**University of Konstanz**
**Winter Term 2014/2015**
**Visual Analytics Group**
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## *Assignment 2 (20 points)*

### Text Documents and Knowledge Representation

1) Explain the 5 major components of an Ontology and discuss based on these components, the differences between an Ontology and a Classification. **(5 P)**

2) How does the keyword based approach for retrieval in text documents work? What are its advantages and disadvantages? **(3 P)**

3) Define the measures of Precision and Recall by which we can assess the quality of a retrieval algorithm. **(5 P)**

4) Give two examples how precision and recall can be negatively affected in a keyword-based query. **(2 P)**

5) How can an Ontology be used to improve retrieval in text documents?
   **(2 P)**

6) Consider the tf*idf vector model for indexing text. Explain how the term weights are computed in this model, and give an interpretation of these values. **(3 P)**