Evaluation

Success Measures:

Code structure: Breaking down code into smaller functions can enhance readability.

User Authentication: Ensure users can sign up with unique usernames and passwords and log in successfully.

User interaction: Ensure all functions are linked and that their buttons support user interaction for login and signup, in addition to buttons for start games and managing logout.

User Engagement: Display for user two educational games: word guessing and definitions matching.

Game difficulty: The program tracks scores and presents words according to the corresponding level achieved based on points.

Score Tracking: the program should track the score to update it in correct or incorrect answers.

File update: Updating the game scores associated with specific users in a file ensures that the progress is saved and can be retrieved later. Additionally, adding a username and password when signing up successfully in a file ensures access to the account

Evaluation of the Solution:

Code structure

- Organize each segment of the code to handle a specific task.
- Minimize indentation for clarity and readability.

> **Success :** Code is easily readable and works because it avoids indentation.

User Authentication

The solution enables users to register with unique usernames and passwords, ensuring successful login through a verification process that confirms the uniqueness and checks if the information already exists in the file before completing the signup process.

> **Success :** user unique usernames and passwords.

User interaction

The solution enables users to directly access the function related to each button by clicking on it.

Success: Interact with and click different buttons without encountering any exception errors. Also displaying helpful messages to guide the user

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User Engagement

-The word_guessing function presents a game where users guess words based on topics with showing the users their progress

-The definitions_matching function provides a matching game where users match words with their definitions

Success: In a word guessing game, enabled users to know the letters they've guessed to understand their progress, and in a definitions matching game, provided definitions and words for users to match the words with corresponding letters for definitions.

Game difficulty

-Both games have levels of difficulty based on users' scores

Success: To determine the words in the word guessing and definitions matching game, it depends on four levels of difficulty, each of which is determined by the points recorded in the file relating to the specific game.

Score Tracking

The solution accurately tracks users' scores for both games in the users_score.txt file.

Success: When the score updates correctly in the specific game score field in the file, the current score is displayed to the user after they've reached maximum guesses with incorrect answers or when they've provided the correct answer.

File changes

The solution involves adding or updating anything in the file.

Success: When a user's username and password are added to the file, the system should check for duplicates when logging in twice. When updating a score, it should only modify the relevant lines without appending to the existing ones. Additionally, it should ensure that updating only affects the score of the specific game being updated, not both games.