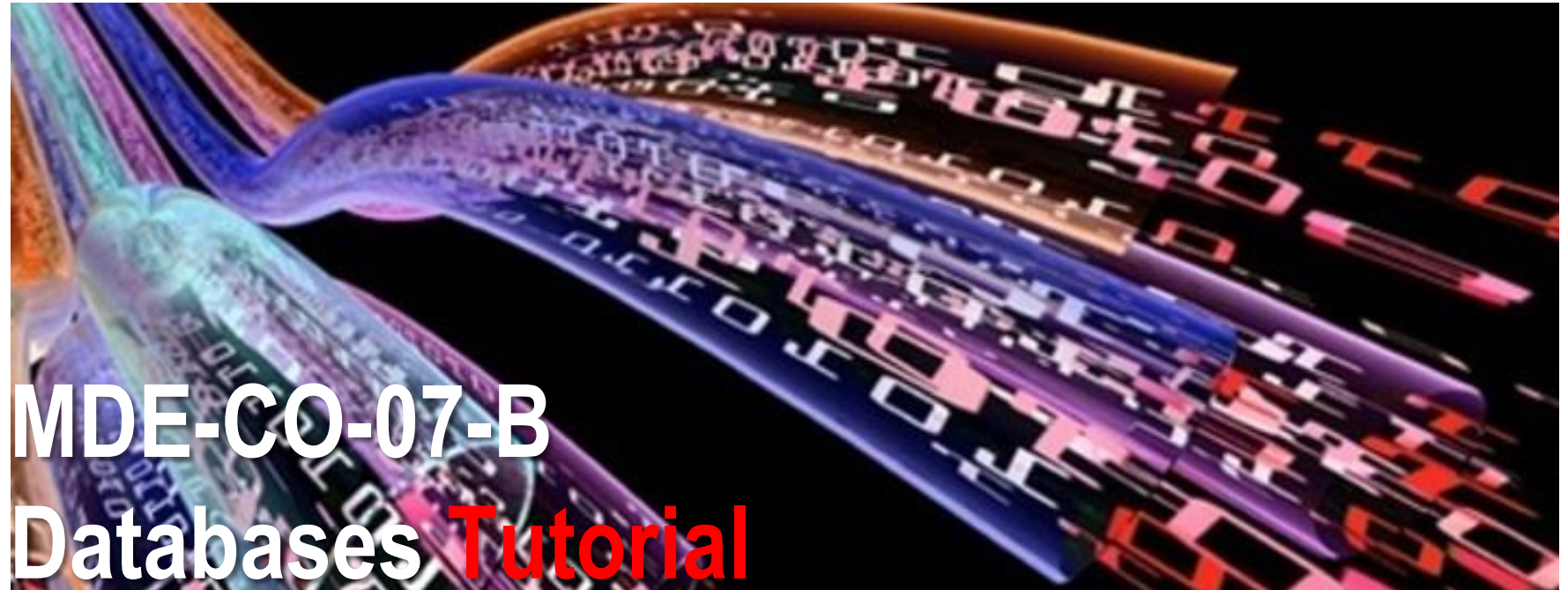




MDE-CO-07-B Databases **Tutorial**

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Support

- We have TAs available
- continuous support (not weekends, not at night)
- Weekly online sessions: Thu 14:15
- always via Teams channel

„Tutorial“ = Semester Project

- Implement core of an individual web service
 - Guided teams of ~3
- Topics? suggest your own!
- Work organization
 - Assignment distributed every Thu evening, deadline following Thu midnight 23:59
 - Offline work, submission via git repo
 - Develop wherever you want, but final handover on course machine!
 - *Support only for this machine – you will want to do it there*
 - *Support only for PHP and Python*
 - Exercises may will require additional own research
- Final in-class presentation by team (not graded)

Tech Platform

- **LAMP** = Linux, Apache, MYSQL, [PHP | Python]

Alternatives to LAMP:

- **MEAN** = MongoDB, Express.js, Angular.js and Node.js
 - [intro1](#), [intro2](#), [tutorial](#)
- **MERN** = MongoDB, Express.js, React.js, Node.js
 - [Intro](#)

Grading

- Weekly assignments (guiding implementation)
- Per student: 3 questions, pass if at least 2 are answered correctly
 - Based on your code increment
 - We use AI
- DE-CO-07-B final grade = pass count of weekly assessments

What is a Good Service Implementation?

- Some general coding criteria (no particular order):
 - Own work
 - complete wrt. requirements
 - engineering (bug-free, project & code documentation, coding quality, ...)
 - user-friendliness, professional look & feel
 - complexity (in absolute terms & in comparison to other teams' work)
 - own understanding

Where to Work

- teaching.peter-baumann.org cloud VM
- Send us your public key
 - Create using ssh-keygen
 - Output: X (private key), X.pub (public key), possibly more (unnecessary) files
- Get login on teaching machine, like „pbaumann“, + password
- Connect with:
 - `ssh <login-name>@teaching.peter-baumann.org`
- Need assistance → TAs

Web Pages

- On teaching VM, files sitting in your home directory -> `public_html/` are accessible via web server
- Example:
 - User `pbaumann`
 - File `public_html/index.html`
 - Accessible via <https://teaching.peter-baumann.org/~pbaumann/index.html>
- Caveat: web server must have permissions to access, minimum:
 - **Files:** permissions 644
 - Home **directory** & `public_html` & subdirectories: permissions 755

Summary

- Under guidance, develop core of a database-backed Web server
 - Self-chosen teams
 - Own responsibility (also to use AI or not)
- Next steps: **Pick teams, pick topic**
 - and inform me!
- *...let's get hands dirty – and have fun!*

