

Where to Go from Here

In this lesson, we will conclude our course.

We'll cover the following



- A Recap
- Advanced Topics

A Recap

We started the course by getting familiar with the history of databases and what came before databases caught on. We also looked at the reasons why we shifted towards databases.

We then moved on to the fundamentals of databases: characteristics, advantages, and a few examples.

Next, we looked at the basics of data modeling. We learned about the first step in database design, i.e., schemas. We also learned to classify databases subject to different attributes.

Next came entity-relationship diagrams. In this chapter, we discussed the different components that make up an ER diagram. Finally, we put together these concepts to make a university ER diagram.

At this point, we moved on to the fundamentals of relational databases. We familiarized ourselves with important ideas such as keys, constraints, and operations regarding relational databases.

The next topic that we covered was functional dependencies. Specifically, we focused on the rules and types of dependencies, as well as the representation of dependencies in our database schemas.

We then jumped into normalization. We studied different normal forms and

how to normalize a non-normalized table in order to reduce data redundancy.

Finally, we started our last chapter which was on Structured Query Language. We learned basic SQL syntax and then used those concepts to build queries in order to retrieve relevant data from the database.

Advanced Topics

This course was created to introduce you to the basic theory behind how databases work and how they are designed. Hence, there was only so much we could cover.

A couple of topics (namely enhanced entity-relationship diagrams, normal forms beyond BCNF, and advanced SQL queries) will be covered in the advanced course.

Thank you for sticking around until the end. We hope this course met your expectations and that you had fun learning about the fundamentals of database design. As always, keep practicing, keep having fun, and we hope to see you in another course soon.