

AGH

University of Science and Technology in Krakow

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Faculty of Electrical Engineering, Automatics, Computer Science and  
Electronics

Department of Automatics



## Report

Semantic Web Applications: Semantic Wikis

Group: Wednesday 8:00

Author: Szczepan Czaicki

Cracow 2012

# 1. Semantic MediaWiki - Categories

**Paste the wiki page source (markup) in the report.**

```
[[Category:Student| ]]  
My name is Szczepan Czaicki. I am 12 years old.  
Currently studying at AGH UST, faculty of electrical engineering.  
I belong to group 8:00 on Wednesday.
```

**Paste the wiki page source (markup) in the report.**

```
[[Category:University subject]]  
Subject about prolog and semantic web.
```

# 2. Semantic MediaWiki - Properties

**Include the updated wikipage source code (markup) in the report.**

```
[[Category:Student| ]]  
  
My name is [[Name::Szczepan Czaicki]]. I am [[Age::23]] years old.  
Currently studying at AGH UST, faculty of electrical engineering.  
I belong to group [[Group::group800|8:00]] on Wednesday.
```

**Include the updated wikipage source code (markup) in the report.**

```
[[Category:University subject| ]]  
  
Subject about prolog and semantic web.  
Lead by: [[lead by::dr inż. Grzegorz J. Nalepa]]. Room: [[room::C3 201]].  
Duration: [[duration::90]] min.
```

# 3. Semantic MediaWiki - Inline queries

**Using the inline queries add to your page the list of the students that are members of your group. Format the output of the query as unordered list. Put the query in the report.**

```
{{#ask: [[Category:Student| ]] [[Group::group800]]  
| ?name  
| format=u1  
}}
```

**Build another query listing the students from your group. Put the query in the report.**

```
{{#ask: [[Category:Student| ]] [[Group::group800]]  
| ?name  
| ?age  
| sort=age,name  
| format=table  
| default=none  
}}
```

## 4. Loki - Use Cases

**Movie recommendation system. Copy the wiki pages sources and paste them into the report.**

[http://loki.ia.agh.edu.pl/lokidev/movie:the\\_usual\\_suspects](http://loki.ia.agh.edu.pl/lokidev/movie:the_usual_suspects)

~~NOCACHE~~

```
==== Podejrzeni ====
**Polish title**: [[polish_title:=Podejrzeni]]

**Original title**: [[original_title:=The Usual Suspects]]

**Genre**: [[genre::genres:thriller]]

**Production year**: [[production_year:=1995]]

**Production country**: [[production_country:=Niemcy, USA]]

**Screenplay**: [[screenplay::person:christopher_mcquarrie|Christopher McQuarrie]]

**Directed by**: [[directed_by::person:bryan_singer|Bryan Singer]]

**Cast**:

[[main_role::person:kevin_spacey|Kevin Spacey]] -
[[main_character::character:roger_verbal_kint|Roger Verbal Kint]]

[[secondary_role::person:gabriel_byrne|Gabriel Byrne]] -
[[secondary_character::character:dean_keaton|Dean Keaton]]

[[secondary_role::person:kevin_pollak|Kevin Pollak]] -
[[secondary_character::character:todd_hockney|Todd Hockney]]

[[secondary_role::person:chazz_palminteri|Chazz Palminteri]] -
[[secondary_character::character:dave_kujan|Dave Kujan]]

**Action place**: [[action_place:=Los Angeles]]

**Language**: [[language:=english]]

[[category:movie| ]]
```

[http://loki.ia.agh.edu.pl/lokidev/person:kevin\\_spacey](http://loki.ia.agh.edu.pl/lokidev/person:kevin_spacey)

```
**Name**: [[name:=Kevin Spacey]]

**Full Name**: [[full_name:=Kevin Spacey Fowler]]

**Gender**: [[gender:=M]]

**Birth date**: [[birth_date:=1959-07-26]]

**From**: [[is_from::countries:USA]]

**Played main role in **:
[[movie:the_usual_suspects|The Usual Suspects]]
[[category:actor| ]]
```

## 5. Loki - Semantic Web Standards

**Put the query into the report.**

**Query will show pages of movie category in which Kevin Spacey played main role.**

```
[[Category:user| ]]
```

Szczepan Czaicki

```
<pl format="sparql">
PREFIX wiki: <>
SELECT ?movie ?main_role
WHERE {
?movie category "movie".
?movie wiki:main_role ?main_role.
FILTER (?main_role=person:kevin_spacey)
}
</pl>
```

## 6. Loki - Reasoning

**Put the goal in the report. Lists comedies.**

```
<pl
goal="wiki_attribute(X,'title',Y),wiki_relation(X,'genre','genres:comedy'),write(Y
),nl,fail" scope="movie"></pl>
```