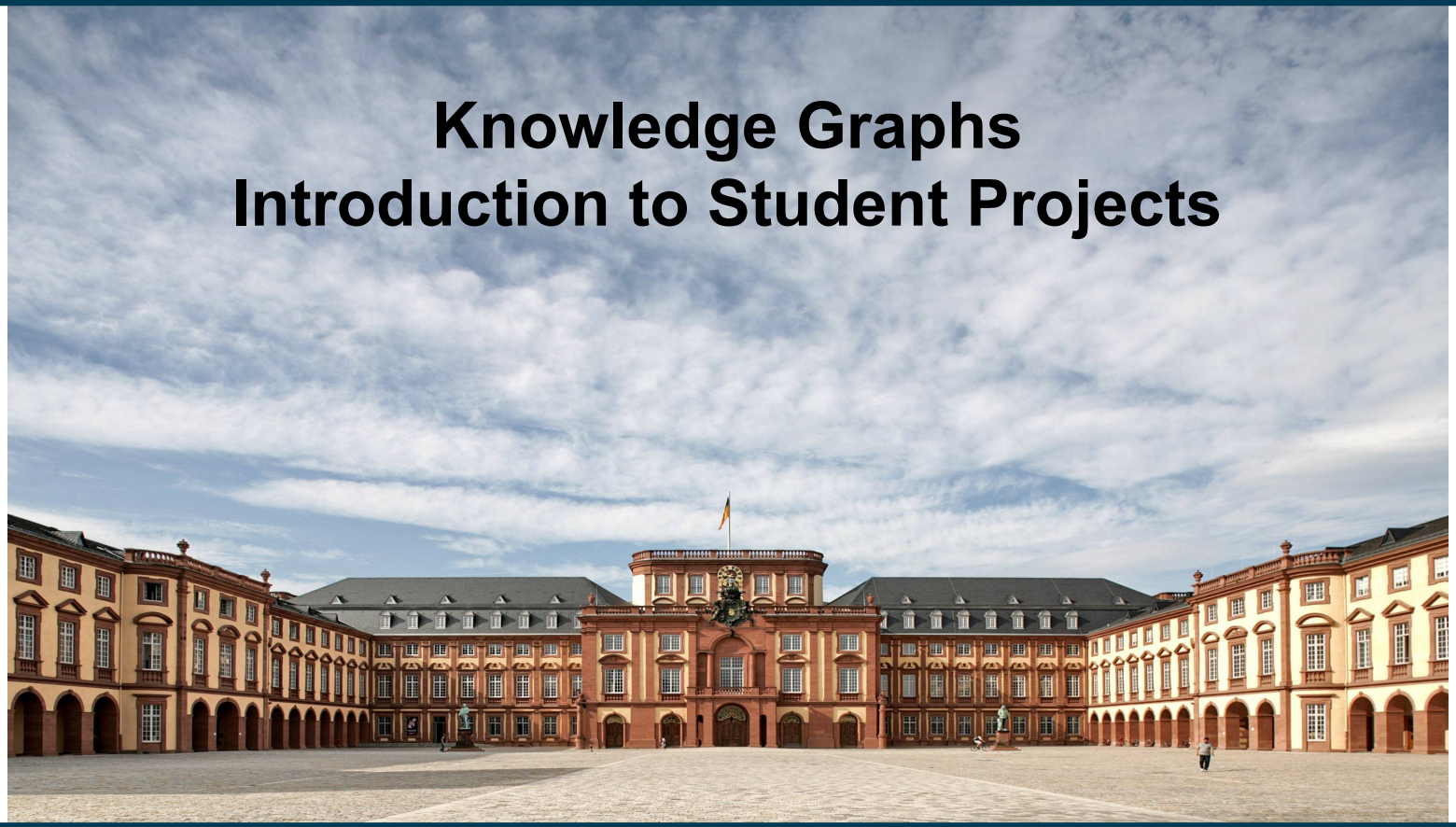
UNIVERSITÄT MANNHEIM

Knowledge Graphs
Introduction to Student Projects



Heiko Paulheim, Sven Hertling

Student Projects

- Goals
  - Gain more practical experience with KGs
  - Become familiar with existing datasets
  - Understand possibilities and limitations of existing KGs
- Expectation
  - Choose one or more (preferably more) KGs
  - 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 **three to four** students
  1. realize a semantic web project
  2. write a **6 to 8 page** summary of the project and the methods employed in the project
  3. present the project results to the other students

- Finding a team
  - see previous e-mail (ILIAS forum, Spreadsheet)

- 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 Knowledge Graphs
  - 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 Sunday, October 8th, 23:59
- send by e-mail to Sven (sven.hertling@uni-mannheim.de)
- 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

- 6-8 pages (sharp!) without title and toc pages
- due Sunday, December 10th, 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 KGs does the application use?
  - How are they accessed (SPARQL, local)?
  - How do you combine information from different sources?
- 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
  - Sunday, October 8th 23:59
- Submission of final project work report
  - Sunday, December 10th, 23:59
- Final presentations
  - Tuesday, December 5th, lecture slot

Questions?