

I used ChatGPT-4 to assist with a project, as it stores all data and sessions across many months instead of just one session, allowing me to go back and revisit previous discussions. While this wasn't strictly necessary, the entire process took around 8 hours in one continuous go. The AI helped me with programming, understanding concepts, and troubleshooting. However, I found that it struggled significantly with assembly code; all the AI-generated code was incorrect and didn't meet expectations.

That said, for the design phase, documentation, and building boilerplate code to work from, the AI definitely saved me many hours of trial and error. It also helped by summarizing key information from the ARMv7 DE1-SoC PDF and the lab assignment, offering useful guidance on which code to use and where to find relevant information.

Overall, AI is a powerful tool if you know how to use it and already have a solid understanding of assembly. If I were a beginner using AI for assembly, I would not have been able to accomplish much, as a foundational knowledge of assembly is necessary to utilize the AI effectively. The AI also struggled with debugging memory issues or handling more sophisticated code structures.

In the end, the AI saved me around 4 hours of work while still allowing me to learn and challenge myself.

- Written by me and grammatically corrected by ChatGPT 😊