

Database System Concepts for Non-Computer Scientists

Introduction

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Lecture

- IN4714:
 - Part of the module Geodatabases (BV470015)
 - Duration: 2V SWS
 - Credits: 2 ECTS
- Dates: TUMOnline
- Fridays 1:30-4pm, **until Christmas**
- After christmas: Geodatabases (Dr. Donaubaauer)
- Exam details: TBA

Teaching

- We will have 1-2 breaks in the middle of the session (10-15 min in total)
- Ask questions
- Small interactive exercises/questions/quizzes → come to the lecture
- Exercise sheets:
 - Handed out (online) after each lecture
 - Solutions are discussed in the following week
 - Very good way to prepare for the exam

Content Overview

- Introduction: Why database systems?
- Database Design: E/R-Modeling
- Relational Data Model
- SQL
- Indexing
- Using Database Systems
- Security Aspects

Additional Material

- Website: <https://db.in.tum.de/teaching/ws2526/DBSandere>
- Slides (from next chapter on): Created by Prof. Alfons Kemper
- SQL interface: <https://umbra-db.com/interface/>
- Literature:
 - Alfons Kemper und André Eickler Datenbanksysteme: Eine Einführung 10. Auflage
 - A. Silberschatz, H. F. Korth und S. Sudarshan Database System Concepts, 6th edition, McGraw-Hill, 2010. codex.cs.yale.edu/avi/db-book/db6/slide-dir/
 - R. Ramakrishnan, J. Gehrke Database Management Systems, 3th edition, 2003. <http://pages.cs.wisc.edu/~dbbook/>