

LAB 6: Semantic Web Applications: Semantic Wikis

1. Semantic MediaWiki – Categories

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

<http://loki.ia.agh.edu.pl/smw/index.php/Piw2012/Subjects/pkamoda>

```
[[Category:Student]]
```

My name is Piotr Kamoda. I am 24 years old.
Currently I study at AGH UST, faculty of IT.
I belong to group 1530. The other members of my group are:

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

<http://loki.ia.agh.edu.pl/smw/index.php?title=AGH-UST/Subjects/kamoSubject>

```
[[Category:University subject]]
```

2. Semantic MediaWiki – Properties

2.1 Include the updated wiki page source code (markup) in the report.

```
[[Category:Student]]
```

My name is [[Name::Piotr Kamoda]]. I am [[Age::24]] years old.
Currently I study at AGH UST, faculty of IT.
I belong to group [[Group::1530]]. The other members of my group are:

2.2 Include the updated wiki page source code (markup) in the report.

```
[[Category:University subject]]  
lead by: [[lead by::prof Kamoda]]  
room: [[room::123]]  
duration: [[duration::90]] min
```

3. Semantic MediaWiki - Inline queries

```
{{#ask: [[Category:Student]] [[Group::1530]]}}
```

Piw2012/group1530/pkamoda

My name is **Piotr Kamoda**. I am 24 years old. Currently I study at AGH UST, faculty of IT. I belong to group 1530. The other members of my group are:

[Piw2011/1530/urban](#) , [Piw2011/group1530/rtrojnia](#) , [Piw2012/group1530/akieltyka](#) , [Piw2012/group1530/lswider](#) , **[Piw2012/group1530/pkamoda](#)** , [Piw2012/group1530/rkojta](#)

```
{{#ask: [[Category:Student]] [[Group::1530]]
|?name = Name
}}
```

	Name
Piw2011/1530/urban	Marcin Urban
Piw2011/group1530/rtrojnia	Rafal
Piw2012/group1530/akieltyka	Andrzej Kieltyka
Piw2012/group1530/lswider	Łukasz Świder
Piw2012/group1530/pkamoda	Piotr Kamoda
Piw2012/group1530/rkojta	Rafał Kojta

4. Loki - Use Cases

4.1 Movie recommendation system

http://loki.ia.agh.edu.pl/lokidev/movies:pulp_fiction

[[category:movie|]]

Title: [[title:=Pulp Fiction]]

Genre: [[genre::genres:Crime]], [[genre::genres:Thriller]]

Production year: [[production_year:=1994]]

Country: [[country::countries:USA]]

Directors: [[directed_by::persons:Quentin Tarantino]]

Cast:

[[main_role::persons:john_travolta|John Travolta]]

[[main_role::persons:uma_thurman|Uma Thurman]]

[[main_role::persons:samuel_l_jackson|Samuel L. Jackson]]

http://loki.ia.agh.edu.pl/lokidev/person:john_travolta

Name: [[name:= John Joseph Travolta]]

Born date: [[born::year:1954]]-[[born::month:02]]-[[born::day:18]]

Country: [[countries:USA]]

Roles:

```
{{#ask: [[category:movie]] [[main_role::persons:john_travolta]] |  
?title |  
?production_year=Production year |  
sort=production_year |  
format=table  
}}
```

5. Loki - Semantic Web Standards

<http://loki.ia.agh.edu.pl/lokidev/user:pkamoda>

Zapytanie zwraca wszystkie filmy z gatunku Thriller:

```
<pl format="sparql">  
PREFIX wiki: <>  
SELECT ?movie ?title ?director ?production_year ?genre  
WHERE {  
?movie category "movie".  
?movie wiki:title ?title.  
?movie wiki:directed_by ?director.  
?movie wiki:production_year ?production_year.  
?movie wiki:genre ?genre.  
FILTER (?genre= "genres:Thriller")  
}  
ORDER BY ASC(?title)  
</pl>
```

6. Loki - Reasoning

Zapytanie zwraca wszystkie filmy z wyprodukowane po 2000 roku:

```
<pl goal="wiki_category(X,'movie'),wiki_attribute(X,'production_year','1994'),write(X),nl,fail"  
scope="movies"></pl>
```