INFORMATION MANAGEMENT

COURSE LOGISTICS

ORGANIZATIONAL TOOLS

Zoom
- For hybrid participation and our sessions on Friday (Zoom room for this module)

ILIAS
- Central place for all material in a structured manner (goto ILIAS)

Microsoft Teams
- Chat group for quick communication (optional and later)

SCHEDULE & EXAM

Sessions

- Monday: 15:00 - 16:30 in HR 0004 (hybrid)
- Friday: 11:30 - 13:00 online (Zoom)

Examination

- Oral examination after the end of lectures (if we are a few students only)
- 1 h written examination (if we are a larger group)

Tools

- Databases and SQL for information management tasks
- Python for programming and automating IM related tasks
- Using public/commercial APIs to enhance your solution

Concepts

- What is information? Why does it need to be managed?
- What is an information system? What are the typical components?
- Why should we, and how can we model information?
- What is a database? What types exist, and for what?
- What is an API, and how can use it to automate information related tasks?

LEARNING OBJECTIVES
SKILLS

Analytical thinking and problem-solving

- How to abstract away complexity:
    - Data modeling
    - Process modeling
- How to divide a large problem into many smaller ones?
    - Planning and building information systems
    - Writing programs
    - Building SQL queries
- Learn how to solve problems with computers!
    - Design algorithms to solve problems