

CS 801 Database Development Project

1. Design and implementation of a database or a database processing algorithm.
2. Possible topics are:
 - Object-Oriented database design and implementation, and then execute object-SQL queries or transactions on the database.
 - Design and implement a Web interface to your database (designed previously in CS605 or CS701). For example, Java applets can be implemented to accept user input, invoke queries/transactions on the DB, and return the result to the user.
 - Implement an algorithm and report the performance result. For example, a data mining algorithm or a parallel join algorithm can be implemented and executed on sample data.
3. Submit a description of your topic and a list of reference papers/documents. (due 5/12)
4. Detail description of design, implementation, result, and discussion must be included in the report.
5. Size of the final report is between 20 and 35 double-spaced pages. (due 6/11)

Technical Reference Sources

- IEEE Trans. on Software Engineering
- IEEE Trans. on Knowledge and Data Engineering
- Computer (IEEE Computer Magazine)
- Communications of ACM
- ACM Trans. on Database Systems
- ACM Trans. on Knowledge Discovery from Data
- ACM Trans. on Information Systems
- Information Systems (Journal)
- Data and Knowledge Engineering (Journal)
- Data Mining and Knowledge Discovery (Journal)
- IEEE Tutorials, such as Tutorial on Database Systems, etc.
- Proc. of IEEE Int'l Conf. on Data Engineering
- Proc. of ACM Conf. on Management of Data (SIGMOD Conference):
refer to the volumes of SIGMOD RECORD
- Proc. of ACM SIGKDD Int'l Conf. on Knowledge Discovery and Data Mining
- Proc. of Int'l Conf. on Very Large Data Bases (VLDB)
- Knowledge and Information Systems (Journal)
- IEEE Trans. on Parallel and Distributed Systems
- ACM Computing Surveys
- ACM/Springer-Verlag Multimedia Systems
and Others