IE 442
Enterprise Information Systems Modeling
SQL Project Guideline

Fall 2023

Deliverables of this project are as follows:

1) A report with an E-R diagram showing the design of the database, and a brief explanation of the diagram.

2) A program in a programming language of your choice (I recommend using Python) that connects to the database and runs the required SQLs (schema construction and MRP calculation SQLs) as needed to obtain the desired result. Note that all MRP calculations are expected to be performed using SQLs on the database, not in the program.

3) A test function to execute a set of SQLs that inserts a small sample data to the database, runs the MRP and asserts the expected results.

4) Use "streamlit (https://streamlit.io)" to develop a simple UI to input required data, run the MRP calculation and show the resulting MRP tables to the user. Add a video recording of your app to showcase how it works.

As a database you can use any available database that you find convenient. As a reference, you can read the following post regarding usage of some common opensource databases (I recommend using SQLite, since it is the simplest to start using)

https://realpython.com/python-sql-libraries/

Please submit your project report and your program.