

VNUHCM - University of Science
Faculty of Information Technology

CTT102

**Introduction to
Database Systems**

Timetable

■ Lecture

- Tesday, 13:30 ~ 17:10
- May 07 ~ August 04, 2018
- Break
 - June 18 ~ 30, 2018
- Room I44
- Final exam: August 6 – 18, 2018

■ Lab

- Announce later
- TA : Luong Vi Minh (lvminh@fit.hcmus.edu.vn)

Objective

- Understand and explain
 - Roles of the database in an information system
 - Basic concepts of the database
- Apply common data models for modeling data
- Master query languages to exploit the relational databases
- Learn skills of building a query in DBMSs
- Declare the integrity constraints on datatabases
- Evaluate a database schema
- Learn skills of critical thinking in practice

Learning outcomes

- (1) Know *the role of the database* in organizations
- (2) Present *basic concepts* of the databases
- (3) Draw *the entity relationship model (ER)* at a basic level
- (4) Understand concepts of *the relational data model*
- (5) Master of *query languages*
- (6) Use a DBMS, for example *MS SQL Server* or *PostgreSQL*, to
 - Declare schema of a relational database
 - Exploit the data

Learning outcome

- (7) Detect *integrity constraints* in the relational database
- (8) Categorize concepts of *functional dependency and normal forms*
- (9) Know *future trends* of the databases

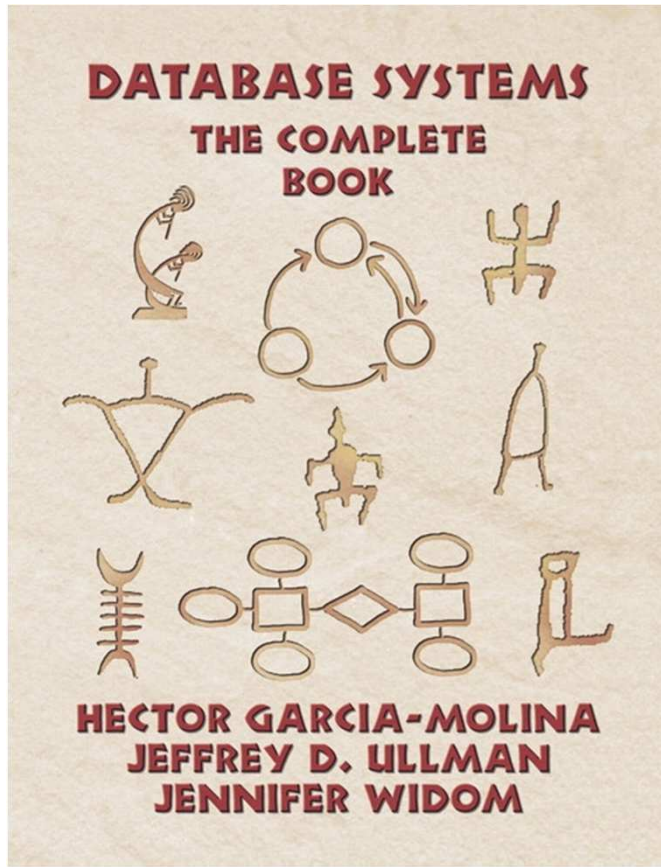
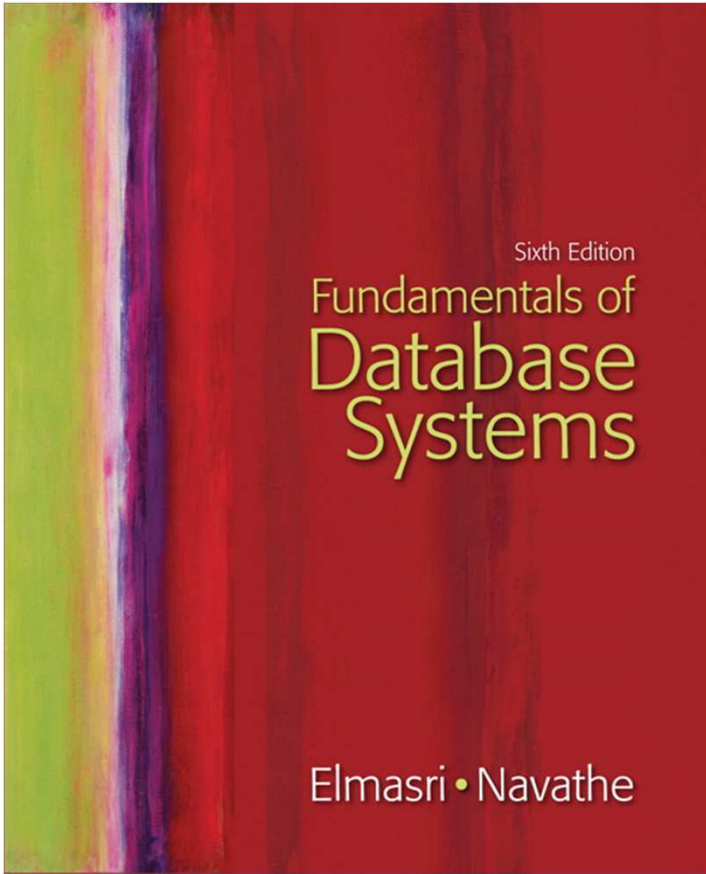
Where you are?

- CTT102 - Introduction to database systems
 - Organize the data using relational data model
 - Manipulate on the database
- CTT203 - Database management systems
 - Apply functions of a DBMS
- CTT204 - Information system: Analysis & Design
 - Develop an information system

Content

- 01- Introduction
- 02- Entity relationship model
- 03- Relational data model
- 04- Relational algebra
- 05- Structured Query Language
- 06- Relational calculus
- 07- Integrity constraints
- 08- Functional dependency and Normal forms

Textbook



Resource

- Moodle
 - Lecture note & assignment & lab documents
 - Announcement
 - <http://courses.ctdb.hcmus.edu.vn/course/view.php?id=175>

Grade

- Lecture (40%)
 - Final exam - Writing
 - Closed book, 90 minutes
- Assignment (20%)
 - In-class
 - Homework
- Lab (40%)
 - Many mini-tests and one midterm exam
 - Closed book

Rule

- In class
 - Keep quiet (do not chat)
 - Switch your mobile phone to silent mode
 - Raise your hand if you have comments
 - Be on time
- If you break the rules
 - Have to quit the class
 - Be marked “Absent” from class

Rule

- Assignment
 - Have to do over 70%, grade will be counted
 - Cheating on one assignment → fail this course
- Must attend the final exam
 - Assignment and lab's work will be counted to the final grade

