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For my project, I chose to design a database for a driving school. The system I created includes five tables: Students, Instructors, Courses, Enrollments, and Lessons. There are five sample data in each of the tables.

The Enrollments table connects Students and Courses, which allows one student to register for many courses. This helps us track which students are enrolled in which courses. The Lessons table connects Students and Instructors, allowing us to assign an instructor to a student for a specific lesson. Each lesson includes the date, time, type (theory or practical), and location.

To decide what information my system should include, I interviewed my driving instructor who gave me some helpful insights into my project. I also used two helpful websites. The first was from Vertabelo.com, which explained how a driving school reservation system works. It helped me understand the importance of including tables for students, instructors, lessons, and courses. It also gave me the idea to include lesson types (theory/practical), date, and time.

The second source was the Microsoft School Database example, which showed how schools manage students, courses, and enrollments. This helped me create the Enrollment table so students could be linked to one or more courses, just like in a real school system. Using these sources, I was able to decide which tables were most important and how they should connect. I made sure each table stores useful information and supports the school’s real-world processes.

Challenges I faced during the project included deciding what tables to include and which ones to leave out to keep the project simple. Drawing the Chen-style ER diagram was hard because I had to think carefully about all the table relationships, and it took me over 30 minutes to plan and draw it. Another challenge was trying to export the Access database to MySQL. It was too confusing and complicated, so I decided to recreate all the tables manually in MySQL Workbench. Finally, uploading files to GitHub was difficult because I had never used it before, so I had to create an account and watch some tutorials to figure it out.

Works Cited:

Microsoft. *School Sample Database - EF6*. Microsoft Learn, 14 Oct. 2020, <https://learn.microsoft.com/en-us/ef/ef6/resources/school-database>.

Kher, Shantanu. “Database Model for a Driving School’s Reservation System. Part 1.” *Vertabelo Database Modeler Blog*, 6 Aug. 2015, [https://vertabelo.com/blog/database-model-for-a-driving-school-reservation-system](https://vertabelo.com/blog/database-model-for-a-driving-school-reservation-system/).