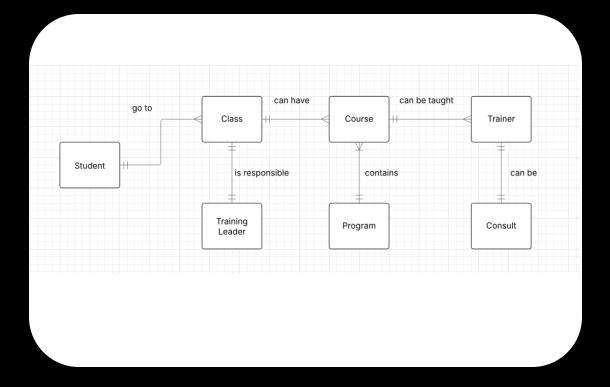
YrkesCo - Database

Data Modeling





- A program can contain multiple courses.
- A training leader is responsible for one class.

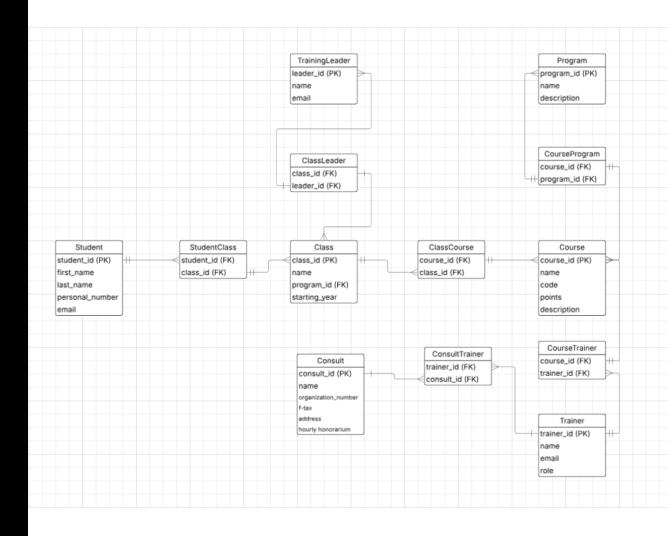
Conceptual Model

Logical Model

- Normalized to 3NF
- No transitive dependencies.
- All the tables have a primary key.
- All non-key attributes depend only on the primary key

Example:

Trainer(trainer_id, name, email, role)



Physical Model

DBdiagram

SQL structured code

Full code and all the tables in Visual Studio Code

```
last name VARCHAR(100) [not null]
 4
       personal number CHAR(12)
       email VARCHAR(255) [unique, not null
10
     TABLE Class {
       class_id SERIAL [primary key]
11
12
       name VARCHAR(30) [not null]
13
       program id INTEGER [not null]
14
       starting year INTEGER [not null]
15
16
17
18
     TABLE TrainingLeader {
       leader id SERIAL [primary key]
19
       name VARCHAR(50) [not null]
20
       email VARCHAR(255) [unique, not null
21
22
23
24
25
     TABLE Course {
       course id SERIAL [primary key]
26
       name VARCHAR(30) [not null]
27
       code VARCHAR(12) [not null]
28
       noint INTEGER [not null]
```

What have we come to with the database?

Organized and managed information about students, courses, programs, etc.