CMSC 508 Final Project Rubric **Name: _____**

Name: _____

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Final documentation:

A. Updated problem statement.
B. Updated Entity-Relationship diagram.
C. Updated relational design (including functional dependencies and normalization).
D. Database: SQL scripts for creating the database tables, views, triggers, and procedures.
E. Interface software: source code and documentation of the interface to the database.

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

Measure	Excellent	Good	Poor	Unsatisfactory
1	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	Lists all entities that would need to be included in database implementation	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	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

Measure	Excellent	Good	Poor	Unsatisfactory
Create an entity-relationship diagram for a database	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.

Implementation and Demonstration of a Running Database and Interface.

1. Design and implementation of a database in MySQL in Google Cloud Platform (GCP) to model a real-world problem.
    a. Create tables for a database in in MySQL
    b. Primary keys and foreign keys are defined
    c. SQL queries to retrieve required information from the database
2. Design and implementation of an interface/website in GCP that interacts with the database to select, insert, update, and delete information.
3. Presentation of Final Project

	Excellent	**Good**	**Poor**	**Unsatisfactory**
1.a.	All necessary tables created	Most necessary tables created	A few tables created	No tables created
1.b	All primary and foreign keys correctly defined	All primary and most foreign keys correctly defined	Most primary and foreign keys correctly defined	Just some primary keys defined
1.c	All SQL queries working	Most SQL queries working	Only wrote some working queries	No queries work
2.	Database implementation, functionality, and frontend are complete	Database implementation is complete but frontend lacks security, authentication, usability.	Database has been implemented but few functionalities are available.	Database is not implemented, and no functionality is available.
3.	Volume, pace, and timing of presentation is good. All team members participate. Presentation highlights key aspects of the project.	Accomplishes goals from excellent most of the time	Accomplishes some of the goals from excellent some of the time	Rarely accomplishes any of the goals from excellent

Notes: