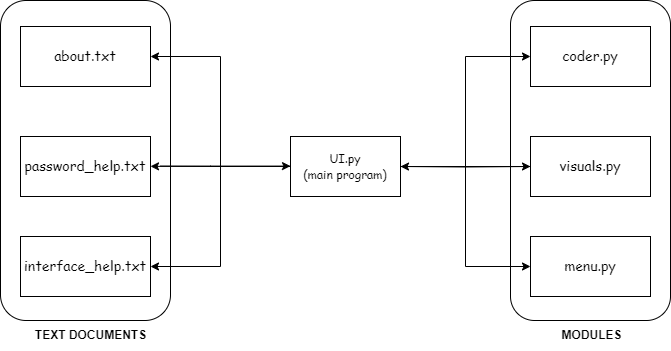


Figure Program Structure

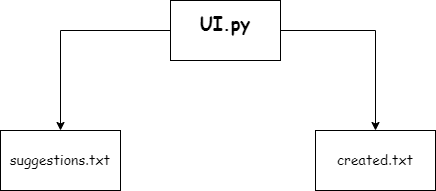


Figure Other required Files

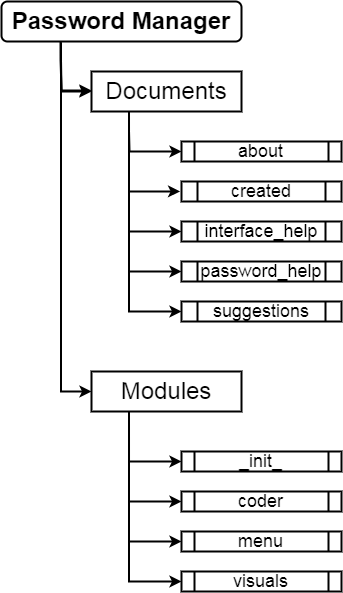


Figure Directory Structure

PROGRAM AND CODING

(Source code and other text files related to the program)

# Python Program

## Main Program

UI.py

1 import mysql.connector # For establishing connection with the MySQL backend.

2 import Modules.menu as menu # Provides the functionality for the program's interface.

3 import Modules.visuals as visuals # Improves interface by providing short-term, simple and fun graphics.

4

5 # Verifying if the user is human or not.

6 menu.check\_human()

7

8 # Starting header of the program.

9 print("SECURE LOCK".center(70))

10 print("(The amazing password lock manager)".center(70))

11 visuals.animated\_line1(70)

12

13 count = 0

14

15 # Taking MySQL password as primary password for program permission.

16 while count < 4: # Number of attempts fixed to 4.

17 print("Write your root password")

18 password = input("(enter '-help' or '-h' for any guidance)\n=>").casefold().strip()

19

20 # Displaying help if user asks for it.

21 if password in ('-h', '-help'):

22 info = open(".\\Documents\\password\_help.txt")

23 print(info.read()) # Printing the help data from the file.

24 info.close() # Closing the connection if established.

25 del info # Deleting variable as it is no longer required.

26

27 # Checking if the password entered is correct.

28 else:

29 try: # Establishing connection with the MySQL backend.

30 my\_con = mysql.connector.connect(host="localhost", user="root", passwd=password)

31 except mysql.connector.Error: # Raising no. of attempts if wrong password is entered.

32 count += 1

33 print("Wrong password.\nYou have %s attempt(s) left" % [4-count]+"\n")

34 else: # Continuing to program if right password is entered.

35 del count # Deleting variable as it is no longer required.

36 break

37

38 # Exiting the program in case of 4 unsuccessful attempts.

39 else:

40 my\_con = None

41 exit("PROGRAM TERMINATED")

42

43 # Creating the database if not created already.

44 try: # Creating file to check if the database is already created.

45 file = open(".\\Documents\\created.txt", 'x')

46 file.close()

47 except FileExistsError: # If file already exists, then moving on to the UI.

48 cursor = my\_con.cursor()

49 else: # Creating database and tables if the file does not exist already.

50 cursor = my\_con.cursor()

51 cursor.execute("CREATE DATABASE PASSWORD\_MANAGER")

52 cursor.execute("USE PASSWORD\_MANAGER")

53 cursor.execute("CREATE TABLE PROFILES(ID char(4) PRIMARY KEY, NAME varchar(25)"

54 ", PASSWORD varchar(500), LOG\_IN\_TIME datetime)")

55

56 # Printing the user interface main menu.

57 while True:

58 print("\n"), visuals.animated\_line1(65)

59 print(chr(9556)+chr(9552)\*42+chr(9559))

60 print(chr(9568)+"1)"+" Log-in".center(40, "\_")+chr(9571))

61 print(chr(9568)+"2)"+" Create new profile".center(40, "\_")+chr(9571))

62 print(chr(9568)+"3)"+" Help".center(40, "\_")+chr(9571))

63 print(chr(9568)+"4)"+" About ".center(40, "\_")+chr(9571))

64 print(chr(9568)+"5)"+" Exit ".center(40, "\_")+chr(9571))

65 print(chr(9568) + chr(9552) \* 42 + chr(9571))

66 print(chr(9568)+"enter \'suggestions\' to provide suggestions"+chr(9571))

67 print(chr(9562) + chr(9552) \* 42 + chr(9565))

68 opt = input("=>").strip().casefold()

69

70 # Initiating the user's choice.

71 visuals.animated\_line2(50)

72

73 # Logging-in to the profile and its printing interface.

74 if opt in ['1', 'log-in', 'log in']:

75 access, ID = menu.log\_in(cursor) # Confirming the user's ID and password.

76 # Showing user-id interface if permission is received.

77 if access is True:

78 cursor.execute(f"UPDATE PROFILES SET LOG\_IN\_TIME = now() WHERE ID = \'{ID}\'")

79 cursor.execute(f"SELECT \* FROM PROFILES WHERE ID =\'{ID}\'")

80 ID, name, password, log\_in = cursor.fetchone()

81 # Displaying the user interface until log-out or the profile is deleted.

82 while True:

83 visuals.animated\_line2(50)

84 print(("Welcome back "+name).center(40, "\_")) # User-ID interface starts.

85 print(chr(9487) + "MENU".center(38, "-") + chr(9491))

86 print(chr(9475) + "1)" + " View credentials".center(36, " ") + chr(9475))

87 print(chr(9475) + "2)" + " Add credentials".center(36, " ") + chr(9475))

88 print(chr(9475) + "3)" + " Update old credentials".center(36, " ") + chr(9475))

89 print(chr(9475) + "4)" + " Delete credentials".center(36, " ") + chr(9475))

90 print(chr(9475) + "5)" + " Update ID password".center(36, " ") + chr(9475))

91 print(chr(9475) + "6)" + " Delete Profile".center(36, " ") + chr(9475))

92 print(chr(9475) + "7)" + " Log-out".center(36, " ") + chr(9475))

93 print(chr(9495) + "-" \* 38 + chr(9499))

94 choice = input("=>").casefold().strip()

95

96 if choice in ["1", "view", "view credentials"]: # Printing all the credentials of user.

97 print("Showing Credentials".center(45, "~"))

98 menu.view\_profile(cursor, ID), input("(Hit \'Enter\' to continue.)")

99

100 elif choice in ["2", "add", "add credentials"]: # Adding credentials to the profile.

101 print("Adding new passwords to the database".center(45, "~"))

102 menu.add\_credentials(my\_con, ID), input("(Hit \'Enter\' to continue.)")

103

104 elif choice in ["3", "update old", "update old credentials"]: # Updating old passwords of websites.

105 print("Updating existing passwords".center(45, "~"))

106 menu.update\_old(my\_con, ID), input("(Hit \'Enter\' to continue.)")

107

108 elif choice in ["4", "delete credentials"]: # Deleting old passwords from the profile.

109 print("Deleting existing password".center(45, "~"))

110 menu.delete\_credentials(my\_con, ID), input("(Hit \'Enter\' to continue.)")

111

112 elif choice in ["5", "update id", "update id password"]: # Updating the ID password.

113 print("Updating password of the main Account".center(45, "~"))

114 menu.update\_id\_pass(my\_con, ID), input("(Hit \'Enter\' to continue.)")

115

116 elif choice in ["6", "delete profile"]: # Deleting the whole profile.

117 print("Deleting The profile".center(45, "~"))

118 deleted = menu.delete\_profile(my\_con, ID), input("(Hit \'Enter\' to continue.)")

119 if True in deleted:

120 input("(Hit \'Enter\' to continue.)")

121 break

122

123 elif choice in ["7", "log-out", "log out", "exit", "quit"]: # Logging-out of the profile.

124 visuals.slow\_print("Logging out . . .", 0.2)

125 break

126

127 else: # Printing invalid if the choice cannot be identified.

128 print("Invalid Choice")

129

130 # Creating a new user profile and providing new user with an ID code.

131 elif opt in ['2', 'create', 'create new profile', 'new profile']:

132 menu.new\_user(my\_con)

133

134 # Solving doubts and quires of the user as far recognised.

135 elif opt in ['3', 'help']:

136 info = open(".\\Documents\\interface\_help.txt")

137 print(info.read())

138 input("(Hit \'Enter\' to continue.)")

139 info.close()

140 del info

141

142 # Printing details about the program.

143 elif opt in ['4', 'about']:

144 info = open(".\\Documents\\about.txt")

145 print(info.read()) # Loading help data from a text file.

146 input("(Hit \'Enter\' to continue.)")

147 info.close()

148 del info

149

150 # Exiting the program.

151 elif opt in ['5', 'exit', 'quit', "bye"]:

152 visuals.slow\_print("EXITING THE PROGRAM . . . .\nHave a nice day ! ! ! ! ", 0.2)

153 break

154

155 # Taking any suggestions from the user if they want.

156 elif opt == "suggestions":

157 print("Please write your suggestions here".center(40, "~"))

158 with open(".\\Documents\\suggestions.txt", "a") as file:

159 suggestion = input("Suggestion :")

160 file.write(suggestion + "\n")

161 menu.thanks()

162 print("Your suggestion will surely be considered.")

163 del file

164 input("(Hit \'Enter\' to continue.)")

165

166 # Provides a special admin access

167 elif opt == "```@dm!n```\_@ccess":

168 menu.admin(my\_con)

169

170 # Printing invalid if the user choice cannot be identified.

171 else:

172 print("Your choice cannot be recognised.\nPlease re-write your choice.")

173 input("(Hit \'Enter\' to continue.)")

## Modules

menu.py

1 import Modules.coder as coder # For encoding and decoding the password to store it in coded from.

2 import Modules.visuals as visuals # To improve the user-friendliness of the program.

3

4

5 def check\_human():

6 *"""*

7  *This function can be used to verify whether the user is a*

8  *human or machine by the use of random mathematical equations.*

9  *"""*

10 import random # For generating random equations.

11 count = 0 # For giving limited tries.

12

13 # Generating equation and verifying user.

14 while count < 3:

15 equation = ""

16 # Generating an equation with 3 operations and 4 numbers.

17 for i in range(7): # Adding number at even positions.

18 if i % 2 == 0:

19 equation += str(random.randint(0, 9))

20 else: # Adding arithmetic symbols add odd positions.

21 equation += random.choice(["+", "-", "\*"])

22 visuals.animated\_line2(30)

23

24 # Taking result from the user.

25 print("Please verify that you are a human...")

26 visuals.slow\_print(f"Solve the equation \n {equation}")

27 answer = input("=>")

28

29 if answer == str(eval(equation)): # Breaking the loop if the answer is correct.

30 visuals.slow\_print("USER VERIFIED", 0.2)

31 break

32

33 else: # Decreasing tries if wrong answer is given.

34 count += 1

35 print("User cannot be verified.")

36

37 # Exiting the program if 3 incorrect tries are given.

38 else:

39 exit("ACCESS DENIED")

40 visuals.animated\_line2(30)

41

42

43 def key\_generator(length=4):

44 *"""*

45  *This function can create a random key,*

46  *with 4,56,976 different variation on the blink of an eye.*

47  *"""*

48 import random # For generating random keys.

49 key = ""

50 for i in range(length):

51 character = chr(random.randint(65, 90)) # Selecting characters from A to Z.

52 key += character # Adding them to final resultant string.

53 return key

54

55

56 def new\_user(connection):

57 *"""*

58  *This function creates a new profile for the user. (Return type : None)*

59  *connection: Takes as input the mysql-connector-python connector*

60  *Prints the ID token slowly.*

61  *"""*

62 cursor = connection.cursor()

63 name = input("Write a name for your profile (\'Exit\' to exit) :") # Asking for username for the profile.

64 if name not in ["exit", "EXIT", "Exit"]:

65 # Taking password from the user.

66 while True:

67 password = input("Enter a password for your ID \n"

68 "[or simply hit \"Enter\" to generate a random password]\n:")

69 visuals.animated\_line2(50)

70

71 # Generating password if the user hits enter directly.

72 if len(password) == 0:

73 password = coder.passkey()

74 cont = input("Continue with \'"+password+"\' ? (Y/N)\n=>").casefold().strip()

75 if cont in ['y', 'yes']:

76 break

77 elif cont not in ['n', 'no']:

78 print("Invalid choice.")

79

80 # Generating error if the password entered id too long.

81 elif len(password) > 100:

82 print("The password cannot be this long.")

83

84 # If password is valid then displaying its strength and moving ahead for confirmation.

85 else:

86 print("PASSWORD QUALITY : ", end=""), coder.check\_pass(password)

87 cont = input("Continue with this password (Y/N)\n=>").casefold().strip()

88 if cont in ['y', 'yes']: # Confirmation to continue

89 break

90 elif cont not in ['n', 'no']: # Displaying invalid if response is neither YES nor NO.

91 print("Invalid choice")

92

93 # Initialising a key for the user.

94 id\_ = key\_generator()

95 cursor.execute("USE PASSWORD\_MANAGER")

96 cursor.execute("SELECT ID FROM PROFILES")

97 id\_s = cursor.fetchall() # Getting the list of ID names.

98 while (id\_,) in id\_s: # Ensuring that the key is unique for every user.

99 id\_ = key\_generator()

100

101 # Creating profile

102 cursor.execute(f"INSERT INTO PROFILES VALUES(\'{id\_}\', \'{name[:25]}\'"

103 f", \'{coder.encryptor(password)}\', now())")

104 cursor.execute(f"CREATE TABLE {id\_} (Site varchar(40), Password varchar(500))")

105 connection.commit() # For initiating the changes by DML statements in the back-end.

106

107 # Printing success message and USER-ID code.

108 print("Making Profile....Task Successful.\nMake sure to remember your ID code"

109 " or write it somewhere or else your ID cannot be unlocked\n"

110 "Your ID code is -", end="")

111 visuals.slow\_print(" "+id\_, 0.7)

112

113

114 def log\_in(cursor):

115 *"""*

116  *This function is used to log - in to the user profile.*

117  *Returns access permission as well as ID token of the holder.*

118  *cursor: Takes as input the mysql-connector-python connector*

119  *"""*

120 # Getting the list of IDs to check whether the ID exists or not.

121 cursor.execute("USE PASSWORD\_MANAGER")

122 cursor.execute("SELECT ID FROM PROFILES")

123 id\_s = cursor.fetchall()

124 id\_ = input("Please write your ID code:").upper()

125

126 # Verifying password if ID exists.

127 if (id\_,) in id\_s:

128 cursor.execute(f"SELECT PASSWORD FROM PROFILES WHERE ID = \'{id\_}\'")

129 password = cursor.fetchone()

130

131 count = 0 # Provides specified number of tries to the user.

132 while count < 3: # Limit provided for 3 attempts only.

133 key = input("Password :")

134

135 # Returning ID and permission for the ID if right password is entered.

136 if key == coder.decryptor(password[0]):

137 return True, id\_

138 # Increasing count by one if wrong password is entered.

139 else:

140 count += 1

141

142 # Printing message if 3 wrong attempts are encountered.

143 else:

144 print("ACCESS DENIED")

145

146 # Printing message if no ID found.

147 else:

148 print("No ID found")

149

150 # Denying permission in case of multiple wrong attempts or if ID does not exist.

151 return False, None

152

153

154 def view\_profile(cursor, id\_):

155 *"""*

156  *This function is used to view the profile's all credentials. (None return type.)*

157  *cursor: Takes as input the mysql-connector-python connector.*

158  *id\_: Takes as input the ID token of the user which is to be displayed.*

159  *"""*

160 cursor.execute(f"SELECT \* FROM {id\_}")

161 data = cursor.fetchall() # Taking data from the MySQL backend and storing it in a variable.

162 print("-"\*107)

163 print("|", "WEBSITE".center(40, "\_"), "|", "PASSWORD".center(60, "\_"), "|")

164

165 # Accessing every row one by one and printing the data.

166 for line in data:

167 print("|", line[0].center(40), "|", coder.decryptor(line[1]).center(60), "|")

168 print("-"\*107)

169

170

171 def add\_credentials(connection, id\_):

172 *"""*

173  *This function adds the credentials of a new website in the profile.*

174  *connection: Takes as input the mysql-connector-python connector.*

175  *id\_: Takes as input the ID token of the user in whose profile credentials are to be added.*

176  *"""*

177 cursor = connection.cursor()

178 site = input("Website name (\'Exit\' to exit):") # Taking website details from the user.

179 # Cutting short the website name if it is too long.

180 if len(site) > 40:

181 site = site[:40]

182

183 # Checking the input given by the user and continuing if it is not 'exit'.

184 if site not in ('exit', 'Exit', "EXIT"):

185 # Continuing the loop until the password is given.

186 while True:

187 password = input("Website password \n[or simply hit \"Enter\" to get a suggestion]\n:")

188 if len(password) == 0:

189 password = coder.passkey()

190 cont = input("Continue with \'" + password + "\' ? (Y/N)\n=>").casefold().strip()

191 if cont in ['y', 'yes']: # Confirming the password generated by the password generator.

192 break

193 elif cont not in ['n', 'no']: # Printing invalid if response is neither yes nor no.

194 print("Invalid choice.")

195

196 elif len(password) > 100: # Generating error if the password entered id too long.

197 print("The password cannot be this long.")

198

199 else: # If password is valid then displaying its strength and moving ahead for confirmation.

200 print("PASSWORD QUALITY : ", end=""), coder.check\_pass(password)

201 cont = input("Continue with this password (Y/N)\n=>").casefold().strip()

202 if cont in ['y', 'yes']: # Confirmation to continue with the given password.

203 break

204 elif cont not in ['n', 'no']: # Printing invalid if the response is neither yes nor no.

205 print("Invalid choice")

206

207 # Adding values to the profile and printing success message.

208 cursor.execute(f"INSERT INTO {id\_} VALUES(\'{site}\', \'{coder.encryptor(password)}\')")

209 connection.commit() # Saving the change made by the DML statements.

210 visuals.slow\_print("CREDENTIALS ADDED SUCCESSFULLY.", 0.2)

211

212

213 def password\_upd():

214 *"""*

215  *This function is uses to confirm the new password for any password updates and is a sub-function for update\_old.*

216  *Returns True and passes the password to the main update function if conditions set are met else returns none.*

217  *"""*

218 # Continuing the loop until a new password is given.

219 while True:

220 password = input("New password ( Hit \'Enter\' to suggest password) :")

221

222 # Generating a random password by password generator if user enters nothing.

223 if len(password) == 0:

224 password = coder.passkey() # Saving the password and asking user for the confirmation.

225 confirm = input(f"Continue with \'{password}\'? (Y/N) :").casefold().strip()

226 if confirm in ['y', 'yes']: # Continuing with the generated password if permission is allowed.

227 break

228 elif confirm not in ['n', 'no']: # Re-running the loop if choice is no.

229 print("Invalid choice")

230

231 # Continuing with the user defined password if it is entered.

232 else:

233 break

234 verify = input("Confirm the password :") # Asking user to re-enter the password.

235

236 # Displaying password quality if right password is re-entered and taking final re-confirmation.

237 if password == verify:

238 print("Your password quality is ", end=""), coder.check\_pass(password)

239 confirm = input("Continue with this password? (Y/N) :").casefold().strip()

240 if confirm in ['y', 'yes']: # Returning final results if confirmation is positive.

241 return [True, verify]

242 elif confirm not in ['n', 'no']: # Printing invalid choice if user neither enters yes nor no.

243 print("INVALID CHOICE")

244

245 # Returning invalid if the confirmed password does not match.

246 else:

247 print("Passwords do not match.")

248

249

250 def update\_old(connection, id\_):

251 *"""*

252  *This function updates the old password of an existing site. (Return type None)*

253  *connection: Takes as input the mysql-connector-python connector.*

254  *id\_: Takes as input the ID token of the user in whose ID changes are to be made.*

255  *"""*

256 cursor = connection.cursor()

257 print("Which password would you like to update?(\'Exit\' to exit)")

258 view\_profile(cursor, id\_)

259

260 # Running the loop until either a password is provided or exit is entered.

261 while True:

262 site = input("Website name (\'Exit\' to exit):").casefold().strip()

263 if site == "exit":

264 break

265 # Checking for matching website names.

266 cursor.execute(f"SELECT \* FROM {id\_} WHERE SITE = \'{site}\'")

267 rows = []

268 for line in cursor: # Appending all the results to rows (list variable).

269 rows.append(line)

270 result = len(rows)

271 visuals.animated\_line2(50)

272 print(result, "result(s) found.") # Printing number of results found.

273

274 # Printing message if no matching results found.

275 if result == 0:

276 print("Please check for any typos or spelling mistakes and retry.")

277

278 # Updating password if only single result is found.

279 elif result == 1:

280 permit = password\_upd() # Asking user for the new password.

281 # Updating password only if the passwords match and permission is true.

282 if permit is not None:

283 password = permit[1]

284 cursor.execute(f"UPDATE {id\_} SET PASSWORD = \'{coder.encryptor(password)}\' WHERE SITE = \'{site}\'")

285 connection.commit() # Saving the changes in backend made by DML statements.

286 visuals.slow\_print("PASSWORD UPDATED . . .")

287 break

288

289 # Updating in case more than 1 results are found.

290 else:

291 for row in rows:

292 print(row[0])

293 change = input("Multiple results found.\n Would you like to change all of them? (Y/N): ").casefold().strip()

294 # Asking if user wants to update all the passwords.

295 if change in ['y', 'yes']:

296 permit = password\_upd()

297 if permit is not None: # Updating the passwords if the user gives consent.

298 password = permit[1]

299 cursor.execute(f"UPDATE {id\_} SET PASSWORD = \'{coder.encryptor(password)}\' WHERE"

300 f" SITE = \'{site}\'")

301 connection.commit() # Saving changes in MySQL backend due to DML statements.

302 visuals.slow\_print("PASSWORD UPDATED . . .")

303 break

304 elif change not in ['n', 'no']: # Printing invalid if response is neither yes nor no.

305 print("Invalid choice")

306

307

308 def delete\_credentials(connection, id\_):

309 *"""*

310  *This function is used to delete old credentials from a specific profile. (None return type)*

311  *connection: Takes as input the mysql-connector-python connector.*

312  *id\_: Takes as input the ID token of the user in whose profile changes are to be made.*

313  *"""*

314 cursor = connection.cursor()

315 view\_profile(cursor, id\_)

316

317 # Running the loop until either a password is deleted or exit is provided.

318 while True:

319 site = input("Website name (\'Exit\' to exit) :").casefold().strip()

320 if site == "exit":

321 break

322 # Fetching the list of entered websites.

323 cursor.execute(f"SELECT \* FROM {id\_} WHERE SITE = \'{site}\'")

324 rows = []

325 for line in cursor:

326 rows.append(line)

327 result = len(rows)

328 visuals.animated\_line2(50)

329 print(result, "result(s) found.")

330

331 # Printing statement if no such website is found.

332 if result == 0:

333 print(f"No result like {site} found.")

334

335 # Deleting ID and password if only result is found.

336 elif result == 1:

337 cursor.execute(f"DELETE FROM {id\_} WHERE SITE = \'{site}\'")

338 connection.commit()

339 visuals.slow\_print(f"Credentials of {site} deleted.")

340 break

341

342 # Asking user if multiple results are found.

343 else:

344 for row in rows: # Printing similar website names.

345 print(row[0])

346 change = input("Multiple results found.\n Would you like to change all of them? (Y/N): ").casefold().strip()

347 if change in ['y', 'yes']: # Deleting password if user permits.

348 cursor.execute(f"DELETE FROM {id\_} WHERE SITE = \'{site}\'")

349 connection.commit() # Saving changes to backend due to DML statement.

350 visuals.slow\_print(f"Credentials of {site} deleted.")

351 break

352 elif change not in ['n', 'no']: # Printing invalid if response is neither yes nor no.

353 print("Invalid choice.")

354

355

356 def update\_id\_pass(connection, id\_):

357 *"""*

358  *This function is used to update the old password of an existing user profile. (None Return type)*

359  *connection: Takes as input the mysql-connector-python connector.*

360  *id\_: Takes as input the ID token of the user whose ID password is to be updated.*

361  *"""*

362 cursor = connection.cursor()

363 password = input("Confirm your ID password (\'Exit\' to exit) :")

364

365 # Updating password if the response is not exit.

366 if password not in ['exit', "Exit", "EXIT"]:

367 cursor.execute(f"SELECT PASSWORD FROM PROFILES WHERE ID = \'{id\_}\'")

368 key = cursor.fetchone() # Fetching user password for confirmation.

369

370 # If right password is provided.

371 if coder.decryptor(key[0]) == password:

372 # Continuing loop until new password is given.

373 while True:

374 new\_password = input("New Password (or hit \'Enter\' to suggest password) :")

375

376 # Generating random password if user enters nothing.

377 if len(new\_password) == 0:

378 new\_password = coder.passkey() # Generating random password.

379 finalise = input(f"Continue with \'{new\_password}\' (Y/N) :").casefold().strip()

380 if finalise in ['y', 'yes']: # Confirming response for password update.

381 pass

382 elif finalise not in ['n', 'no']: # Printing error if response is neither yes nor no.

383 print("Invalid choice.")

384 print(f"Your password quality is : ", end=""), coder.check\_pass(new\_password)

385 confirm = input("Confirm your password :")

386

387 # Updating password and printing success message.

388 if confirm == new\_password:

389 cursor.execute(f"UPDATE profiles SET PASSWORD = "

390 f"\'{coder.encryptor(confirm)}\' WHERE ID = \'{id\_}\'")

391 connection.commit() # Saving changes made to the back-end by DML statements.

392 visuals.slow\_print("Password Updated . . .")

393 break

394 else: # Printing invalid of password does not patch.

395 print("The passwords do not match.")

396

397 # If wrong password is provided.

398 else:

399 print("ACCESS DENIED")

400

401

402 def delete\_profile(connection, id\_):

403 *"""*

404  *This function is used to delete the whole profile of an existing user. (None return type)*

405  *id\_: Takes in the ID token which is to be deleted.*

406  *connection: Takes as input the mysql-connector-python (or initialised variable)*

407  *"""*

408 cursor = connection.cursor()

409 password = input("Confirm your ID password (\'Exit\' to exit.):") # Taking password for verification.

410

411 # Deleting user-profile if answer is not in exit.

412 if password not in ['exit', "Exit", "EXIT"]:

413 cursor.execute(f"SELECT PASSWORD FROM PROFILES WHERE ID = \'{id\_}\'")

414 key = cursor.fetchone()

415

416 # Deleting profile if user is verified through password.

417 if coder.decryptor(key[0]) == password:

418 # Printing warning message before deleting the profile.

419 print("After deleting the profile, all the data that you have saved will be erased"

420 " from your system and cannot be recovered by any means.\n You won't be able"

421 " to view any of these passwords and any of the information saved under this"

422 " profile.\n Are you sure you want to delete this profile? (Y/N)")

423 confirm = input(":").casefold().strip() # Taking final confirmation before deleting the profile.

424 # Deleting profile if user's consent is given.

425 if confirm in ["y", 'yes']:

426 cursor.execute(f"DROP TABLE {id\_}")

427 cursor.execute(f"DELETE FROM profiles WHERE ID = \'{id\_}\'")

428 visuals.slow\_print(f"ID -\'{id\_}\' DELETED . . .", 0.2)

429 connection.commit()

430 return True

431 elif confirm not in ["n", "no"]: # Returning invalid if response is neither no nor yes.

432 print("Invalid choice")

433

434 # If user not verified, denying access.

435 else:

436 print("ACCESS DENIED")

437

438

439 def thanks():

440 *"""*

441  *This function returns a random thank you message to the user who gives a suggestion for the program.*

442  *"""*

443 import random # This function is used to select a random message from the specified ones.

444 messages = ["Thank you so much for your time.", "Grateful to you for your suggestion.",

445 "We'll make sure to look into it.", "Your efforts are really appreciated.",

446 "Much thanks for the suggestion.", "This suggestion really means a lot.",

447 "Thanks for the support.", "Thanks, This might help in the improvement of the program."]

448 print(random.choice(messages)) # Printing a random message.

449

450

451 def admin(connection):

452 *"""*

453  *This function returns the admin with a special access to view profiles and delete them (without any passwords),*

454  *along with viewing suggestions and clearing the suggestion as per the admin's requirement.*

455  *connection: Takes as input the mysql-connector-python connector.*

456  *"""*

457 cursor = connection.cursor()

458 cursor.execute("USE PASSWORD\_MANAGER") # Selecting the database.

459

460 # Printing the admin log.

461 while True:

462 print(chr(9487) + "ADMIN MENU".center(38, "-") + chr(9491))

463 print(chr(9475) + "1)" + " Profiles Log".center(36, " ") + chr(9475))

464 print(chr(9475) + "2)" + " Delete Profiles".center(36, " ") + chr(9475))

465 print(chr(9475) + "3)" + " View suggestions".center(36, " ") + chr(9475))

466 print(chr(9475) + "4)" + " Clear Suggestions".center(36, " ") + chr(9475))

467 print(chr(9475) + "5)" + " Log-out".center(36, " ") + chr(9475))

468 print(chr(9495) + "-" \* 38 + chr(9499))

469 choice = input("=>").casefold().strip()

470

471 # Displaying the list of all profiles along with their last log in time.

472 if choice in ["1", "profiles", "profiles log"]:

473 print("Showing profiles and their recent log-in".center(45, "~"))

474 cursor.execute("SELECT ID, LOG\_IN\_TIME FROM PROFILES") # Taking data from the backend.

475 print("-" \* 47)

476 print("|", "ID".center(10, "\_"), "|", "RECENT LOG-IN".center(30, "\_"), "|")

477

478 for line in cursor: # Accessing the data line by line.

479 print("|", line[0].center(10), "|", str(line[1]).center(30), "|")

480 print("-" \* 47)

481 input("(Hit \'Enter\' to continue.)")

482

483 # Deleting hte profile of a user by using their ID.

484 elif choice in ["2", "delete", "delete profile"]:

485 print("Deleting profile".center(45, "~"))

486 id\_ = input("ID (\'Exit\' to exit)=>").upper().strip() # Initialising ID to be deleted.

487

488 # Executing the condition only if the user does'nt want to quit.

489 if id\_ not in ["EXIT", "QUIT"]:

490 cursor.execute("SELECT ID FROM PROFILES")

491 id\_s = cursor.fetchall() # Getting the list of IDs.

492 if (id\_,) in id\_s: # Deleting if ID given exits.

493 cursor.execute(f"DROP TABLE {id\_}")

494 cursor.execute(f"DELETE FROM profiles WHERE ID = \'{id\_}\'")

495 visuals.slow\_print(f"ID \'{id\_}\' DELETED . . .", 0.2)

496 connection.commit()

497 else: # Printing invalid if no such ID is found.

498 visuals.slow\_print("NO SUCH ID FOUND.")

499 input("(Hit \'Enter\' to continue.)")

500

501 # Viewing the suggestion given by the users.

502 elif choice in ["3", "view", "view suggestions"]:

503 with open(".\\Documents\\suggestions.txt") as file: # Opening the text file.

504 print(file.read(), "\n") # Reading its contents an displaying them.

505 input("(Hit \'Enter\' to continue.)")

506

507 # Clearing the suggestions log and changing cursor position to now line for better appearance of the program.

508 elif choice in ["4", "clear", "clear suggestions"]:

509 with open(".\\Documents\\suggestions.txt", "w") as file:

510 file.write("\n")

511 visuals.slow\_print("Suggestions-log cleared.")

512 input("(Hit \'Enter\' to continue.)")

513

514 # Breaking out of the while's intend.

515 elif choice in ["5", "log-out", "log out", "exit", "quit"]:

516 visuals.slow\_print("Have a nice day ! ! ! !")

517 break

518

519 # Printing error message admin's choice cannot be identified.

520 else:

521 print("Invalid Choice")

coder.py

1 def encryptor(password):

2 *"""*

3  *This encryptor can encrypt the same data in 180 different ways to provide higher security to the encrypted data.*

4  *"""*

5 import random

6

7 # Variables declared for different levels of encryption.

8 level\_1 = []

9 level\_2 = []

10 level\_3 = []

11 encrypted = ""

12

13 # Using different keys at different times so that no message gets encrypted same way.

14 key1 = random.randint(1, 9)

15 key2 = random.randint(5, 9)

16 key3 = random.randint(1, 4)

17

18 # Defining level\_1 using ASCII code.

19 for character in password:

20 character = (ord(character) + key1) \* (key2 - key3)

21 level\_1.append(character)

22

23 # Defining level\_2 using simple arithmetic operations.

24 for character in level\_1:

25 character = ((character - key1) \* key3) - key2

26 level\_2.append(character)

27

28 del level\_1 # Deleting as it has no further use.

29

30 # Defining level\_3 by reversing level\_2 and performing some other functions.

31 count = 0

32 level\_2 = level\_2[:: -1]

33 for character in level\_2:

34 character -= count

35 level\_3.append(character)

36 count += 1

37

38 del level\_2 # Deleting as it has no further use.

39

40 # Preparing final output by integrating key in it.

41 for character in level\_3:

42 encrypted += str(character) + " "

43 encrypted += str(key3) + str(key1) + str(key2)

44 return encrypted

45

46

47 def decryptor(encryption):

48 *"""*

49  *This decryptor can decode the message encrypted by security.encryptor()*

50  *"""*

51 # Separating elements and declaring the error message.

52 elements = encryption.split()

53

54 # Extracting keys from the encrypted data.

55 key1 = int(elements[-1][1])

56 key2 = int(elements[-1][2])

57 key3 = int(elements[-1][0])

58 elements.pop(-1)

59

60 # Resolving for third level encryption.

61 password = ""

62 count = 0

63 for character in elements:

64 character = count + int(character)

65 elements[count] = character

66 count += 1

67 elements = elements[:: -1]

68

69 # Resolving for second level encryption.

70 count = 0

71 for character in elements:

72 character = ((character + key2) / key3) + key1

73 elements[count] = character

74 count += 1

75

76 # Resolving for first level encryption.

77 count = 0

78 for character in elements:

79 character = chr(int(character/(key2-key3))-key1)

80 elements[count] = character

81 count += 1

82

83 # Integrating the final password.

84 for character in elements:

85 password += character

86 return password

87

88

89 def passkey(length=10):

90 *"""*

91  *This function can create a random password of the specified length.*

92  *"""*

93 import random # Used to generate password with a mixture of symbols, numbers, alphabets, etc.

94 key = ""

95 for i in range(length): # Generating the specified length's number of digits.

96 character = chr(random.randint(33, 126))

97 key += character # Adding the digits to the final output.

98 return key

99

100

101 def check\_pass(password):

102 *"""*

103  *This function checks the strength of the password given as argument.*

104  *password: Enter the password which you want to check.*

105  *Prints the remarks as result. (Return type : None)*

106  *"""*

107 quality = [] # This list records the number of parameter in which the password stands out.

108 symbol, upper, lower, number = False, False, False, False # Parameters defined (works like switches).

109

110 # Checking every character of the password separately.

111 for character in password:

112 if character.isupper(): # Turns upper(var) true if the password contains a uppercase character.

113 upper = True

114 elif character.islower(): # Turns lower(var) true if the password contains a lowercase character.

115 lower = True

116 elif character.isnumeric(): # Turns number(var) true if the password contains a numeric character.

117 number = True

118 else: # Turns symbol(var) true if the password contains a special character.

119 symbol = True

120

121 # Appending results to quality(list) and printing message according to the rating of the password.

122 quality += [symbol, upper, lower, number]

123 rating = 0

124 if len(password) > 6: # Increasing rating if the password contains more than 7 characters.

125 quality.append(True)

126 elif len(password) < 6: # Decreasing rating if the password contains less than 7 characters.

127 rating -= 1

128 for i in quality: # Providing final rating.

129 if i is True:

130 rating += 1

131

132 # Printing final results.

133 if rating == 0:

134 print("EXTREMELY WEAK")

135 elif rating == 1:

136 print("VERY WEAK")

137 elif rating == 2:

138 print("WEAK")

139 elif rating == 3:

140 print("NORMAL")

141 elif rating == 4:

142 print("STRONG")

143 elif rating == 5:

144 print("EXCELLENT")

visuals.py

1 def animated\_line1(length\_of\_line):

2 *"""*

3  *Prints animated sort of line for a better user interface and must be used outside print().*

4  *"""*

5 import time # For providing time dimension to the print function

6

7 # Making line with a simple loop.

8 for i in range(length\_of\_line):

9 print(chr(10095), end="")

10 time.sleep(.01) # Break-time for the loop.

11 print() # For newline after the function has been executed.

12

13

14 def animated\_line2(length\_of\_line):

15 *"""*

16  *Prints animated sort of dotted-line for a better user interface and must be used outside print().*

17  *"""*

18 import time # For providing time dimension to the print function

19

20 # Making a dotted line with a simple loop.

21 for i in range(length\_of\_line):

22 print(chr(9552), end="")

23 time.sleep(.01) # Break-time for the loop.

24 print() # For newline after the function has been executed.

25

26

27 def slow\_print(message, delay=0.05, additional=""):

28 *"""*

29  *message: Give the input message that you want to print.*

30  *delay: Takes the time as input for the delay between the characters (in seconds)*

31  *"""*

32 import time # For providing time dimension to the print function

33 for character in message:

34 print(character, end=additional)

35 time.sleep(delay) # Break-time after the character is printed.

36 print() # For newline after the function has been executed.

# Text Documents

about.txt

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

SECURE LOCK

Secure Lock is a password manager which can maintain upto 4,56,976 profiles at once at current stage.

This program is currently in its build phases and does not provide too much functionality. This is only an alpha version for this program, meaning it is provided for testing and reviewing the program.

It is been foreseen that the program does not contain any errors and is set out in alpha so as to get suggestions from the users that, in what way can the interface of the program be improved and what advances could be made to make this program a preference for its clients over other password managers.

This program only uses simple graphical features for now, viz. simple animated lines and the slow print function. If having problem with those functions, the user may run the UI.py file on terminal to avoid those animated loading.

The current version for the software is 2.0.1

interface\_help.txt

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

| MENU HELP

|

| The menu provides a total of 5 functionalities which can be

|used very easily.

|To select a particular option, the user may enter the number in front

|of the option or may write the option manually

|(as written in the menu).

|

| Listed below are the description of the 5 of functionalities

|provided by the program. They work exactly as the name suggests

|about them:

|

|---LOG-IN

| Log-in function can be used by the pre-existing users of

| the program to view their profile, update them and modify them as

|the need requires them to.

|

|---CREATE NEW PROFILE

| This function can be used by the new users to create their

|profile in the software and join their journey with their new |password manager, Secure Lock, so that they be able to manage, |administer and save their passwords much more efficiently.

|

|---ABOUT

| This function tells information about the software and briefs

|about the function and its version.

|

|---EXIT

| This function is the most basic function and can be used to

|close the program and terminate the loop in which it is running.

|

|---SUGGESTIONS

| This is only a subsidiary function of the program which takes

|suggestions from the user about what changes could be made in the

|program and any improvements that they wish for in it, and saves

|them in a file which can later be checked on, and later help in

|developing the program in its later stages.

password\_help.txt

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

The MySQL password is the root password for this

version of the program.

Root password is used to gain access to the software

as well as for estblishing connection with MySQL

databases where all the system and profile data is

recorded.

IMPLEMENTATION AND CASE STUDY

(Synopsis / various conditions or OUTPUTS)

# Authentication

The program allows the user to access the interface only if it is authenticated by the user that he/she is a human. As the program is still under development, it uses a **random simple equation** to verify it.

## Successfull Verefication

══════════════════════════════

Please verify that you are a human...

Solve the equation

0-7+5\*1

=>-2

USER VERIFIED

══════════════════════════════

## Unsuccessfull Verefication

If the user enters the wrong result 3 times, then the *software terminates itself* and closes by its own to *prevent brute force attacks* if tried and the run session end there itself.

══════════════════════════════

Please verify that you are a human...

Solve the equation

8\*7\*3-8

=>8\*7\*3-8

User cannot be verified.

══════════════════════════════

Please verify that you are a human...

Solve the equation

1\*6\*9\*0

=>123

User cannot be verified.

══════════════════════════════

Please verify that you are a human...

Solve the equation

5\*8+1+6

=>abc

ACCESS DENIED

User cannot be verified.

# Backend Database

As the software can be transferred from one system to other, it needs to create its databases in the host device. So, to do so, the program itself creates its databases in the host system if the software is being run for the first time.

# Gaining Access

After the user has been verified as a human, the following interface is provided to the user:

SECURE LOCK

(The amazing password lock manager)

>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>

Write your root password

(enter '-help' or '-h' for any guidance)

=>

Then the program interface starts and asks for the root password which in later versions could be set up by the user, but this version of program is the MySQL password.

## Right Password

If the user enters the right password, then he gets access to the Main Menu of the software as illustrated below:

Write your root password

(enter '-help' or '-h' for any guidance)

=>

>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>

╔══════════════════════════════════════════╗

╠1)\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Log-in\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_╣

╠2)\_\_\_\_\_\_\_\_\_\_ Create new profile\_\_\_\_\_\_\_\_\_\_\_╣

╠3)\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Help\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_╣

╠4)\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ About \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_╣

╠5)\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Exit \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_╣

╠══════════════════════════════════════════╣

╠enter 'suggestions' to provide suggestions╣

╚══════════════════════════════════════════╝

=>[[4]](#footnote-5)

## Wrong Password

If the user enters a wrong password, then the program gives the user 3 retries, meaning a total of 4 attempts and again if the user fails in writing the right password, the program again terminates itself as depicted below:

Write your root password

(enter '-help' or '-h' for any guidance)

=>12345

Wrong password.

You have [3] attempt(s) left

Write your root password

(enter '-help' or '-h' for any guidance)

=>password

Wrong password.

You have [2] attempt(s) left

Write your root password

(enter '-help' or '-h' for any guidance)

=>khul ja sim sim

Wrong password.

You have [1] attempt(s) left

Write your root password

(enter '-help' or '-h' for any guidance)

=>...

Wrong password.

You have [0] attempt(s) left

PROGRAM TERMINATED

## Help

There is also a help menu provided to the user so that if in case they feel difficulty in running the program, they may use it to get information about the program, which can be accessed by entering ‘-h’ or ‘-help’.

Write your root password

(enter '-help' or '-h' for any guidance)

=>-h

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

The MySQL password is the root password for this

version of the program.

Root password is used to gain access to the software as well as for establishing connection with MySQL databases where all the system and profile data is recorded.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Write your root password

(enter '-help' or '-h' for any guidance)

=>

# Creating New Profile

After starting with the software, the user will create a profile, about which, the details are mentioned below:

## Simple and Direct Creation

╔══════════════════════════════════════════╗

╠1)\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Log-in\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_╣

╠2)\_\_\_\_\_\_\_\_\_\_ Create new profile\_\_\_\_\_\_\_\_\_\_\_╣

╠3)\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Help\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_╣

╠4)\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ About \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_╣

╠5)\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Exit \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_╣

╠══════════════════════════════════════════╣

╠enter 'suggestions' to provide suggestions╣

╚══════════════════════════════════════════╝

=>2

══════════════════════════════════════════════════

Write a name for your profile ('Exit' to exit) :Panda Wellson

Enter a password for your ID

[or simply hit "Enter" to generate a random password]

:panda

══════════════════════════════════════════════════

PASSWORD QUALITY : EXTREMELY WEAK

Continue with this password (Y/N)

=>y

Making Profile....Task Successful.

Make sure to remember your ID code or write it somewhere or else your ID cannot be unlocked

Your ID code is - BRLN

This code will also create a new table in the database storing the person’s details in encrypted form:

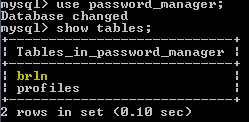


Figure Profile Create and savd in database

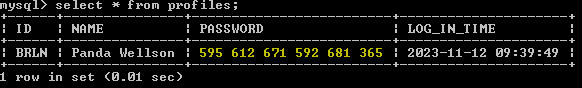


Figure profile password saved in encrypted form

## Using Password Generator

╔══════════════════════════════════════════╗

╠1)\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Log-in\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_╣

╠2)\_\_\_\_\_\_\_\_\_\_ Create new profile\_\_\_\_\_\_\_\_\_\_\_╣

╠3)\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Help\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_╣

╠4)\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ About \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_╣

╠5)\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Exit \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_╣

╠══════════════════════════════════════════╣

╠enter 'suggestions' to provide suggestions╣

╚══════════════════════════════════════════╝

=>2

══════════════════════════════════════════════════

Write a name for your profile ('Exit' to exit) :Osama Abdul

Enter a password for your ID

[or simply hit "Enter" to generate a random password]

:

══════════════════════════════════════════════════

Continue with 'J+WV'7\~pv'? (Y/N)

=>y

Making Profile....Task Successful.

Make sure to remember your ID code or write it somewhere or else your ID cannot be unlocked

Your ID code is - ABIB

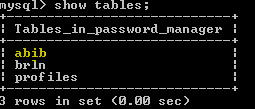


Figure Profile Created

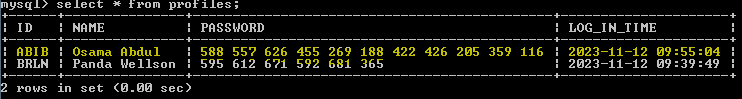


Figure New Profile added to Database With Random password

## Checking different Password Sterngths

╔══════════════════════════════════════════╗

╠1)\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Log-in\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_╣

╠2)\_\_\_\_\_\_\_\_\_\_ Create new profile\_\_\_\_\_\_\_\_\_\_\_╣

╠3)\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Help\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_╣

╠4)\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ About \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_╣

╠5)\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Exit \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_╣

╠══════════════════════════════════════════╣

╠enter 'suggestions' to provide suggestions╣

╚══════════════════════════════════════════╝

=>create

══════════════════════════════════════════════════

Write a name for your profile ('Exit' to exit) :Ramiya Bhopali

Enter a password for your ID

[or simply hit "Enter" to generate a random password]

:hello

══════════════════════════════════════════════════

PASSWORD QUALITY : EXTREMELY WEAK

Continue with this password (Y/N)

=>n Enter a password for your ID

[or simply hit "Enter" to generate a random password]

:hello123

══════════════════════════════════════════════════

PASSWORD QUALITY : NORMAL

Continue with this password (Y/N)

=>n

Enter a password for your ID

[or simply hit "Enter" to generate a random password]

:heLLo

══════════════════════════════════════════════════

PASSWORD QUALITY : VERY WEAK

Continue with this password (Y/N)

=>He11o

Invalid choice

Enter a password for your ID

[or simply hit "Enter" to generate a random password]

:He11o

═══════════════════════════════════════

PASSWORD QUALITY : WEAK

Continue with this password (Y/N)

=>n

Enter a password for your ID

[or simply hit "Enter" to generate a random password]

:He!1o

═══════════════════════════════════════

PASSWORD QUALITY : NORMAL

Continue with this password (Y/N)

=>N

Enter a password for your ID

[or simply hit "Enter" to generate a random password]

:He11oH0wISThis

═══════════════════════════════════════

PASSWORD QUALITY : STRONG

Continue with this password (Y/N)

=>n

Enter a password for your ID

[or simply hit "Enter" to generate a random password]

:He!1o\_u$er

═══════════════════════════════════════

PASSWORD QUALITY : EXCELLENT

Continue with this password (Y/N)

=>y

Making Profile....Task Successful.

Make sure to remember your ID code or write it somewhere or else your ID cannot be unlocked

Your ID code is – GXYU

## Sensetive Code

╔══════════════════════════════════════════╗

╠1)\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Log-in\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_╣

╠2)\_\_\_\_\_\_\_\_\_\_ Create new profile\_\_\_\_\_\_\_\_\_\_\_╣

╠3)\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Help\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_╣

╠4)\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ About \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_╣

╠5)\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Exit \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_╣

╠══════════════════════════════════════════╣

╠enter 'suggestions' to provide suggestions╣

╚══════════════════════════════════════════╝

=>create new profile

══════════════════════════════════════════════════

Write a name for your profile ('Exit' to exit) :ThisIsAVeryNiceProgramAndILoveItVeryVeryMuch!!!!!

Enter a password for your ID

[or simply hit "Enter" to generate a random password] :111111111111111111111111111111111111111111111111111111111111111111111111111111111111111111111111111111111111111111

══════════════════════════════════════════════════

The password cannot be this long.

Enter a password for your ID

[or simply hit "Enter" to generate a random password]

:123

══════════════════════════════════════════════════

PASSWORD QUALITY : EXTREMELY WEAK

Continue with this password (Y/N)

=>y

Making Profile....Task Successful.

Make sure to remember your ID code or write it somewhere or else your ID cannot be unlocked

Your ID code is - JIKH

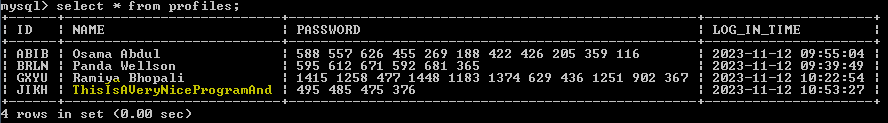


Figure Stripping name to the first 25 characters if it is too long

# Logging-In to Profile

After creating a profile, the user can access the profile and start using the software by the means which they please to. The user can now gain access to their own profile, using the password initialized by them while creating the profile.

After the user Logs-in to his/her profile, the following interface is presented before them:

╔══════════════════════════════════════════╗

╠1)\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Log-in\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_╣

╠2)\_\_\_\_\_\_\_\_\_\_ Create new profile\_\_\_\_\_\_\_\_\_\_\_╣

╠3)\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Help\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_╣

╠4)\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ About \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_╣

╠5)\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Exit \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_╣

╠══════════════════════════════════════════╣

╠enter 'suggestions' to provide suggestions╣

╚══════════════════════════════════════════╝

=>1

══════════════════════════════════════════════════

Please write your ID code:brln

Password :panda

══════════════════════════════════════════════════

\_\_\_\_\_\_\_Welcome back Panda Wellson\_\_\_\_\_\_\_

┏-----------------MENU-----------------┓

┃1) View credentials ┃

┃2) Add credentials ┃

┃3) Update old credentials ┃

┃4) Delete credentials ┃

┃5) Update ID password ┃

┃6) Delete Profile ┃

┃7) Log-out ┃

┗--------------------------------------┛

=>

## Access Denied

### No ID Found

╔══════════════════════════════════════════╗

╠1)\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Log-in\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_╣

╠2)\_\_\_\_\_\_\_\_\_\_ Create new profile\_\_\_\_\_\_\_\_\_\_\_╣

╠3)\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Help\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_╣

╠4)\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ About \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_╣

╠5)\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Exit \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_╣

╠══════════════════════════════════════════╣

╠enter 'suggestions' to provide suggestions╣

╚══════════════════════════════════════════╝

=>1

══════════════════════════════════════════════════

Please write your ID code:pqrs

No ID found

### Wrong Password

╔══════════════════════════════════════════╗

╠1)\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Log-in\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_╣

╠2)\_\_\_\_\_\_\_\_\_\_ Create new profile\_\_\_\_\_\_\_\_\_\_\_╣

╠3)\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Help\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_╣

╠4)\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ About \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_╣

╠5)\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Exit \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_╣

╠══════════════════════════════════════════╣

╠enter 'suggestions' to provide suggestions╣

╚══════════════════════════════════════════╝

=>log in

══════════════════════════════════════════════════

Please write your ID code:brln

Password :12345

Password :123

Password :abc

ACCESS DENIED

## Adding Credentials

The main task of password manager is to save credentials, and that process starts from here forth:

\_\_\_\_\_\_\_Welcome back Panda Wellson\_\_\_\_\_\_\_

┏-----------------MENU-----------------┓

┃1) View credentials ┃

┃2) Add credentials ┃

┃3) Update old credentials ┃

┃4) Delete credentials ┃

┃5) Update ID password ┃

┃6) Delete Profile ┃

┃7) Log-out ┃

┗--------------------------------------┛

=>2

~~~~~Adding new passwords to the database~~~~

Website name ('Exit' to exit):www.worldwildlife.org

Website password

[or simply hit "Enter" to get a suggestion]

:WwF123321

PASSWORD QUALITY : NORMAL

Continue with this password (Y/N)

=>Y

CREDENTIALS ADDED SUCCESSFULLY.

(Hit 'Enter' to continue.)

In the same manner, other records can also be added to the profile.

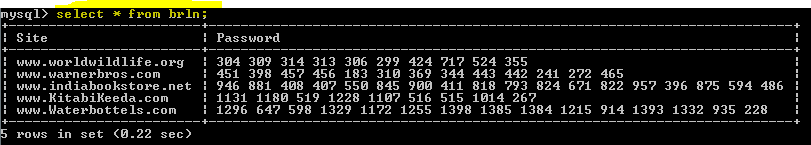


Figure Showing passwords in the profile of Panda Welson

## Viewing Credentials

This program at the current stage, provides only a simple menu for viewing, by which user can view the passwords which are saved by them in the software.

\_\_\_\_\_\_\_Welcome back Panda Wellson\_\_\_\_\_\_\_

┏-----------------MENU-----------------┓

┃1) View credentials ┃

┃2) Add credentials ┃

┃3) Update old credentials ┃

┃4) Delete credentials ┃

┃5) Update ID password ┃

┃6) Delete Profile ┃

┃7) Log-out ┃

┗--------------------------------------┛

=>view

~~~~~~~~~~~~~Showing Credentials~~~~~~~~~~~~~

---------------------------------------------------

|\_\_\_\_\_\_WEBSITE\_\_\_\_\_\_\_\_\_|\_\_\_\_\_\_\_\_\_PASSWORD\_\_\_\_\_\_\_\_|

|www.worldwildlife.org | WwF123321 |

| www.warnerbros.com | H@rrY\_P0tter |

|www.indiabookstore.net| Il0veRead1ngB00ks |

| www.KitabiKeeda.com | b00kw0rm |

|www.Waterbottels.com | NotLessthan15k |

---------------------------------------------------

(Hit 'Enter' to continue.)

## Updating Old Credentials

In case if the user has to update the password of any pre-existing profile, the software provides that user with the facility to do so by using ‘*Update old credentials*’ menu. It can be done in the following listed ways:

### Single Result Found

\_\_\_\_\_\_\_Welcome back Panda Wellson\_\_\_\_\_\_\_

┏-----------------MENU-----------------┓

┃1) View credentials ┃

┃2) Add credentials ┃

┃3) Update old credentials ┃

┃4) Delete credentials ┃

┃5) Update ID password ┃

┃6) Delete Profile ┃

┃7) Log-out ┃

┗--------------------------------------┛

=>update old

~~~~~~~~~Updating existing passwords~~~~~~~~~

Which password would you like to update?('Exit' to exit)

---------------------------------------------------

|\_\_\_\_\_\_WEBSITE\_\_\_\_\_\_\_\_\_|\_\_\_\_\_\_\_\_\_PASSWORD\_\_\_\_\_\_\_\_|

|www.worldwildlife.org | WwF123321 |

| www.warnerbros.com | H@rrY\_P0tter |

|www.indiabookstore.net| Il0veRead1ngB00ks |

| www.KitabiKeeda.com | b00kw0rm |

|www.Waterbottels.com | NotLessthan15k |

---------------------------------------------------

Website name ('Exit' to exit):www.warnerbros.com

══════════════════════════════════════════════════

1 result(s) found.

New password (Hit 'Enter' to suggest password) :#@rry\_P0tter

Confirm the password :#@rry\_P0tter

Your password quality is EXCELLENT

Continue with this password? (Y/N) :yes

PASSWORD UPDATED . . .

(Hit 'Enter' to continue.)

### No Result Found

There are chances that the password which the user is trying to update is not even present in his profile, referring to the case when the user has forgotten to save the password in the software and is directly trying to update it. The program responds to the problem in the following way:

\_\_\_\_\_\_\_Welcome back Panda Wellson\_\_\_\_\_\_\_

┏-----------------MENU-----------------┓

┃1) View credentials ┃

┃2) Add credentials ┃

┃3) Update old credentials ┃

┃4) Delete credentials ┃

┃5) Update ID password ┃

┃6) Delete Profile ┃

┃7) Log-out ┃

┗--------------------------------------┛

=>3

~~~~~~~~~Updating existing passwords~~~~~~~~~

Which password would you like to update?('Exit' to exit)

---------------------------------------------------

|\_\_\_\_\_\_WEBSITE\_\_\_\_\_\_\_\_\_|\_\_\_\_\_\_\_\_\_PASSWORD\_\_\_\_\_\_\_\_|

|www.worldwildlife.org | WwF123321 |

| www.warnerbros.com | H@rrY\_P0tter |

|www.indiabookstore.net| Il0veRead1ngB00ks |

| www.KitabiKeeda.com | b00kw0rm |

|www.Waterbottels.com | NotLessthan15k |

---------------------------------------------------

Website name ('Exit' to exit):www.bamboo.com

══════════════════════════════════════════════════

0 result(s) found.

Please check for any typos or spelling mistakes and retry.

Website name ('Exit' to exit):www.panda.com

══════════════════════════════════════════════════

0 result(s) found.

Please check for any typos or spelling mistakes and retry.

Website name ('Exit' to exit):exit

(Hit 'Enter' to continue.)

### Multiple Results Found

In current stage, the program does not have any advanced system to view or modify websites with similar name. But, in case the user wants to modify even a single one of the details, he/she has to modify all the other ones too:

#### Denying Permission to Change

\_\_\_\_\_\_\_Welcome back Panda Wellson\_\_\_\_\_\_\_

┏-----------------MENU-----------------┓

┃1) View credentials ┃

┃2) Add credentials ┃

┃3) Update old credentials ┃

┃4) Delete credentials ┃

┃5) Update ID password ┃

┃6) Delete Profile ┃

┃7) Log-out ┃

┗--------------------------------------┛

=>3

~~~~~~~~~Updating existing passwords~~~~~~~~~

Which password would you like to update?('Exit' to exit)

---------------------------------------------------

|\_\_\_\_\_\_WEBSITE\_\_\_\_\_\_\_\_\_|\_\_\_\_\_\_\_\_\_PASSWORD\_\_\_\_\_\_\_\_|

|www.worldwildlife.org | WwF123321 |

| www.warnerbros.com | H@rrY\_P0tter |

|www.indiabookstore.net| Il0veRead1ngB00ks |

| www.KitabiKeeda.com | b00kw0rm |

|www.Waterbottels.com | NotLessthan15k |

|www.indiabookstore.net| B00kS@reT@$ty |

---------------------------------------------------

Website name ('Exit' to exit) : www.indiabookstore.net

══════════════════════════════════════════════════

2 result(s) found.

www.indiabookstore.net

www.indiabookstore.net

Multiple results found.

Would you like to change all of them? (Y/N): n

Website name ('Exit' to exit):exit

(Hit 'Enter' to continue.)

#### Allowing Permission to Change

\_\_\_\_\_\_\_Welcome back Panda Wellson\_\_\_\_\_\_\_

┏-----------------MENU-----------------┓

┃1) View credentials ┃

┃2) Add credentials ┃

┃3) Update old credentials ┃

┃4) Delete credentials ┃

┃5) Update ID password ┃

┃6) Delete Profile ┃

┃7) Log-out ┃

┗--------------------------------------┛

=>3

~~~~~~~~~Updating existing passwords~~~~~~~~~

Which password would you like to update?('Exit' to exit)

---------------------------------------------------

|\_\_\_\_\_\_WEBSITE\_\_\_\_\_\_\_\_\_|\_\_\_\_\_\_\_\_\_PASSWORD\_\_\_\_\_\_\_\_|

|www.worldwildlife.org | WwF123321 |

| www.warnerbros.com | H@rrY\_P0tter |

|www.indiabookstore.net| Il0veRead1ngB00ks |

| www.KitabiKeeda.com | b00kw0rm |

|www.Waterbottels.com | NotLessthan15k |

|www.indiabookstore.net| B00kS@reT@$ty |

---------------------------------------------------

Website name ('Exit' to exit):www.indiabookstore.net

═══════════════════════════════════════

2 result(s) found.

www.indiabookstore.net

www.indiabookstore.net

Multiple results found.

Would you like to change all of them? (Y/N): yes

New password ( Hit 'Enter' to suggest password) :MasterMind

Confirm the password :MasterMind

Your password quality is NORMAL

Continue with this password? (Y/N) :yes

PASSWORD UPDATED . . .

(Hit 'Enter' to continue.) ══════════════════════════════════════════════════

\_\_\_\_\_\_\_Welcome back Panda Wellson\_\_\_\_\_\_\_

┏-----------------MENU-----------------┓

┃1) View credentials ┃

┃2) Add credentials ┃

┃3) Update old credentials ┃

┃4) Delete credentials ┃

┃5) Update ID password ┃

┃6) Delete Profile ┃

┃7) Log-out ┃

┗--------------------------------------┛

=>view

~~~~~~~~~~~~~Showing Credentials~~~~~~~~~~~~~

---------------------------------------------------

|\_\_\_\_\_\_WEBSITE\_\_\_\_\_\_\_\_\_|\_\_\_\_\_\_\_\_\_PASSWORD\_\_\_\_\_\_\_\_|

|www.worldwildlife.org | WwF123321 |

| www.warnerbros.com | H@rrY\_P0tter |

|www.indiabookstore.net| MasterMind |

| www.KitabiKeeda.com | b00kw0rm |

|www.Waterbottels.com | NotLessthan15k |

|www.indiabookstore.net| MasterMind |

---------------------------------------------------

(Hit 'Enter' to continue.)

#### Wrong Confirmation Entered

\_\_\_\_\_\_\_Welcome back Panda Wellson\_\_\_\_\_\_\_

┏-----------------MENU-----------------┓

┃1) View credentials ┃

┃2) Add credentials ┃

┃3) Update old credentials ┃

┃4) Delete credentials ┃

┃5) Update ID password ┃

┃6) Delete Profile ┃

┃7) Log-out ┃

┗--------------------------------------┛

=>3

~~~~~~~~~Updating existing passwords~~~~~~~~~

Which password would you like to update?('Exit' to exit)

---------------------------------------------------

|\_\_\_\_\_\_WEBSITE\_\_\_\_\_\_\_\_\_|\_\_\_\_\_\_\_\_\_PASSWORD\_\_\_\_\_\_\_\_|

|www.worldwildlife.org | WwF123321 |

| www.warnerbros.com | H@rrY\_P0tter |

|www.indiabookstore.net| MasterMind |

| www.KitabiKeeda.com | b00kw0rm |

|www.Waterbottels.com | NotLessthan15k |

|www.indiabookstore.net| MasterMind |

---------------------------------------------------

Website name ('Exit' to exit) : www.indiabookstore.net

══════════════════════════════════════════════════

2 result(s) found.

www.indiabookstore.net

www.indiabookstore.net

Multiple results found.

Would you like to change all of them? (Y/N): y

New password (Hit 'Enter' to suggest password) :mastermind

Confirm the password: mastermin

Passwords do not match.

Website name ('Exit' to exit):

## Deleting Credentials

### No Results Found

\_\_\_\_\_\_\_Welcome back Panda Wellson\_\_\_\_\_\_\_

┏-----------------MENU-----------------┓

┃1) View credentials ┃

┃2) Add credentials ┃

┃3) Update old credentials ┃

┃4) Delete credentials ┃

┃5) Update ID password ┃

┃6) Delete Profile ┃

┃7) Log-out ┃

┗--------------------------------------┛

=>4

~~~~~~~~~~Deleting existing password~~~~~~~~~

---------------------------------------------------

|\_\_\_\_\_\_WEBSITE\_\_\_\_\_\_\_\_\_|\_\_\_\_\_\_\_\_\_PASSWORD\_\_\_\_\_\_\_\_|

|www.worldwildlife.org | WwF123321 |

| www.warnerbros.com | H@rrY\_P0tter |

|www.indiabookstore.net| MasterMind |

| www.KitabiKeeda.com | b00kw0rm |

|www.Waterbottels.com | NotLessthan15k |

|www.indiabookstore.net| MasterMind |

---------------------------------------------------Website name ('Exit' to exit) :www.dholakpur.com

══════════════════════════════════════════════════

0 result(s) found.

No result like www.dholakpur.com found.

Website name ('Exit' to exit) :exit

(Hit 'Enter' to continue.)

### Single Result Found

\_\_\_\_\_\_\_Welcome back Panda Wellson\_\_\_\_\_\_\_

┏-----------------MENU-----------------┓

┃1) View credentials ┃

┃2) Add credentials ┃

┃3) Update old credentials ┃

┃4) Delete credentials ┃

┃5) Update ID password ┃

┃6) Delete Profile ┃

┃7) Log-out ┃

┗--------------------------------------┛

=>4

~~~~~~~~~~Deleting existing password~~~~~~~~~

---------------------------------------------------

|\_\_\_\_\_\_WEBSITE\_\_\_\_\_\_\_\_\_|\_\_\_\_\_\_\_\_\_PASSWORD\_\_\_\_\_\_\_\_|

|www.worldwildlife.org | WwF123321 |

| www.warnerbros.com | H@rrY\_P0tter |

|www.indiabookstore.net| MasterMind |

| www.KitabiKeeda.com | b00kw0rm |

|www.Waterbottels.com | NotLessthan15k |

|www.indiabookstore.net| MasterMind |

---------------------------------------------------

Website name ('Exit' to exit) :www.kitabikeeda.com

══════════════════════════════════════════════════

1 result(s) found.

Credentials of www.kitabikeeda.com deleted.

(Hit 'Enter' to continue.)

### Multiple Results Found

#### Denying Permission for Multiple Records

\_\_\_\_\_\_\_Welcome back Panda Wellson\_\_\_\_\_\_\_

┏-----------------MENU-----------------┓

┃1) View credentials ┃

┃2) Add credentials ┃

┃3) Update old credentials ┃

┃4) Delete credentials ┃

┃5) Update ID password ┃

┃6) Delete Profile ┃

┃7) Log-out ┃

┗--------------------------------------┛

=>delete credentials

~~~~~~~~~~Deleting existing password~~~~~~~~~

---------------------------------------------------

|\_\_\_\_\_\_WEBSITE\_\_\_\_\_\_\_\_\_|\_\_\_\_\_\_\_\_\_PASSWORD\_\_\_\_\_\_\_\_|

|www.worldwildlife.org | WwF123321 |

| www.warnerbros.com | H@rrY\_P0tter |

|www.indiabookstore.net| MasterMind |

|www.Waterbottels.com | NotLessthan15k |

|www.indiabookstore.net| MasterMind |

---------------------------------------------------Website name ('Exit' to exit) :www.indiabookstore.net

══════════════════════════════════════════════════

2 result(s) found.

www.indiabookstore.net

www.indiabookstore.net

Multiple results found.

Would you like to change all of them? (Y/N): n

Website name ('Exit' to exit) :exit

(Hit 'Enter' to continue.)

#### Allowing Permission for Multiple Records

\_\_\_\_\_\_\_Welcome back Panda Wellson\_\_\_\_\_\_\_

┏-----------------MENU-----------------┓

┃1) View credentials ┃

┃2) Add credentials ┃

┃3) Update old credentials ┃

┃4) Delete credentials ┃

┃5) Update ID password ┃

┃6) Delete Profile ┃

┃7) Log-out ┃

┗--------------------------------------┛

=>4

~~~~~~~~~~Deleting existing password~~~~~~~~~

---------------------------------------------------

|\_\_\_\_\_\_WEBSITE\_\_\_\_\_\_\_\_\_|\_\_\_\_\_\_\_\_\_PASSWORD\_\_\_\_\_\_\_\_|

|www.worldwildlife.org | WwF123321 |

| www.warnerbros.com | H@rrY\_P0tter |

|www.indiabookstore.net| MasterMind |

|www.Waterbottels.com | NotLessthan15k |

|www.indiabookstore.net| MasterMind |

---------------------------------------------------Website name ('Exit' to exit) :www.indiabookstore.net

══════════════════════════════════════════════════

2 result(s) found.

www.indiabookstore.net

www.indiabookstore.net

Multiple results found.

Would you like to change all of them? (Y/N): yes

Credentials of www.indiabookstore.net deleted.

(Hit 'Enter' to continue.)

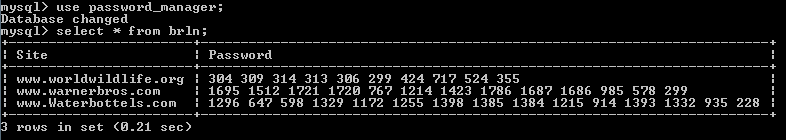


Figure Passwords Removed from database

## Updating ID Password

It might happen to the user that he want to change his profile’s password due to some reason like they want a stronger password, their password is known to someone else and so forth. So to solve the problem, Secure Lock provides the user with an option to update the ID’s log-in password. It can be done as shown below:

### Passwords cannot be confirmed

\_\_\_\_\_\_\_Welcome back Panda Wellson\_\_\_\_\_\_\_

┏-----------------MENU-----------------┓

┃1) View credentials ┃

┃2) Add credentials ┃

┃3) Update old credentials ┃

┃4) Delete credentials ┃

┃5) Update ID password ┃

┃6) Delete Profile ┃

┃7) Log-out ┃

┗--------------------------------------┛

=>5

~~~~Updating password of the main Account~~~~ Confirm your ID password ('Exit' to exit) :khul ja sim sim

ACCESS DENIED

(Hit 'Enter' to continue.)

### Updating Password Manully

\_\_\_\_\_\_\_Welcome back Panda Wellson\_\_\_\_\_\_\_

┏-----------------MENU-----------------┓

┃1) View credentials ┃

┃2) Add credentials ┃

┃3) Update old credentials ┃

┃4) Delete credentials ┃

┃5) Update ID password ┃

┃6) Delete Profile ┃

┃7) Log-out ┃

┗--------------------------------------┛

=>5

~~~~Updating password of the main Account~~~~

Confirm your ID password ('Exit' to exit) :panda

New Password (or hit 'Enter' to suggest password) :panda123

Your password quality is : NORMAL

Confirm your password :panda123

Password Updated . . .

(Hit 'Enter' to continue.)

### Updating Using password Generator

\_\_\_\_\_\_\_Welcome back Panda Wellson\_\_\_\_\_\_\_

┏-----------------MENU-----------------┓

┃1) View credentials ┃

┃2) Add credentials ┃

┃3) Update old credentials ┃

┃4) Delete credentials ┃

┃5) Update ID password ┃

┃6) Delete Profile ┃

┃7) Log-out ┃

┗--------------------------------------┛

=>5

~~~~Updating password of the main Account~~~~

Confirm your ID password ('Exit' to exit) :panda123

New Password (or hit 'Enter' to suggest password) :

Continue with 'F3WI])3#Yw' (Y/N) :y

Your password quality is : EXCELLENT

Confirm your password :F3WI])3#Yw

Password Updated . . .

(Hit 'Enter' to continue.)

## Logging-Out

The log-out button actually does as it says, it simply turns off the current user ID and moves back to the program’s main menu.

\_\_\_\_\_\_\_Welcome back Panda Wellson\_\_\_\_\_\_\_

┏-----------------MENU-----------------┓

┃1) View credentials ┃

┃2) Add credentials ┃

┃3) Update old credentials ┃

┃4) Delete credentials ┃

┃5) Update ID password ┃

┃6) Delete Profile ┃

┃7) Log-out ┃

┗--------------------------------------┛

=>log-out

Logging out . . .

>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>

╔══════════════════════════════════════════╗

╠1)\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Log-in\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_╣

╠2)\_\_\_\_\_\_\_\_\_\_ Create new profile\_\_\_\_\_\_\_\_\_\_\_╣

╠3)\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Help\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_╣

╠4)\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ About \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_╣

╠5)\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Exit \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_╣

╠══════════════════════════════════════════╣

╠enter 'suggestions' to provide suggestions╣

╚══════════════════════════════════════════╝

=>

## Invalid Input

Python programmers at low level generally ignore the consideration that the user can also enter random things in the input. But Secure Lock sees to this problem and return invalid if the user enters some random data in the input.

\_\_\_\_\_\_\_Welcome back Panda Wellson\_\_\_\_\_\_\_

┏-----------------MENU-----------------┓

┃1) View credentials ┃

┃2) Add credentials ┃

┃3) Update old credentials ┃

┃4) Delete credentials ┃

┃5) Update ID password ┃

┃6) Delete Profile ┃

┃7) Log-out ┃

┗--------------------------------------┛

=>what will happen now?

Invalid Choice

## Deleting Profile

If the user wants to delete his/her profile from the software, they may do so by using this function.

### Permission Allowed

╔══════════════════════════════════════════╗

╠1)\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Log-in\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_╣

╠2)\_\_\_\_\_\_\_\_\_\_ Create new profile\_\_\_\_\_\_\_\_\_\_\_╣

╠3)\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Help\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_╣

╠4)\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ About \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_╣

╠5)\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Exit \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_╣

╠══════════════════════════════════════════╣

╠enter 'suggestions' to provide suggestions╣

╚══════════════════════════════════════════╝

=>1══════════════════════════════════════════════════

Please write your ID code:jikh

Password :123

══════════════════════════════════════════════════

\_Welcome back ThisIsAVeryNiceProgramAnd\_

┏-----------------MENU-----------------┓

┃1) View credentials ┃

┃2) Add credentials ┃

┃3) Update old credentials ┃

┃4) Delete credentials ┃

┃5) Update ID password ┃

┃6) Delete Profile ┃

┃7) Log-out ┃

┗--------------------------------------┛

=>6

~~~~~~~~~~~~~Deleting The profile~~~~~~~~~~~~

Confirm your ID password ('Exit' to exit.):123

After deleting the profile, all the data that you have saved will be erased from your system and cannot be recovered by any means.

You won't be able to view any of these passwords and any of the information saved under this profile.

Are you sure you want to delete this profile? (Y/N)

:yes

ID -'JIKH' DELETED . . .

(Hit 'Enter' to continue.)

### Permission Denied

╔══════════════════════════════════════════╗

╠1)\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Log-in\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_╣

╠2)\_\_\_\_\_\_\_\_\_\_ Create new profile\_\_\_\_\_\_\_\_\_\_\_╣

╠3)\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Help\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_╣

╠4)\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ About \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_╣

╠5)\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Exit \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_╣

╠══════════════════════════════════════════╣

╠enter 'suggestions' to provide suggestions╣

╚══════════════════════════════════════════╝

=>1

══════════════════════════════════════════════════

Please write your ID code:brln

Password :panda

══════════════════════════════════════════════════

\_\_\_\_\_\_\_Welcome back Panda Wellson\_\_\_\_\_\_\_

┏-----------------MENU-----------------┓

┃1) View credentials ┃

┃2) Add credentials ┃

┃3) Update old credentials ┃

┃4) Delete credentials ┃

┃5) Update ID password ┃

┃6) Delete Profile ┃

┃7) Log-out ┃

┗--------------------------------------┛

=>6

~~~~~~~~~~~~~Deleting The profile~~~~~~~~~~~~

Confirm your ID password ('Exit' to exit.):delete

ACCESS DENIED

(Hit 'Enter' to continue.)

# Help Menu

Secure Lock provides the user with a help menu contained in its main menu telling in brief about the program.

╔══════════════════════════════════════════╗

╠1)\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Log-in\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_╣

╠2)\_\_\_\_\_\_\_\_\_\_ Create new profile\_\_\_\_\_\_\_\_\_\_\_╣

╠3)\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Help\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_╣

╠4)\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ About \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_╣

╠5)\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Exit \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_╣

╠══════════════════════════════════════════╣

╠enter 'suggestions' to provide suggestions╣

╚══════════════════════════════════════════╝

=>help

══════════════════════════════════════════════════

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

| MENU HELP

|| The menu provides a total of 5 functionalities which can be

|used very easily.

|To select a particular option, the user may enter the number in front

|of the option or may write the option manually

|(as written in the menu).

|

| Listed below are the description of the 5 of functionalities

|provided by the program. They work exactly as the name suggests

|about them:

|

|---LOG-IN

| Log-in function can be used by the pre-existing users of

| the program to view their profile, update them and modify them as

|the need requires them to.

|

|---CREATE NEW PROFILE

| This function can be used by the new users to create their

|profile in the software and join their journey with their new |password manager, Secure Lock, so that they be able to manage, |administer and save their passwords much more efficiently.

|

|---ABOUT

| This function tells information about the software and briefs

|about the function and its version.

|

|---EXIT

| This function is the most basic function and can be used to

|close the program and terminate the loop in which it is running.

|

|---SUGGESTIONS

| This is only a subsidiary function of the program which takes

|suggestions from the user about what changes could be made in the

|program and any improvements that they wish for in it, and saves

|them in a file which can later be checked on, and later help in

|developing the program in its later stages.

(Hit 'Enter' to continue.)

# About Menu

This menu tells about the program and its details. It tells us about the software information and other related things.

╔══════════════════════════════════════════╗

╠1)\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Log-in\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_╣

╠2)\_\_\_\_\_\_\_\_\_\_ Create new profile\_\_\_\_\_\_\_\_\_\_\_╣

╠3)\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Help\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_╣

╠4)\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ About \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_╣

╠5)\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Exit \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_╣

╠══════════════════════════════════════════╣

╠enter 'suggestions' to provide suggestions╣

╚══════════════════════════════════════════╝

=>about

══════════════════════════════════════════════════

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

SECURE LOCK

Secure Lock is a password manager which can maintain upto 4,56,976 profiles at once at current stage.

This program is currently in its build phases and does not provide too much functionality. This is only an alpha version for this program, meaning it is provided for testing and reviewing the program.

It is been foreseen that the program does not contain any errors and is set out in alpha so as to get suggestions from the users that, in what way can the interface of the program be improved and what advances could be made to make this program a preference for its clients over other password managers.

This program only uses simple graphical features for now, viz. simple animated lines and the slow print funcion. If having problem with those functions, the user may run the UI.py file on terminal to avoid those animated loading.

The current version for the software is 2.0.1

(Hit 'Enter' to continue.)

# Suggestions Tab

As this program is still under development and is in its alpha version, the developer(s) would like to know more about the *advancements and updates which can be made* in the program. For which a separate **‘*Suggestions* *menu*’** is provided to the user thorough which they can provide suggestions for the betterment of the software. The program thanks the user for giving the suggestions and also it returns a random message for thanking them. The suggestions tab can be accessed as follows:

╔══════════════════════════════════════════╗

╠1)\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Log-in\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_╣

╠2)\_\_\_\_\_\_\_\_\_\_ Create new profile\_\_\_\_\_\_\_\_\_\_\_╣

╠3)\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Help\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_╣

╠4)\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ About \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_╣

╠5)\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Exit \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_╣

╠══════════════════════════════════════════╣

╠enter 'suggestions' to provide suggestions╣

╚══════════════════════════════════════════╝

=>suggestions

══════════════════════════════════════════════════

~~~Please write your suggestions here~~~

Suggestion :The update feature can be improved from the user menu.

Thank you so much for your time.

Your suggestion will surely be considered.

(Hit 'Enter' to continue.)

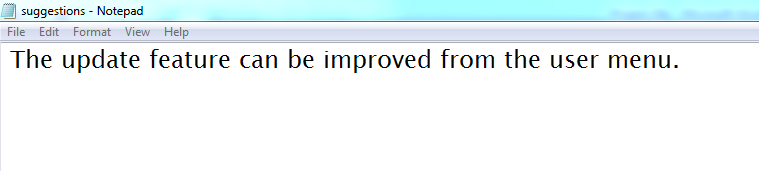


Figure Suggestion Saved in a Text Document

# Backdoor for Administrator

Secure Lock also provides the administrator with a backdoor to access the program and review the database and edit it without the requirement of the ID passwords, in layman’s language it can be said that *the program has a cheat code for the main user*. And the backdoor can be accessed through a special code which can be entered in the main menu to get the administrator access. The admin menu can be accessed as follows:

╔══════════════════════════════════════════╗

╠1)\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Log-in\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_╣

╠2)\_\_\_\_\_\_\_\_\_\_ Create new profile\_\_\_\_\_\_\_\_\_\_\_╣

╠3)\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Help\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_╣

╠4)\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ About \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_╣

╠5)\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Exit \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_╣

╠══════════════════════════════════════════╣

╠enter 'suggestions' to provide suggestions╣

╚══════════════════════════════════════════╝

=>```@dm!n```\_@ccess

══════════════════════════════════════════════════

┏--------------ADMIN MENU--------------┓

┃1) Profiles Log ┃

┃2) Delete Profiles ┃

┃3) View suggestions ┃

┃4) Clear Suggestions ┃

┃5) Log-out ┃

┗--------------------------------------┛

=>

The administrator can modify and delete the profiles of the people having profile in the program using the following interface.

## Viewing Profiles Log

The profile log show the user ID and also the most recent log-in time of the user.

┏--------------ADMIN MENU--------------┓

┃1) Profiles Log ┃

┃2) Delete Profiles ┃

┃3) View suggestions ┃

┃4) Clear Suggestions ┃

┃5) Log-out ┃

┗--------------------------------------┛

=>1

~~~Showing profiles and their recent log-in~~

-----------------------------------------------

| \_\_\_\_ID\_\_\_\_ | \_\_\_\_\_\_\_\_RECENT LOG-IN\_\_\_\_\_\_\_\_\_ |

| ABIB | 2023-11-12 09:55:04 |

| BRLN | 2023-11-12 17:35:45 |

| GXYU | 2023-11-12 10:22:54 |

-----------------------------------------------

(Hit 'Enter' to continue.)

## Deleting Profiles

The profiles can be deleted by the administrator freely without the use of any password. The user might need to delete the profile of a user due o inactivity or some other reasons. It is illustrated below of how the admin can delete a profile.

### No Such ID Found

┏--------------ADMIN MENU--------------┓

┃1) Profiles Log ┃

┃2) Delete Profiles ┃

┃3) View suggestions ┃

┃4) Clear Suggestions ┃

┃5) Log-out ┃

┗--------------------------------------┛

=>2

~~~~~~~~~~~~~~~Deleting profile~~~~~~~~~~~~~~

ID ('Exit' to exit)=>123

NO SUCH ID FOUND.

(Hit 'Enter' to continue.)

### id DELETED

┏--------------ADMIN MENU--------------┓

┃1) Profiles Log ┃

┃2) Delete Profiles ┃

┃3) View suggestions ┃

┃4) Clear Suggestions ┃

┃5) Log-out ┃

┗--------------------------------------┛

=>2

~~~~~~~~~~~~~~~Deleting profile~~~~~~~~~~~~~~

ID ('Exit' to exit)=>GXYU

ID 'GXYU' DELETED . . .

(Hit 'Enter' to continue.)

┏--------------ADMIN MENU--------------┓

┃1) Profiles Log ┃

┃2) Delete Profiles ┃

┃3) View suggestions ┃

┃4) Clear Suggestions ┃

┃5) Log-out ┃

┗--------------------------------------┛

=>PROFILES LOG

~~~Showing profiles and their recent log-in~~

-----------------------------------------------

| \_\_\_\_ID\_\_\_\_ | \_\_\_\_\_\_\_\_RECENT LOG-IN\_\_\_\_\_\_\_\_\_ |

| ABIB | 2023-11-12 09:55:04 |

| BRLN | 2023-11-12 17:35:45 |

-----------------------------------------------

(Hit 'Enter' to continue.)

## View Suggestons

The admin has the right to view the suggestions gven by the people which can be viewed as follows:

┏--------------ADMIN MENU--------------┓

┃1) Profiles Log ┃

┃2) Delete Profiles ┃

┃3) View suggestions ┃

┃4) Clear Suggestions ┃

┃5) Log-out ┃

┗--------------------------------------┛

=>view

The update feature can be improved from the user menu.

Want a GUI based version of the program.

Much excited for the next update.

Expecting for different viewing styles.

(Hit 'Enter' to continue.)

## Clear Suggestions

After the admin has reviewed the suggestions, they can clear the Suggestions-Log as follows:

┏--------------ADMIN MENU--------------┓

┃1) Profiles Log ┃

┃2) Delete Profiles ┃

┃3) View suggestions ┃

┃4) Clear Suggestions ┃

┃5) Log-out ┃

┗--------------------------------------┛

=>view

The update feature can be improved from the user menu.

Want a GUI based version of the program.

Much excited for the next update.

Expecting for different viewing styles.

(Hit 'Enter' to continue.)

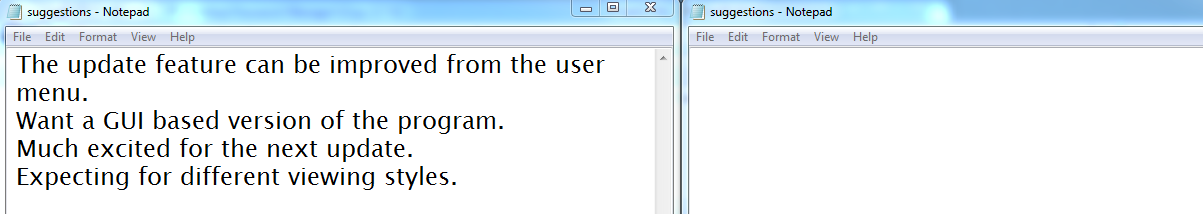


Figure Suggestion Log Cleared

## Logging-Out

After the admin has don the required tasks, they may log out. The following is displayed to them as they log-out.

┏--------------ADMIN MENU--------------┓

┃1) Profiles Log ┃

┃2) Delete Profiles ┃

┃3) View suggestions ┃

┃4) Clear Suggestions ┃

┃5) Log-out ┃

┗--------------------------------------┛

=>5

Have a nice day ! ! ! !

╔══════════════════════════════════════════╗

╠1)\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Log-in\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_╣

╠2)\_\_\_\_\_\_\_\_\_\_ Create new profile\_\_\_\_\_\_\_\_\_\_\_╣

╠3)\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Help\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_╣

╠4)\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ About \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_╣

╠5)\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Exit \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_╣

╠══════════════════════════════════════════╣

╠enter 'suggestions' to provide suggestions╣

╚══════════════════════════════════════════╝

=>

# Exiting the Program

As the user exits the program, they are provided with the following interface:

╔══════════════════════════════════════════╗

╠1)\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Log-in\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_╣

╠2)\_\_\_\_\_\_\_\_\_\_ Create new profile\_\_\_\_\_\_\_\_\_\_\_╣

╠3)\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Help\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_╣

╠4)\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ About \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_╣

╠5)\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Exit \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_╣

╠══════════════════════════════════════════╣

╠enter 'suggestions' to provide suggestions╣

╚══════════════════════════════════════════╝

=>exit

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EXITING THE PROGRAM . . . .

Have a nice day ! ! ! !

# Other Features

This program has some special things that are taken care of while making the program which are often neglected by people, these features make the program easier to use.

1. Understands the input give by user, irrespective of the case in which it is written.
2. Exit is provided which helps the user to go back to the previous interface in case they have entered a specific menu mistakenly or due to any typo.
3. It interprets the input even if numerous times space is used before or after the text (prevents errors caused due to naughty children from their silly tests ☺☺☺).
4. Gives the user a password generator at every time while they are entering a password.
5. Saves the password in an encrypted manner with a self-created module.
6. Prints the output gradually, making the interface more user friendly and giving it a bit of animated touch.
7. Waits for the user to hit enter before moving on to the next interface in order to avoid any confusion that can be caused *(Hit ‘enter’ to continue)*.

## Casefold

This function helps in understanding text irrespective of the case in which it is written.

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╠1)\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Log-in\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_╣

╠2)\_\_\_\_\_\_\_\_\_\_ Create new profile\_\_\_\_\_\_\_\_\_\_\_╣

╠3)\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Help\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_╣

╠4)\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ About \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_╣

╠5)\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Exit \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_╣

╠══════════════════════════════════════════╣

╠enter 'suggestions' to provide suggestions╣

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=>cReATe NeW PROfile

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Write a name for your profile ('Exit' to exit) :

## Exit Command

If the user enter wrong menu by mistake, they can quit it using ‘exit’ or ‘quit’.

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╠1)\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Log-in\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_╣

╠2)\_\_\_\_\_\_\_\_\_\_ Create new profile\_\_\_\_\_\_\_\_\_\_\_╣

╠3)\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Help\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_╣

╠4)\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ About \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_╣

╠5)\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Exit \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_╣

╠══════════════════════════════════════════╣

╠enter 'suggestions' to provide suggestions╣

╚══════════════════════════════════════════╝

=>2

══════════════════════════════════════════════════

Write a name for your profile ('Exit' to exit) :exit

>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>

╔══════════════════════════════════════════╗

╠1)\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Log-in\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_╣

╠2)\_\_\_\_\_\_\_\_\_\_ Create new profile\_\_\_\_\_\_\_\_\_\_\_╣

╠3)\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Help\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_╣

╠4)\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ About \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_╣

╠5)\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Exit \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_╣

╠══════════════════════════════════════════╣

╠enter 'suggestions' to provide suggestions╣

╚══════════════════════════════════════════╝

=>

## Strip

╔══════════════════════════════════════════╗

╠1)\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Log-in\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_╣

╠2)\_\_\_\_\_\_\_\_\_\_ Create new profile\_\_\_\_\_\_\_\_\_\_\_╣

╠3)\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Help\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_╣

╠4)\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ About \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_╣

╠5)\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Exit \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_╣

╠══════════════════════════════════════════╣

╠enter 'suggestions' to provide suggestions╣

╚══════════════════════════════════════════╝

=> log-in

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Please write your ID code:

POST IMPLEMENTATION

(Future update which can be Made)

There are multiple things which can still be implemented in the program and I as the developer am seeking to implement these things in the future in the program:

* Implementing the program as GUI based.
* Adding more features for the administrator.
* Launching it online.
* Making it more user-friendly.
* Updating the encrypting methods to store the data more securely.
* Introducing two-step verification process.
* Providing auto fill details in online browsers.
* Ensuring working on every browser.
* Providing multi-platform usability.
* Adding forgot password menu.
* Adding OTP verification for the first time user log-in.
* Increasing the profile limit from 4,56,976.

Software CD

( A compact disk containing the program and other documents.)

Software Requirements:

|  |  |
| --- | --- |
| **SYSTEM REQUIREMENT** | **REMARK** |
| OS | Any OS |
| Hardware Requirements | At least, 1 GB RAM;  124 MB storage (Minimum) |
| Required Software | * Python 3+ configured to path. * Module *mysql* installed. * MySQL Command Line Client (5.7 or 8.0) configured. |
| Contents of CD | * Source Code * Document files * Snapshots used in the project. |

1. SOURCE : [https://secureframe.com/blog/password-statistics](https://secureframe.com/blog/password-statistics#:~:text=A%20study%20by%20NordPass%20found,%2C%E2%80%9D%20and%20%E2%80%9Cqwerty.%E2%80%9D) [↑](#footnote-ref-2)
2. SOURCE: <https://www.comparitech.com/blog/information-security/password-statistics/> [↑](#footnote-ref-3)
3. SOURCE: <https://www.comparitech.com/blog/information-security/password-statistics/> [↑](#footnote-ref-4)
4. In this case the password is ‘’ or *<BlankSpace>* [↑](#footnote-ref-5)