werkzeug.security Library Report

Code Repository	https://github.com/rdstrach/CSE312_Group_Project
License Type	BSD 3-Clause "New" or "Revised" License
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License Restrictions	• Copyright holders cannot be held liable
Who worked with this?	Ryan Strachan
Source code library	https://github.com/pallets/werkzeug

Function Name: generate_password_hash

Purpose:

The purpose of this function is to store hashes of passwords. Used on lines 102,159.

General Description:

This function takes either 2 or 3 arguments[password, hash type and salt length]; By default the salt length is 16 given no only 2 arguments. This project only uses 2 arguements for generate_password and thus all passwords will have a defualt salt length of 16 associated with it. A salt is generated werkzeug by using a secrets library, secrets library in which uses random processes from operating systems to generate random output. The set of random characters generated in salt is in the set of uppercase and lowercase letters as well as number 0 to 9, totaling 62 characters in the complete set. In which add 62 ^ 15 possible salts. this set of character can be found in the variable SALT_CHARS

Function Name: check_password_hash

Is to check if the plain text can generate the hash value, this done by removing the salt and then hashing the plain text to check if they match.

Magic section

Name	Code Origin/purpose	Discription
create_user	Project	Add user data to database
validate_registration_input	Project	Analysis user input for registration
login_validation	Project	Checks if user data is correct
user_data	Project	Obtain user data
user_exist	Project	Check if username exist
password_hash_gen	Project	outputs hash for password
generate_password_hash	Created by Flask	used in password_hash_gen to return output
next_id	Homework 1	Used for incrementing id
change_password	Project	Used to change password
check_password_hash	Created by Flask	Checks string is apart of salted hash outputed by generate_password_hash; used in login_validation