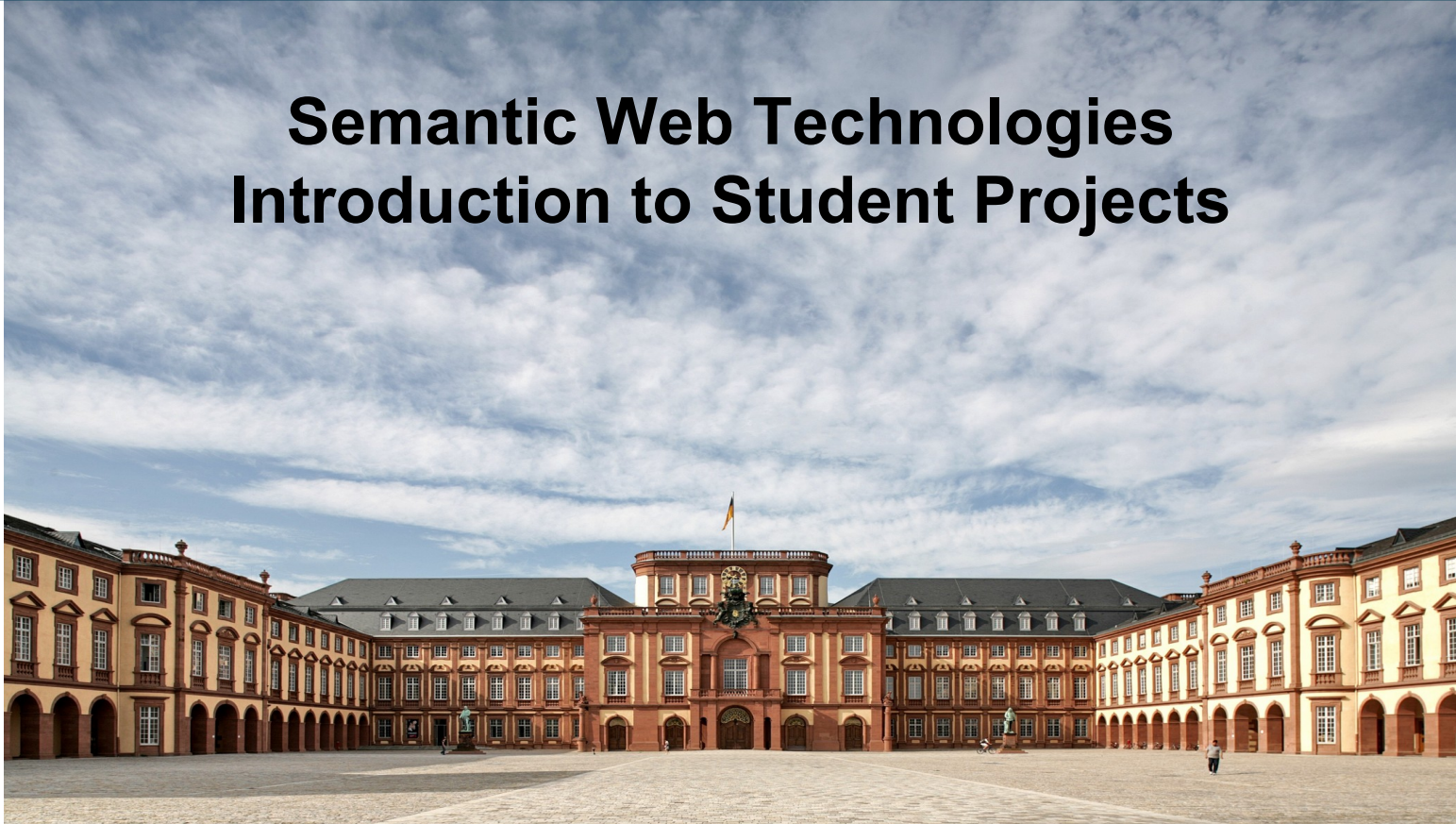# Semantic Web Technologies
# Introduction to Student Projects

**Heiko Paulheim, Sven Hertling**

# Student Projects

- Goals
  - Gain more practical experience with the Semantic Web
  - Become familiar with existing datasets
  - Understand possibilities and limitations of Semantic Web datasets

- Expectation
  - Choose one or more (preferably more) Semantic Web datasets
  - Build an interesting application with it

# Interesting Applications

- Just a few possible examples
    - Quiz applications
    - Mobile apps with local information
    - Expert systems for a special domain
    - ...

# Procedure

- Teams of two students
    1. realize a semantic web project
    2. write a 10 to 12 page summary of the project and the methods employed in the project
    3. present the project results to the other students

- Finding a team
    - use, e.g., the discussion forum in ILIAS

- Final mark for the course
    - will be entirely based on the exam
    - the project, report, and presentation are a **mandatory** requirement!

# Requirements

- The project you develop should
    - solve a real world task for end users
    - use one or more semantic web datasets
    - involve some processing beyond mere display of the data

# Project Outlines

- 2-3 pages (sharp!) without title and TOC pages, DWS master thesis layout

- due Wednesday, October 16th, 23:59

- send by e-mail to  Sven and Heiko

- answer the following questions:
  - What is the goal of the application you are going to build?
  - What are the example results you expect?
  - What datasets are you planning to use?
  - What techniques are you going to use?
  - How do you plan to evaluate your results?

# Project Reports

- 10-12 pages (sharp!) without title and toc pages

- due Friday, November 24th, 23:59

- send by e-mail to Sven and Heiko

- describe your solution including the steps to get there:

  1. Application domain and goals

  2. Datasets used

  3. Techniques used

  4. Example results

  5. Known limitations

  6. Lessons learned

- Requirements

  - Use the DWS master thesis layout

  - Please cite sources properly

# Project Reports

- Application domain and goals
  - Which users are targeted?
  - Which user problems are solved?
  - Which user information needs are addressed?

- Datasets used
  - Which datasets does the application use?
  - How are they accessed (SPARQL, local)?
  - How do you combine information from different datasets?

- Techniques used, e.g.
  - Reasoning
  - Search
  - external services

# Project Reports

- Example results
  - What outcomes does the application provide?
  - How is are some user queries answered?
- Known limitations
  - In which domains does the application not work?
  - Are there queries which cannot be answered?
  - **Why?**
  - How could you overcome those limitations, given more time?
- Lessons learned
  - Which challenges did you face?
  - What were the biggest obstacles?
  - What would you do differently next time?

# Deadlines at a Glance

- Submission of project work proposal
  - Wednesday, October 16th 23:59

- Submission of final project work report
  - Sunday, November 24th, 23:59

- Final presentations
  - Monday, November 25th, and Monday, December 2nd (if needed)

- Final exam
  - Tuesday, December 17th

# Questions?