

MIS 302 – Team Project Phase 2

Due February 23

Specific Deliverables for Phase 2

- Include a revised version of your Phase 1 document
- Using MS Visio and the Chen notation, draw two ER diagrams: one with and one without attributes and primary keys. You should have a minimum of 5 entities (the model should not be too simple). I do not encourage you to go much beyond 5 as it may complicate the remaining project phases exponentially. Subtype entities count as one entity per hierarchical layer.
- Thoroughly explain (define) each entity and its attributes. Indicate the primary keys (underline the attribute name(s)). Be careful. You may lose points if you incorrectly identify an attribute as an entity, and vice versa.
- Regarding each relationship
 1. Justify the necessity of each relationship (especially 1:1 relationships).
 2. State the bi-directional business rules it represents (1:1, 1:M, M:M) and clarify any unusual relationship names.
 3. Insert the relevant segment of the ERD with the associated connectivities and cardinalities. Do not show any attributes except the primary keys. If you have converted a M:M relationship to a composite entity in your ERD, also provide the ER representation of the M:M relationship and explain the conversion process.
 4. Make appropriate statements about relationship participation (optional vs. mandatory), and describe the rationale behind these decisions.
- Identify weak entities (if any) and discuss why they are so.
- Discuss any potential generalization hierarchies along with their completeness and disjointness constraints. Provide the relevant ERD segment.
- List the business rules not captured by the ER diagram (there should be several).
- Explain the iterations you went through to arrive at the final version of the ERD and why it evolved. Include your previous ERDs in this section to illustrate the process. Discuss why other ERDs that you have considered are inappropriate and why the current ERD is your best one.
- As an Appendix, include your graded Phase 1 proposal document.
- Use the following titles in your report: Project Proposal, ER Diagram, Entity and Attribute Definitions, Relationships, Weak Entities (if applicable), Generalization Hierarchies (if applicable), Business Rules not Captured by ER Diagram, The Conceptual Design Process, and Appendix. Your Table of Contents should list only these titles.

The rubric that I will use for grading is provided on the next page.