

Prepare for Reasoning with SWRL

Unik Wiki - Courses - Mol

cwi.unik.no/wiki/Prepare\_for\_Reasoning\_with\_SWRL

- Help
- MediaWiki FAQ
- Semantic Wiki help

**Forms (create or edit)**

- Add User
- Add ActionItem
- Add Meeting
- Add Master-Thesis
- Add a paper
- Add a lecture
- Add Course
- Project Proposal
- Create a Project
- Add PhD\_Thesis
- Add Task
- Add Organisation
- Interested in PhD?

**External links**

- UNIK wiki
- nSHIELD internal
- UNIK home page
- old Wiki

**Toolbox**

- What links here
- Related changes
- Upload file
- Special pages
- Printable version
- Permanent link
- Browse properties

<b>presented</b>	by <a href="#">Susana Rodriguez de Novoa</a>
<b>Objective</b>	Learn how to install the SWRL
<b>Learning outcomes</b>	having joined this lecture, you will be able <ul style="list-style-type: none"> <li>to formulate your rules in a "human understandable language".</li> <li>to know how to add SWRL to your Protege</li> <li>to see one example of a SWRL rule</li> </ul>
<b>Pensum (read before)</b>	Read before: <ul style="list-style-type: none"> <li>SWRL Tutorial: <a href="http://protege.cim3.net/cgi-bin/wiki.pl?SWRLTutorialESWC2010">http://protege.cim3.net/cgi-bin/wiki.pl?SWRLTutorialESWC2010</a></li> </ul>
<b>References (further info)</b>	References: <ul style="list-style-type: none"> <li>SWRL Tutorial: <a href="http://protege.cim3.net/cgi-bin/wiki.pl?SWRLTutorialESWC2010">http://protege.cim3.net/cgi-bin/wiki.pl?SWRLTutorialESWC2010</a></li> <li>Queries &amp; Rules Tutorial: <a href="http://protege.cim3.net/cgi-bin/wiki.pl?SQWRL">http://protege.cim3.net/cgi-bin/wiki.pl?SQWRL</a></li> <li>Mushfiq's lecture on SWRL with hands-on "how to install"           <ul style="list-style-type: none"> <li><a href="http://wiki.unik.no/index.php/Courses/4710Access">http://wiki.unik.no/index.php/Courses/4710Access</a></li> <li><a href="http://protege.cim3.net/cgi-bin/wiki.pl?SWRLLanguageFAQ">http://protege.cim3.net/cgi-bin/wiki.pl?SWRLLanguageFAQ</a> - FAQ on SWRL</li> </ul> </li> </ul>
<b>Keywords</b>	Protege, SWRL, Rules, Reasoning, Open world assumption, Closed world assumption

*this page was created by [Special:FormEdit/Lecture](#), and can be edited by [Special:FormEdit/Lecture/Prepare for Reasoning with SWRL](#).*

## Test yourself. answer these questions

- What is SWRL?

StudentLearning\_SW...zip

Vis alle nedlastinger...

Prepare for Reasoning with SWRL

- How many Atom types are provided by SWRL?
- What is a Class atom? What is an Individual Property atom?
- Does SWRL adopt the Open World Assumption?
- Does SWRL support OWL Full? and RDF?

(Revisit the "rules" for the ontologies from everyone)

## Lecture notes

---

### Lecture notes 2012

---

- Notes: [Media:UNIK4710-L6-v12.pdf](#)
- Video: [mms://lux.unik.no/UNIK4710-JN/2012/UNIK-20120302.wmv](#)

### Lecture notes 2013


---

- Notes: [Media:UNIK4710-L6-v13.pdf](#)
- Presentation Notes: [Media:UNIK4710-SWRLComments.ppt](#)
- Protege Rules:
  - Pizza Example: [Media:pizza\\_SWRL\\_SQWRL.zip](#)
  - Student-centric learning: [Media:Student\\_SWRL\\_SQWRL.zip](#)
- Video: [mms://lux.unik.no/UNIK4710-JN/UNIK-20130222.wmv](#)

## Other Info

---

<b>title</b>	Prepare for Reasoning with SWRL
<b>author</b>	Susana R. de Nova
<b>subfooter</b>	



UNIK  
UNIVERSITÄT  
DUISBURG  
ESSEN

UNIK4710/UNIK9710  
Introduction

StudentLearning\_SW...zip

↓ Vis alle nedlastinger...

VISIT OLD WIKI FOR OTHER EXAMPLES  
ABOUT RULES:

The screenshot shows a web browser window with the URL [wiki.unik.no/index.php/Courses/UNIK4710](http://wiki.unik.no/index.php/Courses/UNIK4710). The page content is a list of course materials and events. Handwritten annotations in green and black ink are present:

- A green arrow points from the text "old wiki" to the top of the page.
- A green vertical line is drawn on the left side of the page.
- A black arrow points from the text "MORE RULES & ONTOLOGIES" to a box containing two links: "Scenario: Context-aware wellbeing home scenario by Dave (.owl.zip)" and "Scenarios: home-walking scenario by Paul (.owl.zip)".

The page content includes the following text:

- this lecture continues on the implementation of rules. It follows the "course example from Frederik (v09), updated in [Attach:CourseOntologyFrederik\\_v2.zip](#)
- As the Jess Engine is not yet part of Protege 4.1.1 (8. April 2011), we converted back to Protege 3.4.5. See [Installation notes on 4710Access](#)
- We use two examples, (a) the Frederik ontology for defining access to course documents, and (b) the Role-based-access for documents related to business
- Scenario (a), course access:
  - install [CourseOntologyFrederik\\_v2](#)
  - defines members of a course
  - Rules, see examples
- define your own rules
- translate them into SWRL syntax
- run them under Protege

Blockseminar Thu 14.4 (1200h) - 15.4. (15:00h) - Place UNIK

- see [LectureNotes BlockSeminar](#), [Notes on Protégé in 4710Access](#)
- see [Lecture notes L5 \(.pdf\)](#), for specifications on what should be presented during the block seminar
- Scenario: [Student-centric learning by Maurice \(.owl.zip\)](#)
- Scenario: [Student-centric learning by Maurice \(.pdf\)](#)

Scenario: [Context-aware wellbeing home scenario by Dave \(.owl.zip\)](#)

Scenarios: [home-walking scenario by Paul \(.owl.zip\)](#)

Fr, 29. April 2011 - comparison of JAVA API

- Java based Community Ontology handling
- [Lecture Notes L8 \(.pdf\)](#) - updated

Fr, 6. May 2011, 0900-1200h

- Presentation of scientific papers related to your scenario (15-20 min pres, 5-10 min discussion)
- (discussion of implementation of Java API)
- Dave: take contact with Zahid, Sarfraz, Mushfiq, Arne and Robert
- [Lecture Notes L9 \(.pdf\)](#)

Fr, 13. May 2011, 1215-1515h

- Dave: Presentation of scientific papers related to your scenario (15-20 min pres, 5-10 min discussion)
- [Attach:DaveScientificPapers.pdf](#)
- Paul: Presentation of Cosar
- [Lecture Notes L10 \(.pdf\)](#)
- (discussion of shortcomings in real life reasoning)
- date & topics of last lectures (java implementation)

Fr. 10. June 2011, 1200-1530h

- Presentation of implementations, based on
  - 1 page description, (then discussion with Josef)
    - [Attach:Maurice\\_Scenario\\_Description.pdf](#)
  - Extension with subgoals and implementation steps
    - [Attach:Maurice\\_Scenario\\_Description\\_and\\_Implementation\\_Steps\\_June11.pdf](#)
- Demonstration