

The second part of the project is a group assignment. This part is worth 10% of the final grade. A group of 2-3 students will be on each project. Each group needs to submit an initial report (no more than 3 pages) with the following items. **The initial report is due on Apr 5.**

- a. Application background
- b. Data description, including all constraints that need to be enforced
- c. An ER diagram design of your database
- d. Team members

Note: You can use the database in the first part as an example of your database design. The total number of relations should be around 5-10. Also, the user interface is optional, since this course is not a Java course, nor a GUI course. A simple command-line interface is acceptable. The purpose of this project is to exercise the database designing concepts that we have learned in the class.

Final project report: Each group needs to submit one final report (no more than 15 pages) with the following items. **The final report is due on Apr 24.**

- a. Application background
- b. Data description, including all constraints that need to be enforced
- c. An (updated) ER diagram design of your database (if applicable)
- d. A list of functional dependencies derived from the semantics of your data
- e. The schema of your database
- f. 5-8 example queries supported by your system. The queries should include the use of join, sub-queries, aggregate functions , and group by.
- g. Implementation: OS, DBMS, and programming language if any
- h. The role of each team member
- i. A short presentation/demo in the last a few classes