Module 5 Journal

CS 499: Computer Science Capstone

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The two trends I have seen have been AI integration and NPM overuse. The AI integration is growing larger and more efficient every day and may one day take over for main programming. NPM overuse on the other hand seems to be lowering the skills of aspiring programmers by offering them packages to do every little thing. Over time AI integration has been making the bar to entry for programming lower and at the same time it has made current programmers more efficient with systems integrated into visual code and many other IDEs. On the other hand NPM overuse has changed many new programmers from creating their own functions to using an existing function someone has even if they don’t actually know how it works or if it is efficient.

I think AI integration will mostly go unfelt by the average consumer except in parts where its use leads to repetitive systems or subpar programming as what happens when someone completely relies on AI. NPM overuse is similar as on the consumer’s end they will not see how the code has been laid out. There may sometimes be slower service if there are too many NPM packages or the ones used are very inefficient. I have just started utilizing some smart code features of visual code but those are just autofill and dependency suggestions. Going forward I think I will need to look into more uses and integration with AI. I think when it comes to NPM use that I will need to learn which are necessary/useful and which are crutches/going to slow down my projects or may inject more security risks.

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| **Checkpoint** | **Software Design and Engineering** | **Algorithms and Data Structures** | **Databases** |
| **Name of Artifact Used** | CS 340 | CS 340 | CS 340 |
| **Status of Initial Enhancement** | Partial. Started conversion but didn’t not finish complete functionality. | Delayed due to issues with API integration will come back before end of course | Started API integration. Got calls to work but being blocked so more work needed. Seeded database successfully with real rescues data. |
| **Submission Status** | Second submission |  | First submission |
| **Status of Final Enhancement** | Could not get Piechart to work. Enhanced and finished table. Added geolocation based on animal selected. Added filters for specific rescue types. |  |  |
| **Uploaded to ePortfolio** |  |  |  |
| **Status of Finalized ePortfolio** |  |  |  |

**Status Checkpoints for All Categories**