Lab # 07: DBMS LAB Project – Complete Conceptual Schema

OBJECTIVES OF THE LAB

This lab focuses on the Database Design consisting of the Conceptual Schema.

- Complete Conceptual Schema
 - o Entity Description,
 - o Business Rules,
 - o Entity Relation Diagram, and
 - Enhance Entity Relation Diagram (If Required)

COMPLETE CONCEPTUAL SCHEMA

A conceptual schema is a high-level description of a business's informational needs. It typically includes only the main concepts and the main relationships among them. Typically this is a first-cut model; with insufficient detail to build an actual database. This level describes the structure of the whole database for a group of users. The conceptual model is also known as the data model as data model can be used to describe the conceptual schema when a database system is implemented. It hides the internal details of physical storage and targets on describing entities, data types, relationships and constraints.

To create the Entity-Relationship Diagram (ERD) and Enhanced Entity-Relationship Diagram (EERD), please use one of the following CASE Tools:

- 1. www.draw.io (https://app.diagrams.net/)
- 2. Microsoft Visio Software

To create ERD & EERD in draw.io, please use the following YouTube video as a reference:

1) Creating Entity Relationship Diagrams using Draw.io https://www.youtube.com/watch?v=lAtCySGDD48

To create ERD & EERD in Microsoft Visio, please use the following YouTube videos as a reference:

2) Entity-Relationship Diagram Model with Visio https://www.youtube.com/watch?v=597BVMtMZ1w 3) Visio 2013 - Database Diagram (Crows Foot Notation) https://www.youtube.com/watch?v=xzQQW0NiAMM

-----Task 7.1-----

Submit the Complete Conceptual Schema of your DBMS Project including:

- 1. Entity Description (ED)
- 2. Business Rules (BR)
- 3. Entity-Relationship Diagram (ERD)
- 4. Enhanced Entity-Relationship Diagram (EERD)

Note:

- 1. For writing better business rules and entity description, consider Lecture 2a and Lecture 2b.
- 2. For making better ERD, consider Lecture 2a and 2b.
- 3. For making better EERD, consider Lecture 3.