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SDEV 300 7383

May 7, 2024

## Lab 8

### Testing

| **Purpose** | **Input** | **Expected Output** | **Actual Output** |
| --- | --- | --- | --- |
| Standard Execution | | | |
| Login | http://localhost:5000/login | * adds new users * displays error logs |  |
| Register | http://localhost:5000/register | * adds new users * Updates old passwords * Insists on complexity and uncommonness |  |
| Character | http://localhost:5000/Ame (or Suvi or Eursulon) | * Well-formatted character wiki entries * Locked until login |  |

### Pylint

#### Output

\*\*\*\*\*\*\*\*\*\*\*\*\* Module lab8

lab7.py:40:0: C0116: Missing function or method docstring (missing-function-docstring)

lab7.py:41:4: W0621: Redefining name 'app' from outer scope (line 36) (redefined-outer-name)

lab7.py:43:8: E1120: No value for argument 'char' in function call (no-value-for-parameter)

lab7.py:58:4: W0603: Using the global statement (global-statement)

lab7.py:70:27: C0201: Consider iterating the dictionary directly instead of calling .keys() (consider-iterating-dictionary)

lab7.py:91:4: W0602: Using global for 'users' but no assignment is done (global-variable-not-assigned)

lab7.py:119:23: C0201: Consider iterating the dictionary directly instead of calling .keys() (consider-iterating-dictionary)

lab7.py:88:0: R0911: Too many return statements (9/6) (too-many-return-statements)

lab7.py:99:16: W0612: Unused variable 'line' (unused-variable)

lab7.py:131:4: W0603: Using the global statement (global-statement)

lab7.py:165:4: W0603: Using the global statement (global-statement)

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

Your code has been rated at 8.58/10 (previous run: 8.40/10, +0.19)

#### Discussion

* I put docstrings on every function for which it made sense.
* Iterating directly would allow for the use of a username as a sort of password search
* I do, in fact, assign users later in the function.
* Also, what's wrong with using the global statement?

## Decryption

1. **Morse Code**

THIS SDEV 300 CLASS HAS SOME STRANGE REQUESTS.

1. **Caesar Cipher (-12)**

--- Begin Key ----

I am so clever. No one could possibly figure this out.

--- End Key ---

1. **Base 64 encoding**

So this is base64. Now I know.

## Discussion

#### Logger

My logger.txt file formats entries like this,

*Username:*

*Password:*

*Time: 2024-05-07 14:16:36.164234*

*IP: 127.0.0.1*

*Username: Lou*

*Password: Wilson*

*Time: 2024-05-07 14:17:57.986553*

*IP: 127.0.0.1*

*\*\*Success\*\**

Using this file would make it very easy to spot brute force attempts (e.g. more than five failures in rapid succession from the same ip) and block that access.

#### Password security enforcement

The registration/update page currently provides the following feedback:

| **Input** | **Output** |
| --- | --- |
| Found in common passwords doc: | "Don't be so basic.” |
| Password less than 12 characters in length: | "Look's like you failed your length check. We only accept 12 and over. ;)" |
| No lowercase letters in password: | "Gonna need to see some halflings in there." |
| No lowercase letters in password: | "Gonna need to see some giants in there." |
| No lowercase letters in password: | "Gonna need to see some constructs in there." |
| No lowercase letters in password: | "Gonna need to see some aberrations in there." |
| Known User, Good Password: | ‘Your password familiar has been reincarnated.' > redirect ‘/login’ |
| New user, Good password: | "This looks like a great character. Come on in!" redirect ‘/login’ |