Introduction to Databases

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CentraleSupélec

Organization of the course

- Lecture 1. An introduction to database systems and data modeling.
- Lecture 2. Normalization theory.
- Lecture 3. Relational database management systems.
- Lecture 4. Advanced database concepts.
- Lecture 5. Distributed databases and NoSQL.
- Lecture 6. Document-oriented databases: MongoDB.
- Lecture 7. Graph databases: Neo4j.

- Different tutorials and lab assignments.

Class material

Available on my academic website ▸ Click here

- Slides of the lectures.
- References (books and articles).
- Tutorials and lab assignments.

Required software

- **DB Browser for SQLite**. Tool to manage SQLite databases.
  ▸ Click here
- **MongoDB**. A document database management system. ▸ Click here
- **Neo4j**. A graph database management system. ▸ Click here

Evaluation

- **Project** (P).
  - Teamwork assignment (teams of 3 students each).
  - Objective: design the database of a travel reservation agency.
  - The project starts during the last three hours of the course (Nov. 24th).

- **Written exam** (E). MCQ (1 hour) and free-text exercises (2 hours).
  - The exam covers all the notions learned in the course.

$$\text{Final grade} = 0.4 \cdot P + 0.6 \cdot E$$

Contact

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Best way to get a quick answer: MS Teams (Team code: z0ixc50).

☞ Join the MS team, all the communications regarding the exam will be sent there!

Stay healthy (please wear a mask at all times)