Team Learnings from the Online Shopping Project

During the development of our online shopping platform, our team gained substantial insights into how to create a normalized database system following of our specified company rules for our online shopping site and how to connect it with the application.

A major learning milestone was working with the Entity Relationship Diagram (ERD). Through the project, we identified our weak points in ERD modeling, especially in establishing correct relationships and designing a structure that supports efficient data flow. This experience taught us how crucial a well-designed ERD is for both database performance and clarity in development. We also learned how to effectively use the ERD as a reference for writing SQL queries, making the process of retrieving, manipulating, and managing data more organized and accurate. Receiving feedback helped us improve our project.

In addition, we explored database management concepts such as specialization, CTEs, conditional loops, and general SQL queries. We implemented constraints that helped us handle data and retrieve specific information. We basically built a mini real-world backend for a marketplace—not just tables and queries, but full business flows. Overall, these learnings greatly strengthened our technical abilities and provided a clearer understanding of building a complete and functional online shopping system.