Introduction to Student Projects

IE650 Knowledge Graphs

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Student Projects

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- 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

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

Procedure

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- Teams of 2-3 students
  1. Realize a semantic web project
  2. Write a 8 to 10 page summary of the project and the methods employed in the project
  3. Present the project results to the other students
- Finding a team
  - ILIAS forum
- Final mark for the course
  - Will be entirely based on the exam
  - The project, report, and presentation are a **mandatory** requirement!

Requirements

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- 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

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- 2-3 pages (sharp!) without title and TOC pages
  - use DWS master thesis layout
- Due Sunday, October 20th, 23:59
- Send by e-mail to Rita
- 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

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- 8-10 pages (sharp!) without title and toc pages
- due Sunday, December 8th, 23:59
- Send by e-mail to Rita

Project Reports

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- 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

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- 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

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- 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

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- Submission of project work proposal
  - Sunday, October 20st, 23:59
- Submission of final project work report
  - Sunday, December 8th, 23:59
- Final presentations
  - Tuesday, December 3th
- Final exam
  - TBD

Questions?