

CSC 455 Group Project Initial Information

Project Proposal due 9/16:

Submit a summary of your project group's business or organization or need. Include a written description, data requirements, operations, and business rules. What does the database need to do for its users?

- If you start thinking of the **conceptual** model for the project, the next step, you should have at least 4 distinct entities.
- This will become the basis for the Project Summary requirement in the final submission.
- One group member may submit for the entire group, but be sure all group member names are given. This will count as a homework grade.

Conceptual ERD due 9/25

- Conceptual E-R diagram (not hand-drawn), correctly showing all attributes, relationships, cardinalities and participation constraints.
- One group member may submit for the entire group, but be sure all group member names are given. This will count as a homework grade.

Logical ERD/Schema due 10/5

- Logical E-R diagram/schema showing primary keys, foreign keys mapped to their sources, all stored attributes, and any constraints that might be added to the diagram or noted otherwise.
- One group member may submit for the entire group, but be sure all group member names are given. This will count as a homework grade.

The final project requirements are below. A grading rubric will be provided later.

1. Written overview or summary of the project: its purpose, its functionality, any sort of user documentation, description of known problems, etc. This should be "deliverable" to a client (i.e. professional tone and writing.)
2. Final Conceptual E-R diagram (modified if necessary), correctly showing all attributes, cardinalities and participation constraints.
3. Logical E-R diagram, Table design, Relationships, & Data:
 - a. The schema is correctly mapped from the Final Conceptual E-R diagram
 - b. Primary and foreign keys are appropriately identified and assigned
 - c. Attributes are an appropriate type and size
 - d. The initial DDL includes the correct SQL syntax to create tables, and the initial insertion of data for each table is a separate transaction.
4. Supporting Queries and Functionality:
 - a. At least 10 SQL queries are demonstrated that **implement the functionality** described in #1. These must include:
 - i. SELECT queries demonstrating: two-table join, three-table join, self-join, an aggregate function, an aggregate function using GROUP BY and HAVING, a text-based-search query using LIKE with wildcard(s), a subquery.
 - ii. One stored function, one stored procedure, and one trigger: implemented and demonstrated through an appropriate query.
 - iii. Make sure that these queries also demonstrate the intended functionality of the project

5. A simple, web-based front-end providing links to the appropriate queries. (An example will be provided in class.)
6. Group evaluation: completed confidentially and individually at the final exam.

The project will be scored as follows:

DELIVERABLE	WEIGHT	DUE
1. Project Summary	5%	9/16
2. Conceptual E-R diagram	15%	9/25
3. Logical E-R diagram/Schema, Table design, Relationships, & Data	35%	10/5 12/2
4. Supporting Queries and Front-end Functionality	35%	12/2
5. Group evaluation	10%	12/2