Semantic Web

- Motivation & Agenda –

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Semantics: What for?

Tasks & Purpose
Find me pictures about a boy on the beach
Find me cute pictures about Nico to show to my Mum
Find me pictures from Greece
Find me pictures from our common holiday

- with a resolution of ....
- with no other person in the foreground...
What does this mean?
Content semantics (general knowledge):
boy; beach; jet ski; sea; sky

Content semantics („private knowledge“):
Nico digging

Retrieval semantics:
cute picture to show

Situational semantics:
Chalkidiki, Greece, 2006

Social semantics:
SSMS 2006
And semiotics will tell you that this list is incomplete…
Multimedia Semantics

Multimedia content semantics
  Multimedia situational semantics
    Multimedia retrieval semantics
      Multimedia social semantics

common vacation -> Manual Class. & Mgmt

cute -> Feedback & AutoClassify

Turkey -> Capture (during creation)

boy -> Extract from (image) data
Find me a cute picture of Nico digging during our common vacation.
"One Ring to rule them all, 
One Ring to find them, 
One Ring to bring them all and 
in the darkness bind them."

Inscribed on the One Ring
Core Questions for Multimedia:

How to represent the ontology?
How to query the ontology?
Which ontology to construct how?
How to populate the ontology?
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How to represent the ontology?

How to query the ontology?

Which ontology to construct how?

How to populate the ontology?

Agenda Items:

Ontology Representation Languages

Ontology Query Languages

Multimedia Ontologies

Ontology-based

- content recognition
- content creation
- retrieval and feedback
- metadata management
Core Questions for Multimedia:

*How to represent the ontology?*

*How to query the ontology?*
*Which ontology to construct how?*
*How to populate the ontology?*

Agenda Items:

- Ontology Representation Languages
- Ontology Query Languages
- Multimedia Ontologies
- Ontology-based
  - annotation
  - content recognition
  - content creation
  - retrieval and feedback
  - metadata management

Not considered in this tutorial!
Thank You

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Interested in this?
New EU project that tackles these layers will start next year!

Positions@Koblenz open!
Talk to me or send email.