

Podstawy Inżynierii Wiedzy - Semantic Web

Sprawozdanie 6

Andrzej Kiełtyka, Aleksandra Sikora

7 czerwca 2012

1 Semantic Web Applications: Semantic Wikis

1.1 Semantic MediaWiki - Categories

- Student wiki page source (Piw2012/group1530/akieltyka):

```
1 My name is Andrzej Kiełtyka. I am 23 years old. Currently I study at AGH UST,  
   faculty of applied computer science. I belong to group 1530. The other members  
   of my group are: Krzysztof Garcarz, Lukasz Mielczarek.  
2  
3 [[Category:Student]]
```

- University subject wiki page source (AGH-UST/Subjects/ZTB):

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

1.2 Semantic MediaWiki - Properties

- Updated student wiki page source (Piw2012/group1530/akieltyka):

```
1 My name is [[Name::Andrzej Kiełtyka]]. I am [[Age::23]] years old. Currently I  
   study at AGH UST, faculty of applied computer science. I belong to group [[  
   Group::1530]]. The other members of my group are: Krzysztof Garcarz, Lukasz  
   Mielczarek.  
2  
3 [[Category:Student]]
```

- Updated university subject wiki page source (AGH-UST/Subjects/ZTB):

```
1 = Zaawansowane Technologie Bazodanowe =  
2 Lead by: [[lead by::Sebastian Ernst]] <br>  
3 Room: [[room::C3 101]] <br>  
4 Duration: [[duration::90]] min  
5  
6 [[Category:University subject]]
```

1.3 Semantic MediaWiki - Inline queries

- Students that are members of my group inline query (list):

```
1 {{#ask: [[Category:Student]] [[Group::1530]]  
2 | intro=List of students in my group:  
3 | format=ul  
4 }}
```

- Students that are members of my group inline query (table):

```

1 {{#ask: [[Category:Student]] [[Group::1530]]
2 | intro=Table of students in my group:
3 | format=table
4 | sort=Age,Name
5 | order=asc,asc
6 |?Age
7 |?Name
8 }}

```

„Define a default value which will be displayed if the required field (e.g. age) is empty.” - w podlinkowanym manualu dot. inline queries nie udało się znaleźć informacji o możliwości zdefiniowania czegoś takiego. Jest w nim mowa jedynie o parametrze „default=tekst”, którego wartość jest wyświetlana w przypadku braku jakichkolwiek wyników dla całego zapytania, a nie braku wartości w przypadku pojedynczej kolumny.

1.4 Loki - Use Cases (Geographic Wiki)

- City loki page source (<http://loki.ia.agh.edu.pl/lokidev/cities:madrid>):

```

1 Madrid is the capital and largest [[category:city]] of [[capital_of::countries:Spain]]. It's inhabited by [[inhabited_by:=population:=3,265,038]] people and covers an area of [[area:=605.77]] square kilometers.

```

- Country loki page source (<http://loki.ia.agh.edu.pl/lokidev/countries:spain>):

```

1 Spain, officially the Kingdom of Spain (Spanish: Reino de Espana), is a sovereign state and a member of the European Union located in southwestern [[placed_in::continents:europa|Europe]] on the Iberian Peninsula. Its mainland is bordered to the south and east by the Mediterranean Sea except for a small land boundary with the British Overseas Territory of Gibraltar; to the north and north east by [[countries:france|France]], [[countries:andorra|Andorra]], and the Bay of Biscay; and to the northwest and west by the Atlantic Ocean and [[countries:portugal|Portugal]].
2
3 Spain with an area of [[area:=504,030 km^2|504,030 km2]] is the second largest [[category:country]] in Western Europe and the European Union after [[countries:france|France]], and the fourth largest country in Europe after [[countries:russia|Russia]], [[countries:ukraine|Ukraine]] and [[countries:france|France]].
4
5 People in Spain speak [[language::languages:spanish]].
6
7 Source: en.wikipedia.org

```

1.5 Loki - Semantic Web Standards

- Dziesięć krajów o największej powierzchni (<http://loki.ia.agh.edu.pl/lokidev/user:asikora>):

```

1 <pl format="sparql">
2 PREFIX wiki: <>
3 SELECT ?location ?area
4 WHERE {
5   ?location category "country".
6   ?location wiki:area ?area.
7 }
8 ORDER BY DESC(?area)
9 LIMIT 10
10 </pl>

```

1.6 Loki - Reasoning

- Książki z gatunku „horror” (<http://loki.ia.agh.edu.pl/lokidev/user:asikora>):

```
1 <pl goal="wiki_category(X, 'book'), wiki_attribute(X, 'title', Y), wiki_relation(X, '
2   genre', 'bookstore:genre:horror'), write(Y), nl, fail" scope="bookstore:book">
```