1. Login Form: Accessing the url http://localhost:5000/login should display the page
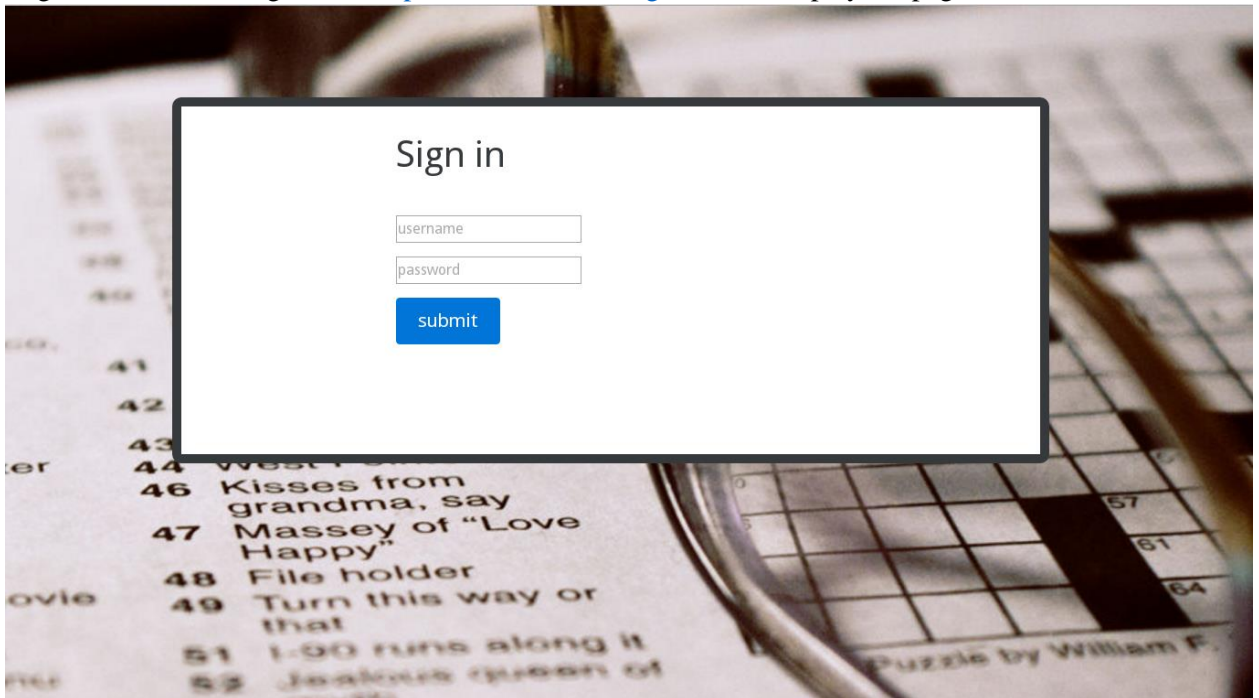

2. Login form - invalid input: If the user enters an incorrect username/password combination into the login form, the page should display an alert with the message: Login invalid.

3. Login form – SQL injection. Any attempt to inject SQL queries into the username or password fields of the login form (for instance ' AND 1=1;) should result in no effect.

4. Login Form – cross side scripting: Any attempt to inject Javascript into the username or password fields of the login form (for instance <script>alert("hello");</script> should result in the user being created without the Javascript executing.

5. Login – redirect: Upon successful login, the site will redirect to the main game page, with the player's username and high score displayed at the top.

6. Sign Up Form: Accessing the url http://localhost:5000/signUp should display the page
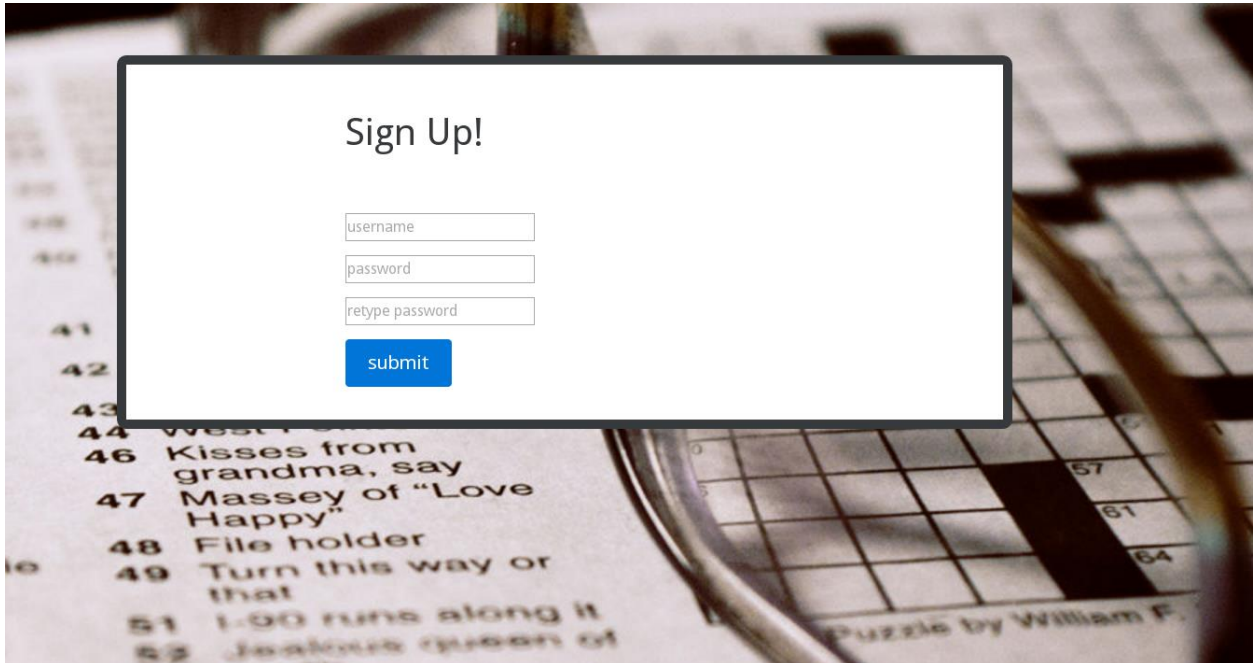
7. Sign Up Form- Invalid input: if the username field is left blank, the page should display an alert with the message: Username invalid.

8. Sign Up Form – Invalid input: if the password field is left blank, the page should display an alert with the message: Password invalid.

9. Sign Up Form – Invalid input: if the password and retype password fields do not match, the page should display an alert with the message: "Passwords do not match."

10. Sign Up Form – SQL injection: any attempt to inject SQL queries into any field in the sign up form (for instance ' AND 1=1) should result in no effect.

11. Sign Up Form – cross side scripting: any attempt to insert Javascript into any field in the sign up form (for instance <script>alert("hello");</script>) should result in a user being created with that login information, and the Javascript will not be executed.

12. Sign Up Form – successful signup: A successful signup should result in the user being logged in and the browser redirecting to the main game page, which will display the username/high score at the top.

13. Hint button: Clicking the hint button should pop up an alert with the next correct letter:
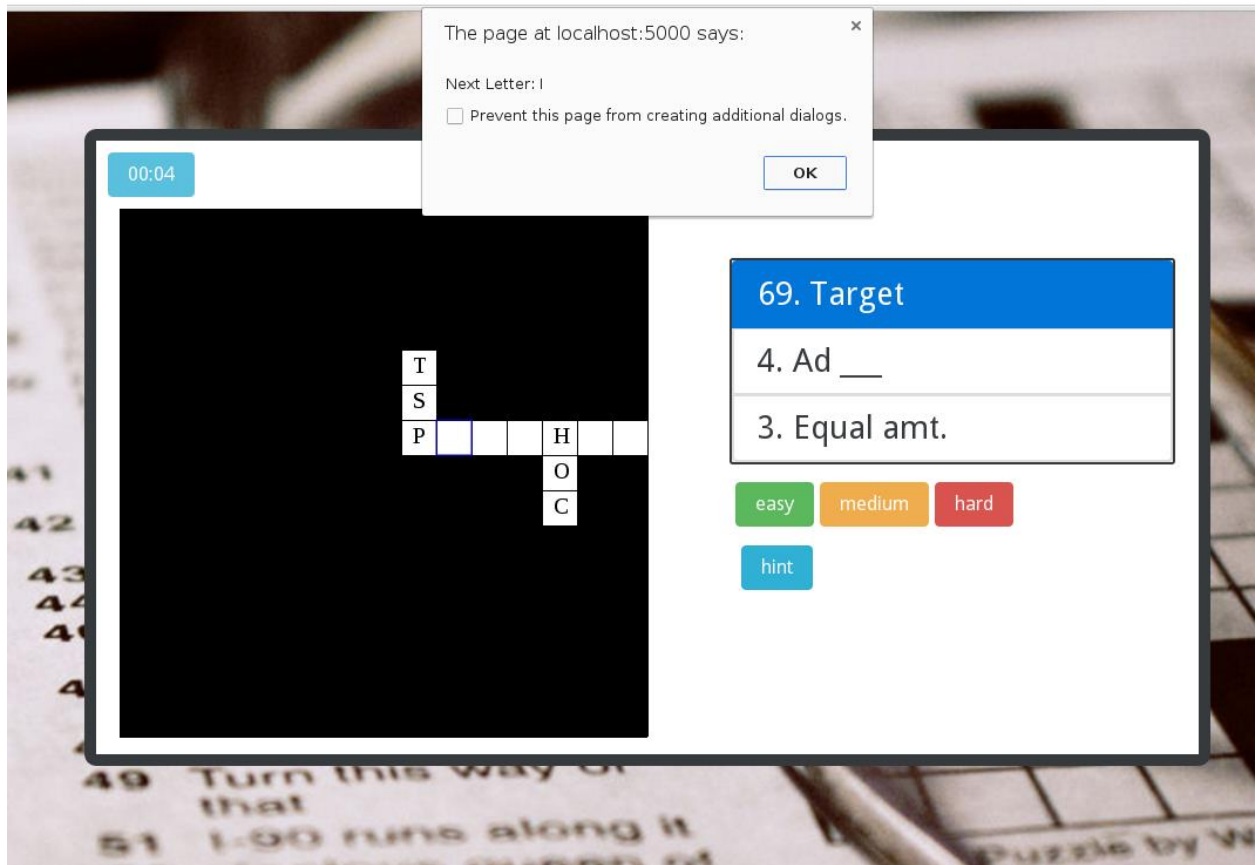
14. Username: If a user has logged in via the login page, their username should display above the top right of the puzzle.

15. Score – Logged In: If a user has logged in via the login page, their all time high score should display above
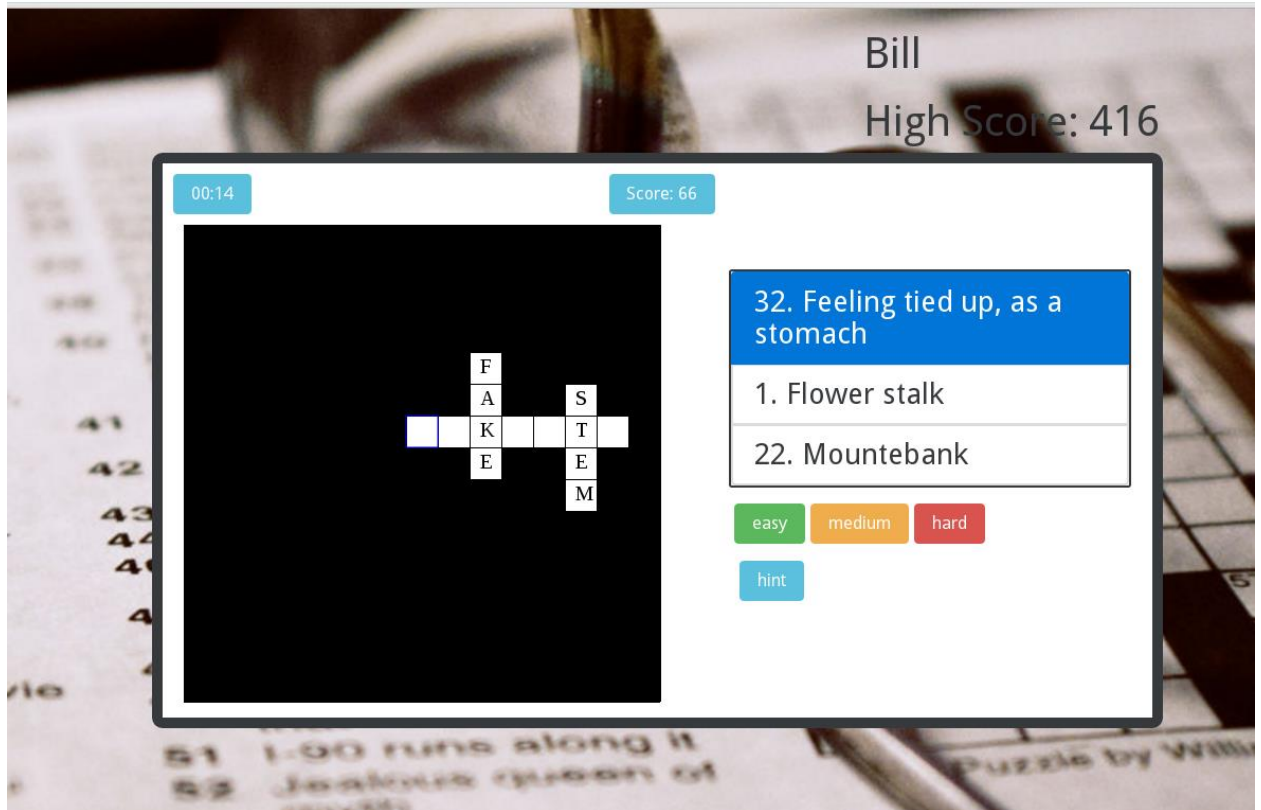
16. Score – not logged in: if the user is not logged in, the high score should start at 0 and still increment, but it will not save to the database.
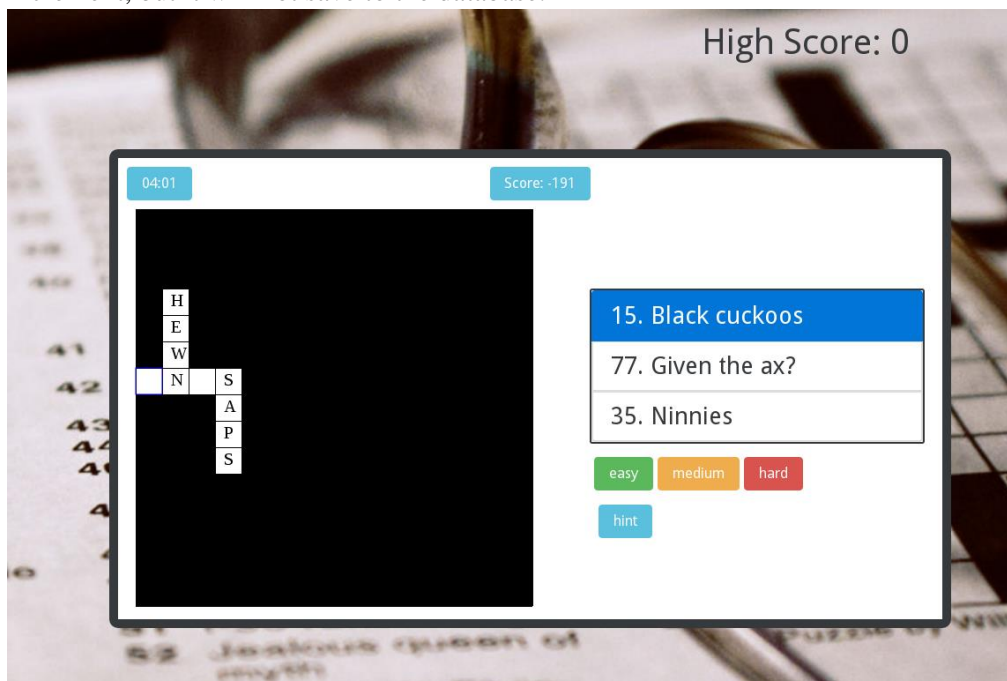
17. Score: If the player beats their previous high score, the high score should be incremented appropriately.
18. Score- Save to database: If the player logs out and logs back in, their most recent high score should be persistent across logins, as it is retrieved from the database.