

MDE518: Database Management Systems
University of Athens
Deprt. of Informatics & Telecommunications

Project II (Alternative)
January 2012

Purpose of the Project:

To write a *up-to-date survey* and/or *pursue a promising research topic* that is both modern and interesting. The main objective of a (good) survey is to bring-up-to-date a non-expert in a specific area of interest.

The specifications of the survey project are the following:

1. 15-20 typeset pages of text, illustration material and bibliographic references.
2. The discussion should be integrated (i.e., it should not consist of the description of a few research efforts in a disconnected form).
3. The material to be used should be at least 15 research papers that should come from reputable publication forums (including both conferences and journals). To contain the search I provide a confined list below.
4. You can select the topic of your survey; here are some (sample) suggestions you may consider:
 - Virtualization for database systems
 - Data processing techniques in the Cloud
 - Query processing in virtualized data architectures
 - Database architectures and techniques for social networks
 - Non-SQL data processing in Map-Reduce Environment
 - Workload-adaptive query processing
 - Multidimensional indexing and search
 - Automatic tuning for database systems
 - Query processing for data streams
 - Replicated database systems
 - Managing data on the Web & Web databases
 - *Any other specific topic/area* you may find interesting

Bibliographic Sources:

Publications you can use in your research may include articles that have appeared in the proceedings of the following annual conferences and journal publications:

- IEEE Int. Conf. on Data Engineering (ICDE)
- Int. Conf. on Very Large Databases (VLDB)
- ACM SIGMOD Conference (SIGMOD)
- Int. Conf. on Extending Database Technology (EDBT)
- Int. Conf. on the WWW (WWW)
- The VLDB Journal (VLDBJ)

- IEEE Transactions on Knowledge and Data Engineering (TKDE)
- ACM Transactions on Databases (TODS)
- Information Systems (www.sciencedirect.com/science/journal/03064379)