## **Appendix 1: First Meeting (09/16/2024) - Identifying the Problem**

Objective: Determine the problem to be solved.

Me: Good afternoon, Mr. X. Thanks for meeting with me. I wanted to discuss your concerns regarding your students' typing skills and how I can develop a solution.

Mr. X: Good afternoon! Yes, I've noticed that many students struggle with typing speed and accuracy, which is negatively affecting their performance in class. When they need to type essays or complete digital assignments, they take too long, and their errors slow them down even more.

Me: I see. Have you tried any traditional methods to improve their typing?

Mr. X: Yes, I've given them typing drills and suggested online typing programs, but they find them boring. They lack engagement, and don't feel motivated to practice.

Me: So, it sounds like the main issue is engagement. Since they aren't motivated, they don't practice enough to improve.

Mr. X: Exactly. One thing I've noticed is that my students are naturally competitive. If there were a way to incorporate competition into learning, I think they would engage more.

Me: That's an interesting point. So, if I could design a solution that makes typing more interactive and competitive, would that be beneficial?

Mr. X: Absolutely. A tool that tracks their progress, lets them compete, and encourages them to practice could make a real difference.

Me: Great! I'll take these points into consideration and come back with a proposal. I'll explore possible technologies and frameworks that could work well for this solution.

Mr. X: Sounds good. Let me know when you have something to show me.

## **Appendix 2: Second Meeting (10/10/2024) - Presenting the Solution**

Objective: Propose the solution and confirm its adequacy.

Me: Thanks for meeting again, Mr. X. After our last discussion, I researched ways to make typing practice more engaging. I'd like to present my proposed solution.

Mr. X: Of course! I'm eager to see what you've come up with.

Me: I plan to develop a web-based typing game that incorporates competition and interactive elements to keep students engaged. Instead of static drills, the game will have different typing challenges where students can track their progress and improve their typing speed and accuracy.

Mr. X: That sounds promising! How will it be structured?

Me: There will be three main game modes:

Speed Test: A short timed typing test to measure words per minute (WPM) and accuracy. Sprint Mode: A fixed-length passage that students must complete as quickly and accurately as possible.

And Endless Mode: A continuous typing challenge where students can track improvement over extended practice sessions.

Mr. X: I like the variety. But how will it incorporate competition?

Me: I'll include a progress-tracking dashboard where students can see their WPM and accuracy over time

Mr. X: That's excellent. Will teachers be able to monitor student progress?

Me: Yes! I'll implement role-based access control, so teachers will have their own accounts where they can create classes, assign tasks, and track student performance.

Mr. X: That's great. What about accessibility?

Me: Since this will be a web-based application, students can access it from any device with an internet connection. This eliminates the need for installations and ensures they can practice from anywhere.

Mr. X: That sounds very well thought out. When do you think you'll have a working prototype?

Me: I'll start implementing the core features soon, and I should have a prototype in a few months.

Mr. X: That's great. I'm looking forward to seeing how this develops!

## Appendix 3: Third Meeting (02/04/2025) - Client Feedback Session

Objective: Gather feedback on the implemented product.

Me: Hi Mr. X, thanks for meeting with me again. I've finished developing the typing game, and I'd love to hear your feedback.

Mr. X: I've tested it with some students, and I have to say, it's impressive! The students were much more engaged than with previous methods.

Me: That's great to hear! Were they motivated to keep practicing?

Mr. X: Definitely. The statistics tracking made them eager to improve. Some students even started competing against each other to see who could type the fastest.

Me: That's exactly what I was hoping for! Do you have any suggestions for improvement?

Mr. X: One thing that could make it even better is real-time competition. If students could race against each other in real time, I think it would add another layer of excitement.

Me: That's a great idea! I could implement WebSockets to allow for real-time multiplayer typing races.

Mr. X: Also, the statistics page is useful, but it could be improved by adding more tracking and progress graphs so students can see where they struggle.

Me: I think that could be a great addition! I could have it track WPM and accuracy at many points throughout the typing test and graph the results.

Mr. X: Overall, I think this is a fantastic tool, and it has real potential. Once these additional features are refined, I believe it will be an even more effective learning tool.

Me: Thank you for the feedback, Mr. X!