

IS 335: Information Technology in Business Reading Preparation Assignment Chapter 13 Enterprise Architecture Textbook

Read Chapter 13, "Information Modeling" of *Design of Enterprise Systems: Theory Architecture, and Methods*, pp. 307 – 319

Read the below questions and be prepared for class discussion based on those questions.

- 1. Identify and describe each of the three schemas.
- 2. Describe a benefit of the three-schema architecture.
- 3. What is the purpose of information modeling?
- 4. Define an entity and differentiate between an entity and the instance of an entity.
- 5. What is the difference between a data type and a domain?
- 6. In a university database, why would the student's name not be a good primary key?
- 7. What does the rule that a primary key cannot be null mean, and why do we need that rule?
- 8. Describe is the relationship between a foreign key and a primary key.
- 9. Explain the difference between an identifying relationship and a non-identifying relationship.
- 10. What is the purpose of introducing associative entities into a model?
- 11. Explain how semantics are embedded in the information model.