I used Profiling Tool - DevTools Performance tab, whichconfirmed the backend crashed during the search request. (Kloda, 2025a) It was cause because return object format didn’t match with the front end trying to parse it.

Refactored SemanticSearchBar.js reduced bug reports in subsequent sprints - test update. (Kloda, 2025b)

Python debugger determined the point of failure, which helped me detect where I should refactor code. (Kloda, 2025c)

he application experienced significant delays during rendering, with Firefox DevTools showing high CPU usage in paint and refresh cycles caused by inefficient DOM updates and frequent event handling. To address this, I refactored the indexing logic to optimize CPU performance by reducing redundant computations and improving how data was processed before rendering.

# References

Kloda (2025). [online] github. Available at: [Accessed 21 May 2025]. https://github.com/Jkloda/LOJuliaKloda/blob/main/LongTailOfTheSoftwareCycle/STRIDE.xlsx

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