Your Database Project

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1 Introduction

- Throughout this semester, we learned the basic concepts of database systems.

- The purpose of the final project is to get an in-depth experience by creating schema, inserting records, and updating the database instance.

- Minimal requirement

  - Draw an ER diagram for the University
  - Write DDL statements for each entity
  - Write DDL statements for each relationship
  - Explain each DDL statement in relation to ER diagram
  - Write sample insert statements for each table (both entity and the relationship)
  - Connect to the database using JDBC
  - Create database schema using JDBC

- Moderate requirements

  - Insert records to all tables
  - Assuming that income tax rate is 10%, print the tax amount for each instructor about the amount of tax
  - Print the student with the highest grade for each semester.

- Challenge requirements (Write an application program)

  - Write application functions
    * Explain the interface
    * Show the DML statements
    * Write Java Program
  - Example functions
    * Insert/delete new students using JDBC
    * Insert/delete new instructor
    * Change a student's department

2 Important dates

- Proposal: Mar 18 (your rough idea. It's ok to change later)

- Presentation: Apr 8 (show your results and take questions or normal class)

- Paper: Apr 21 (a written explanation with more detailed information such as bibliography)

2.1 Final paper

- Abstract

  - Important findings from the implementation

- Introduction

- The system

  - Explain the requirements you satisfied

- Conclusion

  - Summarize what you learned

- Bibliography

  - Include the bibliography you found relevant to your project.
  - Each bibliography should appear in the body of the final paper.

- Appendix

  - ER-diagram (photo if hand-drawn)
  - The source codes
    * List of DDL statements
    * Java source code
    * Brief user's guide