## Evaluation

The product successfully meets the success criteria outlined in Criteria A. The login system functions as intended, allowing users to register and authenticate securely. Input validation ensures that usernames and passwords adhere to the specified criteria, preventing invalid inputs and ensuring user security. The role-based access system effectively differentiates between teacher and student accounts, providing the appropriate functionalities for each type of user. The typing test feature includes three distinct modes, Speed Test, Sprint, and Endless, providing a diverse range of challenges to keep students engaged. The performance tracking system effectively records typing speed (WPM), accuracy, and error count, offering valuable insights into the student's progress. Teachers can assign tasks with specific parameters, and the assignment system correctly tracks completion and deadlines. Feedback from my client indicates a positive reception of the product.[1] Mr. X acknowledged the engaging nature of the typing exercises and noted that students were more motivated due to the competitive aspect. The ability to monitor student progress through the statistics dashboard was also highlighted as a particularly useful feature. However, Mr. X suggested that more in-depth statistics, such as real-time progress tracking and error mapping, could further enhance the learning experience. From my personal evaluation, the product is intuitive and user-friendly. The interface is well structured, ensuring easy navigation. While the core functionalities perform as expected, there are opportunities for enhancements to improve usability and engagement further.

Word count: 231

## Recommendations for Improvement

Based on feedback and evaluation, several enhancements could be made to further improve the product. Introducing a multiplayer feature where students can compete in real time would significantly enhance engagement. This feature would allow students to race against their classmates, adding a social element and further enhancing the competitive aspect. Afterwards, a leaderboard could be shown which tracks the top performers, motivating students to improve. Implementation would require a WebSocket based real-time communication system to synchronize user inputs during races. Another improvement that could be made is expanding the statistics page, as Mr. X suggested. Tracking typing speed and accuracy throughout a text, and creating a graph to show these fluctuations would offer students deeper insights into their typing performance. This can allow students to identify specific areas of improvement, and help to provide a clearer picture of their long-term progress. This could be achieved by recording statistics at many points throughout the typing test and implementing a dynamic graphing library. Additionally, to further personalize the learning experience, an adaptive difficulty system could be implemented. In this system, the complexity of passages automatically adjusts based on user

[1] See Appendix 3

performance. The ability for teachers to create custom lesson plans could also be introduced. This would allow teachers to select specific texts tailored to student needs, ensuring that students receive appropriate challenges based on their skill level. By implementing these enhancements, the product would offer a more interactive and personalized experience, leading to greater student engagement and improved results over time.

Word count: 248