**CSF QA Assessment – Mahmood Badr**

**Something is not displaying properly in the browser, and you want to learn more about it. How do you go about doing that? (Looking for what tools and specific steps you would take to investigate the error)**

When troubleshooting display issues in a web browser, I start by carefully assessing the problem to understand its specific nature and scope. Using developer tools like Chrome DevTools or Firefox Developer Tools, I examine into the HTML, CSS, and JavaScript affecting the element that isn’t displaying properly. The browser console is a good first step for identifying any errors or warnings that might help with the issue. Additionally, the network tab helps me pinpoint any failed or slow-loading resources, such as images or scripts, that could be causing the problem. When it comes to CSS, I review the applied styles, looking for conflicts or unexpected behavior. Similarly, for JavaScript-related issues, I employ debugging tools like breakpoints and console logging to track down logic errors or unexpected behavior. It's also crucial to consider browser compatibility, testing the webpage across different browsers and versions to isolate any compatibility issues.

If recent changes were made to the codebase, I turn to version control history to identify potential causes and perform regression testing to confirm if the issue arose from recent updates. I also tap into documentation and online communities for insights and solutions to common display issues. Collaboration with team members, especially those with frontend development expertise, is key to resolving complex problems effectively. By following this systematic approach and leveraging various tools and resources, I can identify and resolve such a problem.

**Have you ever broken a piece of software? How did you break it? How did you fix it?**

Yes, I have broken a piece of software during the early stages of developing a cross-platform language immersion app. One significant problem arose when trying to open external media through the app. Initially, the app would redirect users to a browser, which disrupted the seamless user experience I aimed to provide. To address this, I decided to create an in-app browser substitute. However, my changes resulted in the in-app browser not switching properly between light and dark modes due to the inherited Material UI theme, which automatically manages theme switching. To fix this, I had to adjust the theme settings within the app to ensure proper functionality across different modes, thereby maintaining a seamless user experience.

**Describe your experience with code review.**

My experience with code review includes both giving and receiving feedback on code quality, functionality, and adherence to coding standards. During my studies, software engineering internship, and research position, code review was an integral part of the development process. I've participated in thorough code reviews where team members examined each other's code for potential bugs, optimization opportunities, and adherence to project requirements. Additionally, I've provided constructive feedback during code reviews, focusing on clarity, maintainability, and efficiency. Through this process, I've learned to both give and receive feedback professionally, fostering a collaborative environment aimed at improving overall code quality and project success. Code review was especially emphasised during my Data Structures and Algorithms class where we did a weekly code review for our project submissions.