Narrative to Successful Coding  
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10AUG2025

Over the journey of improving Travlr Getaways and InvenTitan, I focused a lot on the roles of different APIs and improving my database design as the backbone a solid software. In Travlr Getaways, I improved the MongoDB schemas, implemented JWT-secured APIs, and streamlined the data traversal between Angular SPA and Express backend. This not only improves the security and performance of the application but also shows my ability to create scalable, professional systems. For InvenTitan, I migrated the original Android SQLite logic I already had into Flutter while preparing the app for cloud expansion through Firebase and AWS. This system shows my understanding of both mobile databases and enterprise systems. Together, these artifacts show my ability to integrate clean API communication and organized databases into real applications.

These enhancements directly connect to some of my main goals as they show some of the most important skills needed in today’s industry such as building modular APIs, managing secure databases, and looking at future needs. They also show my progress towards the computer science program needs by showing my ability to solve problems using algorithmic principles, design resilient database builds, and applying security practices to protect their data. Both artifacts are now finalized in my ePortfolio, with only minor changes needed. The projects show that I can not only create a working application but also show that I can refine them with the long-term vision in mind meeting the requirements of scalability, security, and real-world usage in mind.

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| Checkpoint | Software Design and Engineering (Travlr Getaways) | Algorithms and Data Structures (InvenTitan) | Databases (Travlr and InvenTitan) |
| Name of the Artifact Used | Travlr Getaways (Full Stack MEAN App) | InvenTitan (Flutter Inventory App) | Travlr (MongoDB) and InvenTitan (SQLite/Firebase/AWS) |
| Status of Initial Enhancement | Completed JWT security, Angular reactive forms | Completed CRUD with SQLITE, structured data model | Completed Schema refinements, migration options |
| Submission Status | Submitted For Review | Submitted For Review | Submitted For Review |
| Status of Final Enhancement | Final polish with API documentation updates | Final polish with optional edit feature | Final polish for the finalized database notes |
| Uploaded to ePortfolio | Yes, in progress | Yes, in progress | Yes, in progress |
| Status of Finalized ePortfolio | Pending final edits, screenshots, and feedback | Pending final edits and feedback | Pending final edits and feedback |