



Database I, Year 2021/ 2022
Project

Project's descriptions:

1. Car Trading

A customer (customerID, customerName, customerAddress, customerTelephone, customerMobile) may want to buy a car (carID, carName, carYear) which has different brands (carBrandID, carBrandName, carBrandCountry). A customer may sell his car to an agency and an agency may buy different old cars from customers. Each car brand may have contract with different agencies (agencyID, agencyName, agencyAddress, agencyTelephone, agencyFax) where each agency may itself have contract different car brands. Agencies must ship via at least one shipper (shipperID, shipperName, shipperAddress, shipperTelephone, shipperCountry) but a shipper may ship to different agencies.

2. Hospital Management System

In a hospital, Doctors (DoctorId, DoctorName, DoctorAddress, DoctorEmail, DoctorTel) supervise patients (patientId, patientName, patientAddress, patientEmail, patientTel) which will reserve a room (roomNo, roomType, roomPrice) and this patient will be served by nurse (nurseId, nurseName, nurseAddress, nurseEmail, nurseTel). Each doctor belongs to one department (DeptId, DeptName). Each patient will take one or more medicine (medId, medName, medPrice).

3. Book Store

A Client (ClientID, ClientName, ClientAddress, ClientEmail, ClientPhone, Postal Code, Country) may order a book or more (BookISBN, BookTitle, BookEdition, PubYear, UnitPrice, UnitsInStock) which belong has different Categories (CategoryID, CategoryName, Description). An Employee (EmployeeID, EmployeeName, Title, Country, Salary) is responsible to get Orders (OrderID, OrderDate) from Clients. Each Employee may report to a supervisor which is also an employee. Each order contains many books with details as the UnitPrice and the Quantity required of each book from the Client.

4. Publishing Company

A publishing company produces scientific books on various subjects (Subject ID, Subject_name, Subject_Description). The books are written by authors (Author ID, Author_name) who specialize in one particular subject. The company employs editors (Editor ID, Editor_name) who, not necessarily being specialists in a particular area, each take sole responsibility for editing one or more publications. A publication (Publication ID, Publication_name, Publication_description, Publishing_Date) covers essentially one of the specialist subjects and is normally written by a single author. When writing a particular book, each author works with on editor, but may submit another work for publication to be supervised by other editors. To improve their competitiveness, the company tries to employ a variety of authors, more than one author being a specialist in a particular subject.

Requirements:

1. Make groups of 4 or 5 students.
2. Select one of the above ideas.
3. Read the description carefully then:
 - a. Make a cover page with the project title and team information.
 - b. Draw two ERD models using power designer (Conceptual and physical).
 - c. Build at least two forms using C# by connecting to microsoft SQL server. These forms should allow (insert, update, delete or select data from one or more tables).
 - d. Create two reports using microsoft visual studio. The reports should represent different data.

Notes:

1. Copies will be graded to ZERO for source and copy.
2. Submission deadline is 3-Jan-2022 before 11pm.
3. Discussion will be on Tuesday 4-Jan-2022 (Each TA will share the exact time).
4. Good GUI may receive one bonus mark.