Lab Eight

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Course: SDEV 300

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Files

- One python file. app.py
- Seven html files. Index.htm, calculator.html, home.html, login.html, register.html, result.htm, update_password.html
- one CSS file. Style.css
- Four images. Image1.japg, image2.jpg, image3.jpg, image4.jpg
- One Text, one .log file. Login_attempts.log, CommonPasswords.txt

Test Case	Test Description	Procedure	Input	Expected Output	Actual Output	Pass?
1	Test if the home page is properly displayed	+ run app.py + click on http://127.0.0.1:5000	None	Home page will be displayed	Home page is displayed	Yes
2a-a	Test if the web allows users to register.	+ run app.py + click on http://127.0.0.1:5000 + type 'adey' in username filed. + type '123!@#qweQWE' for password + click register	Username - adey Password - 123!@#qweQWE	The web will be routed to the login page	The web is routed to the login page	Yes
2a-b	Test if the web can check if the password meets the requirements during registration.	+ run app.py + click on http://127.0.0.1:5000 + type 'adey' in username filed. + type '123qwe' for password	Username - adey Password - 123qwe	Error message will be displayed	Error message displayed	Yes

		+ click register				
2a-c	Test if the registration form displays a message when clicked without any input.	+ run app.py + click on http://127.0.0.1:5000 + click register	None	Error message will be displayed	Error message displayed	Yes
2a-d	Check if the web compares the prospective secrete with the list in CommonPasswords.txt	+ run app.py + click on http://127.0.0.1:5000 + type 'adey' in username filed. + type 'password' for password + click register	Username - adey Password - password	Error message 'password is too common. Please choose a different password 'will be displayed	Error message ''password d is too common. Please choose a different password 'is displayed.	Yes
2a-e	Test if the user login once registered.	+ run app.py + click on http://127.0.0.1:5000 + type 'adey' in username filed. + type '123!@#qweQWE' for password + click register + type 'adey' in username filed. + type '123!@#qweQWE' for password + click login	Username - adey Password - 123!@#qweQWE	The web will be routed to the calculator page.	The web routed into the calculator page.	Yes
3a-a	Test if the web allows users to change their password.	+ run app.py + click on http://127.0.0.1:5000 + type 'adey' in username filed. + type '123!@#qweQWE' for password + click register	Old Password: '123!@#qweQWE' New password: 'qweQWE123!@#'	Password will be successfully updated and the web rerouted back to the calculator page.	Password is successfully updated and the web rerouted back to the calculator page.	Yes

|		+ click on update password link. + type '123!@#qweQWE' in old password field + type 'qweQWE123!@# in the new password field.				
3a-b	Test if the web display error message when user enter wrong old password during updating the password.	+ run app.py + click on http://127.0.0.1:5000 + type 'adey' in username filed. + type '123!@#qweQWE' for password + click register + click on update password link. + type '123' in old password field + type 'qweQWE123!@# in the new password field.	Old Password: '123!@#qweQWE' New password: 'qweQWE123!@#'	error message 'Invalid Old Password' will be displayed.	error message 'Invalid Old Password' is displayed	Yes
3a-c	Check if the web displays an error message when user attempts to enter a common password during password changing process.	+ run app.py + click on http://127.0.0.1:5000 + type 'adey' in username filed. + type '123!@#qweQWE' for password + click register	Old Password: '123!@#qweQWE' New password: 'password'	error message 'password is too common. Please choose a different password'	error message 'password is too common. Please choose a different password'	Yes

				will be displayed.	is displayed	
		+ click on update password link. + type 'password' in old password field + type 'qweQWE123!@# in the new password field.				
4a	Test if the code registers all failed login attempts.	+ run app.py + click on http://127.0.0.1:5000 + type 'adey' in username filed. + type '123' for password	Username - adey Password - f	A logger will register the date, time, Ip address of the failed login attempt.	A logger registered the date, time, Ip address of the failed login attempt.	Yes

Screenshots

1

2a-a

Login

Username | Password | Login

Not registered yet? Register here
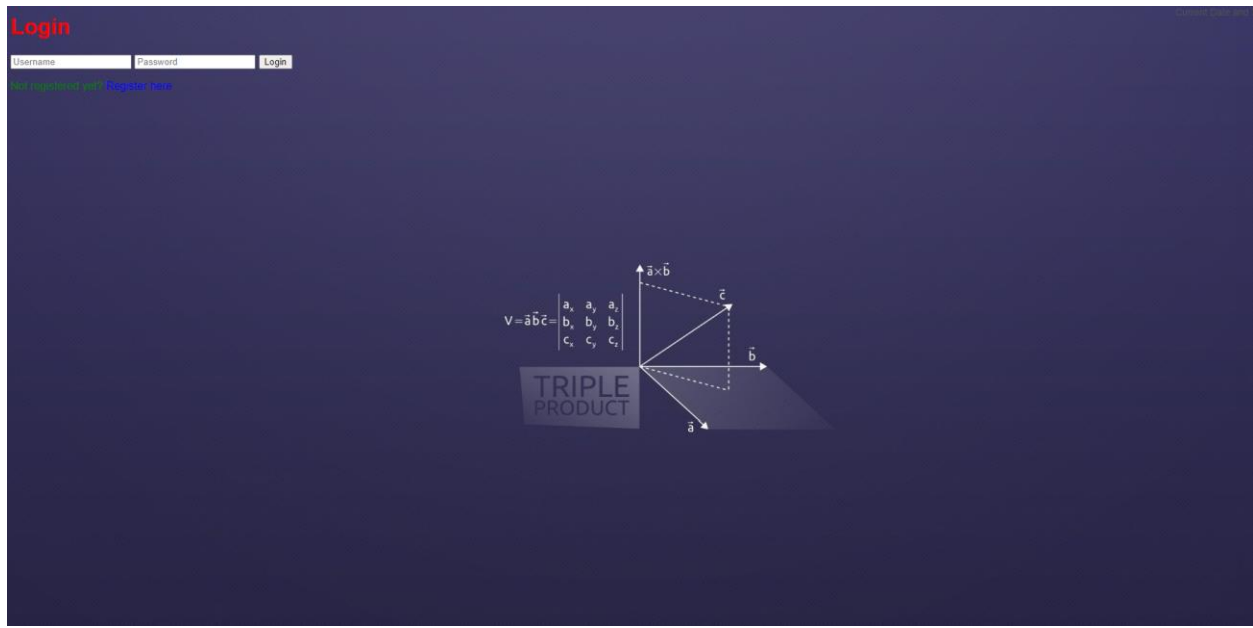
2a-b

Password must be at least - 12 characters long and contain at least - 1 uppercase letter - 1 lowercase letter - 1 number and 1 special character.

adey | •••••• | Register

Already registered? Login here

Update Password

2a-c

Username | Password | Register

! Please fill out this field. here

Update Password

2a-d

Password is too common. Please choose a different password.

Username | Password | Register

Already registered? Login here

Update Password

2a-e

Welcome, adey!

Enter number 1	Enter number 2	Addition (+) ▾	Calculate

Logout Update Password

Useful Links:

learn Addition and Subtraction
Math Drill
Order of Operation

YOUR

3a-a

Update Password

Old Password: [_____]

New Password: [_____]

[Update Password]

3a-b

Update Password

Invalid old password.

Old Password: [_____]

New Password: [_____]

[Update Password]

3a-c

Update Password

Password is too common. Please choose a different password.

Old Password: [•••••••••••••]

New Password: [••••••••]

[Update Password]

4a

```
2023-07-06 01:23:21,928 - INFO - Failed login attempt - Username: adey - IP Address: 127.0.0.1
```

Login

Invalid username or password.

[Username] [Password] [Login]

Not registered yet? Register here

Part II

a.   - .... / ... -.. . ...- / ...-- ----- ----- / -.-. .-.. .- ... ... / .... .- ... / ... --- -- . / ... - .-. .- -. --. . / .-. . --.- ..- .
...- ... .-.-.-   (Morse Code)

Decrypted Message: <mark>THIS SDEV 300 CLAS S HAS SOME STRANGE REQ UESTS.</mark>

Operating mode: Decrypt ⌄

The text to encode or decode:

```
- .... .. ... / ... -.. . ...- / ...-- ----- ----- / -.-. .-.. .- ...
... / .... .- ... / ... --- -- . / ... - .-. .- -. --. . / .-. . --.-
..- . ... - ... .-.-.-
```
Ⓖ

Remove: <u>letters</u>, <u>numbers</u>, <u>whitespace</u>, <u>other things</u>
Change: <u>lowercase</u>, <u>Natural case</u>, <u>Title Case</u>, <u>UPPERCASE</u>, <u>swap case</u>, <u>reverse</u>
<u>Make groups</u> of 5   and next line after 10   groups

<u>Swap dits and dahs</u>

```
THIS SDEV 300 CLAS
S HAS SOME STRANGE REQ
UESTS.
```

b.   U28gdGhpcyBpcyBiYXNlNjQuIE5vdyBJIGtub3cu   (Base64)

Decrypted Message: <mark>So this is base64. Now I know.</mark>

Operating mode: Decode ⌄

Message to encode or decode:

```
U28gdGhpcyBpcyBiYXNlNjQuIE5vdyBJIGtub3cu
```
Ⓖ

Remove: <u>letters</u>, <u>numbers</u>, <u>whitespace</u>, <u>other things</u>
Change: <u>lowercase</u>, <u>Natural case</u>, <u>Title Case</u>, <u>UPPERCASE</u>, <u>swap case</u>, <u>reverse</u>
<u>Make groups</u> of 5   and next line after 10   groups

```
So this is base64. Now I know.
```

c.   --- Psuwb Ysm ----

W oa gc qzsjsf. Bc cbs qcizr dcggwpzm twuifs hvwg cih.

--- Sbr Ysm ---   (Caesar)

Decrypted Message : <mark>o. --- Begin Key ---- I am so clever. No one could possibly figure this out. --- End Key ---</mark>

N: `14 ▾`

```
Letters: ABCDEFGHIJKLMNOPQRSTUVWXYZ
 Keyed: ABCDEFGHIJKLMNOPQRSTUVWXYZ
Encoded: OPQRSTUVWXYZABCDEFGHIJKLMN
```

```
c.       --- Psuwb Ysm ----
W oa gc gzsjsf. Bc cbs gcizr dcggwpzm twuifs hvwg cih.
 --- Sbr Ysm ---
```

Remove: letters, numbers, whitespace, other things
Change: lowercase, Natural case, Title Case, UPPERCASE, swap case, reverse
Make groups of `5` and next line after `10` groups

The following problems have been detected.

- Found a leading space in output
- Found a trailing space in output

```
o. --- Begin Key ----
I am so clever. No one could possibly figure this out.
 --- End Key ---
```

Pylint Analysis

1st Try:

```
C:\Users\zack1\PycharmProjects\lab8>pylint app.py
************* Module app
app.py:37:0: C0301: Line too long (111/100) (line-too-long)
app.py:84:0: C0301: Line too long (104/100) (line-too-long)
app.py:148:0: C0301: Line too long (143/100) (line-too-long)
app.py:153:0: C0301: Line too long (200/100) (line-too-long)
app.py:1:0: C0114: Missing module docstring (missing-module-docstring)
app.py:4:0: E0401: Unable to import 'passlib.hash' (import-error)
app.py:14:5: W1514: Using open without explicitly specifying an encoding (unspecified-encoding)
app.py:39:8: W0612: Unused variable 'flag' (unused-variable)
app.py:84:8: W1203: Use lazy % formatting in logging functions (logging-fstring-interpolation)
app.py:141:56: W0621: Redefining name 'file' from outer scope (line 14) (redefined-outer-name)
app.py:142:20: W0621: Redefining name 'common_passwords' from outer scope (line 11) (redefined-outer-name)
app.py:141:21: W1514: Using open without explicitly specifying an encoding (unspecified-encoding)
app.py:151:61: C0121: Comparison 'flag == False' should be 'flag is False' if checking for the singleton value False, or
 'not flag' if testing for falsiness (singleton-comparison)
app.py:142:20: W0612: Unused variable 'common_passwords' (unused-variable)
app.py:186:0: R1710: Either all return statements in a function should return an expression, or none of them should. (in
consistent-return-statements)

-----------------------------------------------------------------
Your code has been rated at 8.00/10 (previous run: 9.03/10, -1.03)
```

2nd Try:

```
C:\Users\zack1\PycharmProjects\lab8>pylint app.py
************ Module app
app.py:11:0: E0401: Unable to import 'passlib.hash' (import-error)
app.py:21:5: W1514: Using open without explicitly specifying an encoding (unspecified-encoding)
app.py:90:8: W1203: Use lazy % formatting in logging functions (logging-fstring-interpolation)
app.py:148:56: W0621: Redefining name 'file' from outer scope (line 21) (redefined-outer-name)
app.py:149:20: W0621: Redefining name 'common_passwords' from outer scope (line 18) (redefined-outer-name)
app.py:148:21: W1514: Using open without explicitly specifying an encoding (unspecified-encoding)
app.py:149:20: W0612: Unused variable 'common_passwords' (unused-variable)
app.py:199:0: R1710: Either all return statements in a function should return an expression, or none of them should. (i
consistent-return-statements)


------------------------------------------------------------------
Your code has been rated at 8.72/10 (previous run: 8.62/10, +0.11)
```