Criterion E

1. Login for users, with an additional dev key for teacher access to the solver.
   a. MET
   b. Users can login and register on the login page, if the developer key is recognized in a username when registering and logging in, that user has access to the solver.

2. The GUI should be simple and user friendly.

   a. MET
   b. GUI consists of only the essential elements, and two windows: a login window, and the main window.

3. Unique seed for every game, for fair competing with the same 16 words.

   a. MET
   b. Entering a new seed is as simple as copying it in and pressing the "Enter" button, and each unique seed is linked to a specific sequence of 16 words that never changes.

4. Timer to track progress and competing.

   a. MET
   b. A timer displaying minutes, seconds, and milliseconds that activates as soon as the first word is entered and stops as soon as the last word is solved.

5. The solver must be able to generate all 16 words within a few seconds.

   a. MET
   b. The solver generates the solution in under 1 second.

6. The solver should be able to solve all 16 words in 16-17 attempts.

   a. MET
   b. The solver is able to solve all 16 words in 16 attempts.

7. The solver and game should function consistently without crashing or producing errors.

   a. MET
   b. After client's extended amount of time spent playing the game, it has never crashed or produced errors.

Improvements

-   Live Keyboard Feedback: A useful addition would be a real-time keyboard display that highlights the letters entered so far. This would make it easier for users to keep track of what they've typed and avoid mistakes, especially when solving longer words.
-   Better UI & Visual Feedback: Right now, the UI works fine, but it could definitely be more intuitive and visually appealing. Adding small animations for correct/incorrect inputs and making the interface more responsive to user actions would make the game feel smoother and more engaging.

Extensibility

A final discussion with my client concluded that the project has a lot of potential for extra features in the future, like:

-   Leaderboard & Time Tracking: Adding a leaderboard where users can see their best times would make the game way more competitive and fun. It would also let players track their progress and try to beat their own records.
-   More Flexible Word Challenges: Right now, the game only works with a set number of words and lengths. A cool extension would be to let users pick how many words they want to solve (e.g., 16, 32, or 64 words) and also change the word length (e.g., 4-letter, 5-letter words, etc.). This would make the game way more customizable.
-   Adjustable Difficulty: Another idea is to make the game scale difficulty based on performance, so if a player is doing really well, it could automatically increase the challenge by adding more words or making them longer.

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