# Lab 2

Software Design 2023

# Today

- Lab materials
- Git
- Assignment presentation + discussion
- Project
  - Choose topic
  - Deliverable 1 presentation

# Lab materials

- https://github.com/CristinaMadalinaMihai/UTCNSoftwareDesignLaboratory/tree/main/lab2
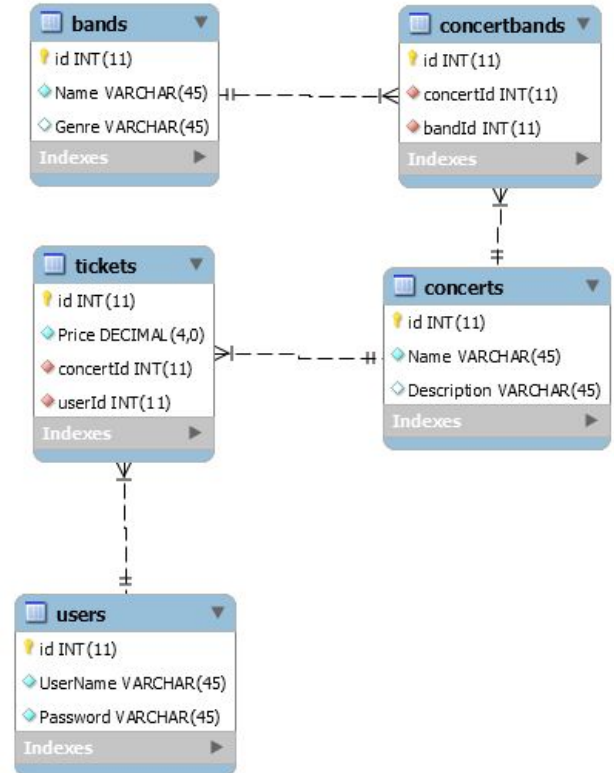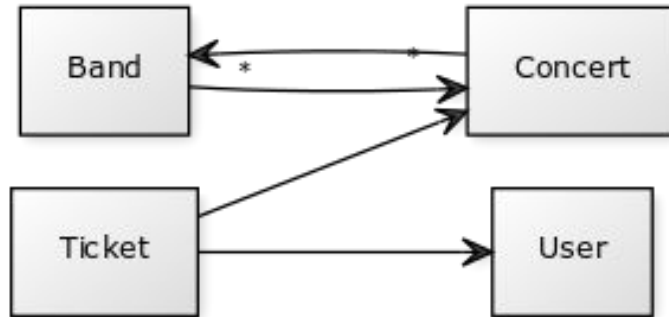- Take 15-20 min to read the lab

# Git

- Assignments and project will be uploaded on github before the presentation
  - Source code only
- https://docs.google.com/spreadsheets/d/1eBrwkMMmoELQkSzzAEIhQ0b-A5zSfx-ZjOGpvCfohS4/edit?usp=sharing

# Assignment presentation + discussion

- Ticket selling system
- 2 users: admin and cashier
- Admin: CRUD + export operations
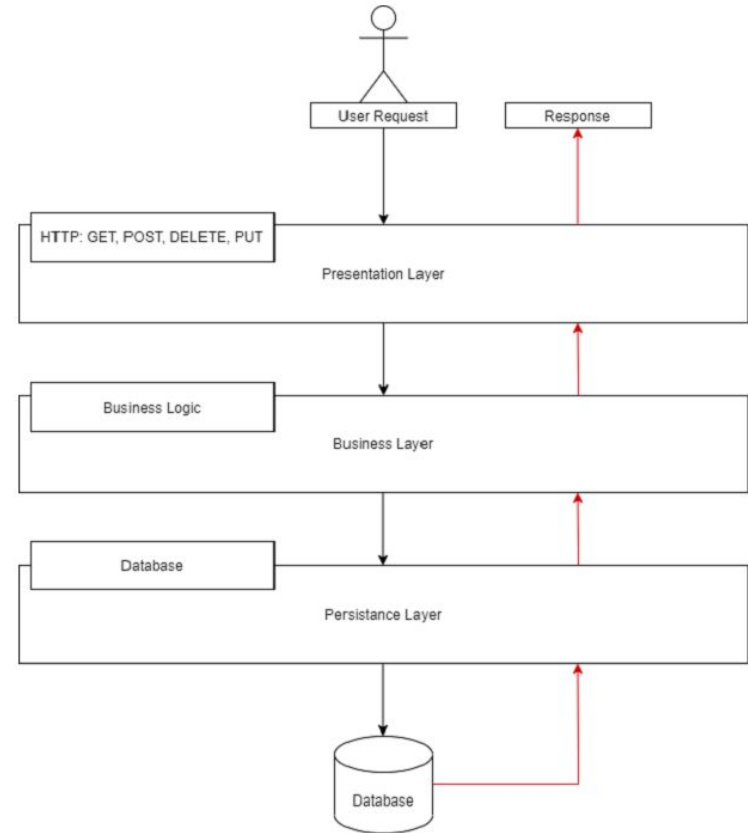- Cashier: manage tickets

# Assignment presentation + discussion

- ● Database modeling example:
  - ○ A ticketing agency needs to build a model to sell tickets
    - ■ A concert can be held with many bands
    - ■ Users can buy tickets to a concert

# Assignment presentation + discussion

- Layered architecture
- https://www.oreilly.com/library/view/softw
  1437/ch01.html

# Assignment presentation + discussion

- Base64 encryption for passwords
  - Other encode/decode technique is allowed
- Validations
  - Sold out
  - User/Performance not found
  - Not enough available places

# Assignment presentation + discussion

- Export to csv/xml
- Factory vs Factory method
- The **factory method pattern** provides an abstraction/interface for creating an object. And the job must be done by a subclass.
- A **simple factory** is a class or function that creates an object.

# Project

- Choose topic