# Homework 2

(end of lecture 5)
MLLO 20181009

# Homework 2

Build a database based on the ER model you built in Homework 1. We use 'MySQL Command line client - Unicode' in this homework. For your homework, please do the following

Basic Create a database for the ER model you built, give a proper name to the database.

Basic In this database, create a 'self' table to describe yourself. The table should include your student ID, name, department, year, and other information you think are necessary.

Basic Insert your self-information into the 'self' table.

- For each entity types that you designed in homework 1, create a table with the corresponding name, attributes, domains, and key constraints.

Schema size
  - You will have at least 5 tables or more tables.
  - You will have at least 3 attributes for each table.

- In addition, your tables must contain the following in the corresponding tables
  - Regarding entity types

Primary Key
    - For each strong entity type, there must be the primary key

5% bonus
    - For each weak entity type, each partial key should be "turned" into a multi-attribute primary key (by adding additional column).
  - Regarding attributes

Attrib
    - Define attribute and domain properly
    - For composite-valued attributes, use string to as its domain for now.
    - For each multi-valued attribute,
      - Treat a single value for now

Attrib constraints
    - Use NOT NULL and Default constraints in at least once for each table
    - Define at least three attribute constraints in all tables using CHECK

# Homework 2-2

- Regarding relationship
  - Recursive
    - For each recursive relationship, assign the foreign key properly for its corresponding table.
  - Foreign key
    - Each 1-1 or 1-n relationship in the ER diagram should be implemented as a foreign key constraint in a table
  - m-n
    - For each m-n relationship in the ER diagram, you need to create an additional table
  - Table size
    - Insert at least 3 rows for each table.

Additional bonus:

- 5% bonus
  - Use enum type in at least three attribute domains

# Homework 2-3

Hint:

- What you create in this homework may continue to be used by yourself in the future homeworks.

Other rules:

- Due 10/23 before the end of first break of the class
- Late submission, 80% discount for each day late.
- Maximum two day delay (No acceptance on the third day counting from the submission date.)

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# TA Grading Guidelines

- 20% Basic
- 10% Schema size
- 10% Table size
- 10% Primary Key
- 10% Foreign key
- 10% Recursive
- 10% m-n
- 10% Attrib
- 10% Attrib constraints
- Total 100%
- 5% 5% bonus:weak
- 5% 5% bonus: enum
- Total 110%