

**AGH**  
**University of Science and Technology in Krakow**  
Faculty of Electrical Engineering, Automatics, Computer Science and  
Electronics  
DEPARTMENT OF AUTOMATICS



Podstawy Inżynierii Wiedzy  
Introduction to the Semantic Web

## **Raport Lab6**

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## 2 Semantic MediaWiki - Categories

- <http://loki.ia.agh.edu.pl/smw/index.php/Piw2012/group1600/szypulazaber>

My name is Szypula Zaber student. I am 112 years old.  
Currently I study at AGH UST, faculty of applied IT.  
I belong to group 1600. The other members of my group are:

[[Category:Student]]

- <http://loki.ia.agh.edu.pl/smw/index.php/AGH-UST/Subjects/art-class>

[[Category:University subject]]

## 3 Semantic MediaWiki - Properties

- My name is [[name::Szypula Zaber]] student. I am [[age::112]] years old.  
Currently I study at AGH UST, faculty of applied IT.  
I belong to group [[group::1600]]. The other members of my group are:

[[Category:Student]]

- [[Category:University subject]]

lead by: [[lead by::dr Wiktor Wektor]]

room: [[room::#121]]

duration: [[duration::135]] min

## 4 Semantic MediaWiki - Inline queries

- ```
{{#ask: [[Category:Student]] [[group::1600]]
| ?name
| ?age
| ?group
| format=ul
}}
```
- ```
{{#ask: [[Category:Student]] [[group::1600]]
| ?name
| ?age
| sort=age,name
| order=ascending,ascending
| format=table
}}
```

### 6.1 Movie recommendation system

- <http://loki.ia.agh.edu.pl/lokidev/movies:12monkeys>

~~NOCACHE~~

==== Twelve Monkeys ====

{{ :filmy:indy.jpg}}

**\*\*Title\*\***: [[title:=Twelve Monkeys]]

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

**\*\*Production Year\*\***: [[[production\_year:=1995]]

**\*\*Production country\*\***: [[produced\_in\_country::countries:USA]]

**\*\*Screenplay\*\***: [[screenplay::persons:chris\_marker|Chris Marker]]

**\*\*Directed by\*\***: [[directed\_by::persons:terry\_gilliam|Terry Gilliam]]

**\*\*Cast\*\***:

[[main\_role::persons:bruce\_willis|Bruce Willis]] -

[[main\_character::characters:james\_cole|James Cole]]

[[supporting\_role::persons:madeleine\_stowe|Madeleine Stowe]] -

[[main\_character::characters:kathryn\_railly|Kathryn Railly]]

[[supporting\_role::persons:brad\_pitt|Brad Pitt]] -  
[[main\_character::characters:jeffrey\_goines|Jeffrey Goines]]

\*\*Action time\*\* : [[action\_time:=1996]], [[action\_time:=2035]]

\*\*Action place\*\* : [[action\_place:=USA]]

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

[[category:movie| ]]

- [http://loki.ia.agh.edu.pl/lokidev/osoby:bruce\\_willis](http://loki.ia.agh.edu.pl/lokidev/osoby:bruce_willis)

Bruce Willis jest twarzą reklamową polskiej wódki Sobieski oraz jednym z właścicieli jej producenta - spółki Belvedere (3,3 proc. akcji)

[[Category:Aktor]]

## 7 Loki - Semantic Web Standards

```
<pl format="sparql">
PREFIX wiki: <>
SELECT ?movie ?production_year WHERE {
  ?movie a "movie".
  ?movie wiki:production_year ?production_year.
  FILTER(?production_year > 1900)
}
</pl>
```

## 8 Loki - Reasoning

```
My Recommendations:
~~NOCACHE~~
<pl goal="wiki_category(X,'movie'),
wiki_attribute(X,'title',T),
wiki_relation(X,'genre','genres:thriller'),
write(T), nl, fail." scope="movies" >
</pl>
```