ISYS 464, Section 2 and 3, Fall 2022, Database Project Overview

The project is to design and implement a database that is able to support a business application that will meet the requirements of a particular business or organization, real or hypothetical. Be creative and innovative in identifying new business operations, services that can be enabled by database. Today’s web, mobile and IoT technologies offer many opportunity for new services to gain competitive advantages for a business. Use your imagination to figure out one such application and design a database to support it. You are to work in teams of up to two students on this project. Each team will have to identify an application for an organization (real or hypothetical), analyze the organization's data requirements and create a data model, design and implement the database using MySQL, and use SQL to retrieve useful information from the database.

Project report should be organized as follows:

Part 1a: Project introduction
Describe the business for which you design the application.
Describe the part of business operation your database supports.
Describe the advantages of automating this operation.

Part 1b: Database analysis
Describe the data requirements
Draw an ERD based on the data requirements

Part 2: Database design and implementation
Design the database based on ERD
Use MySQL to implement the database design. The database must meet the database constraints such as primary key constraint, referential integrity constraint, etc. Each table should have around 7 records.

Part 3: Querying database
You should define at least 7 queries that produce useful information from the database.

I will assign the due date for each part of the project later.