

Fundamentals of Database Technologies

Coursework assignment 1

Imagine that you are designing a database schema for a small business. The context may be whatever you choose; be creative.

It's best to think about all these questions before starting to answer the first one.

1) In English, write out a description of the business. Mention at least four entity types (e.g. orders, products, bookings) from your business and three relationships: one one-to-one, one one-to-many, and one many-to-many. Describe at least three attributes of each entity.

*To clarify: an entity is a row in a table (such as a booking); an entity type is a table (such as **bookings**).*

Any join tables you create (to support many-to-many relationships) do not count towards the four entity types. Join tables support relationships, not entities.

2) Draw the entity relationship diagram corresponding to the description you wrote in question 1. Use the appropriate symbols to indicate the cardinality of each end of the relationships. Use a key symbol to indicate the primary key of each table. Choose appropriate names for each column and table (use either camel case or snake case consistently; use singular for the column titles, and plural for the table titles). Choose appropriate data types for each column and indicate them on the ER diagram.

A legend, showing all special symbols used, should be included.

Do not copy any parts of either the dvdrental ER diagram or the northwind ER diagram. You will not receive marks for database schemas which are the same (or subsets) as either of these databases.

You can either take a photo of the ER diagram and upload it (make sure it is clear) or design it using an online or offline tool and submit it as a jpg, png or pdf file.