

**CMSC 508 Semester Project Rubric**

Name: \_\_\_\_\_

**Phase 1 – 200 points**

Name: \_\_\_\_\_

**Phase 1 documentation:**

Team #: \_\_\_\_\_

- A. Problem statement.
  - a. Team formation & preliminary problem proposal (15 points)
  - b. Submitted project problem statement (60 points)
- B. Entity-Relationship diagram. (50 points)
- C. Relational design (including functional dependencies and normalization). (50 points)
- D. Sample data. (25 points)

**Problem Statement**

1. Describes the environment and user groups for a specific database
2. Identifies the entities that need to be stored within the database
3. Describes the potential uses for the database and 20 sufficiently unique queries designed to show how the database is used in the problem solution

Measure	Excellent	Good	Poor	Unsatisfactory
1 (20 points)	Clearly describes the environment in which the database will be used. Clearly defines roles of all possible user groups	Briefly describes the environment in which the database will be used. Clearly defines roles of some possible user groups	Briefly describes the environment in which the database will be used. Just lists user groups	Mentions an environment and lists a few types of users
2 (20 points)	Lists all entities that would need to be included in database implementation. There should be at least 4 major entities.	Lists most entities that would need to be included in database implementation	Lists some entities that would need to be included in database implementation; but omits some obvious ones	Lists just a few possible entities – omitting several obvious ones
3 (20 points)	Potential uses listed as queries for each type of user. Queries are reasonably complex and realistic.	Potential uses listed as queries but without regard to type of user. Queries are reasonably complex and realistic.	Potential uses listed as simplistic queries based on single entities.	Potential uses listed as queries that don't relate to entities in database.

**Design – E/R Diagram**

Measure	Excellent	Good	Poor	Unsatisfactory
Create an entity-relationship diagram for a database using format specified in class lectures	E/R diagram includes all needed entities and relationships. All relationships are of correct functionality. Diagram can be used to show how to answer all queries.	E/R diagram includes most needed entities and relationships. Most relationships have correct functionality. Diagram can be used to show how to answer most queries.	E/R diagram includes some needed entities and relationships. Most relationships have correct functionality. Diagram can be used to show how to answer some queries.	E/R diagram includes a few needed entities and relationships. Some relationships have correct functionality. Diagram cannot be used to show how to answer most queries.

Comments: