COMPUTING & DATA ANALYTICS 5540 – Assignment 2

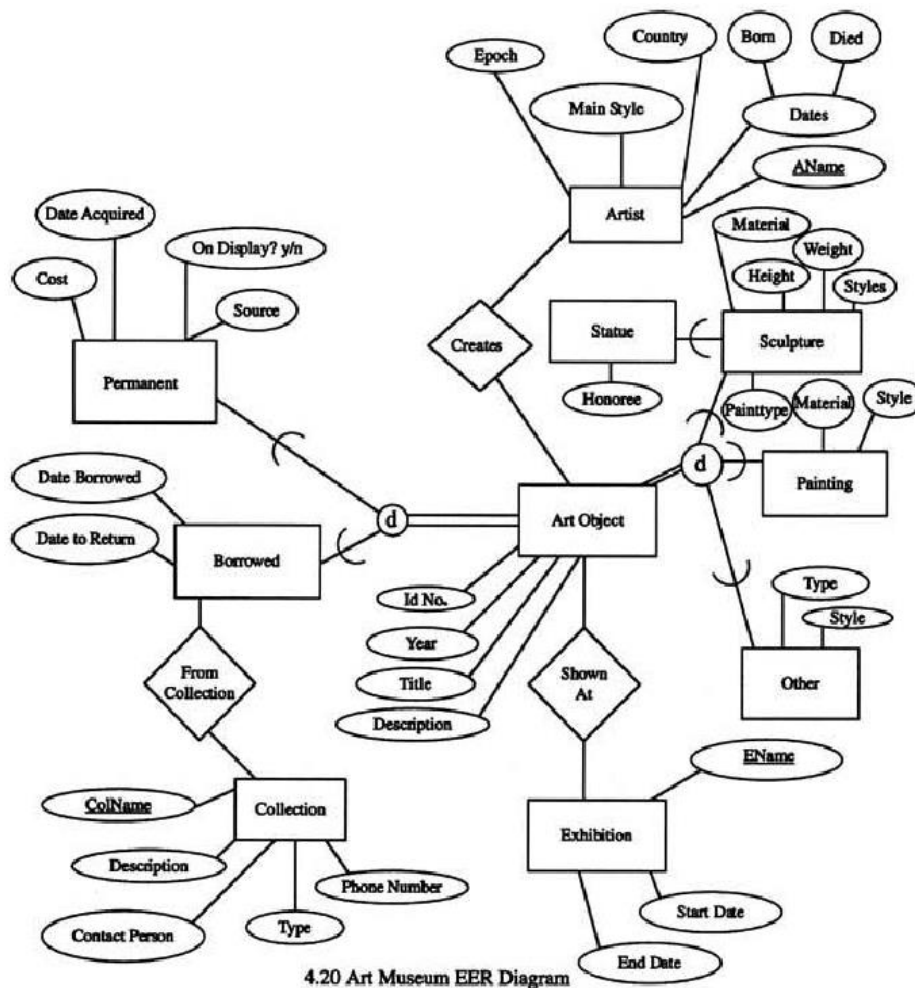===
Date assigned: Feb. 05   Time due: Feb. 24 at 11:59 pm
                        (see submission procedure below)
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PROBLEM 1 [11 marks]
Map the following EER diagram to a relational database schema. Use the notation we used in the examples in the lectures. In particular, make sure to underline primary keys, and indicate foreign keys using arrows.

4.20 Art Museum EER Diagram

PROBLEM 2 [16 marks]

Air Travel Agents (ATA) wants a database to keep information about its many offices and the people involved in its operations, and about airline companies and the flights they offer. Every office has a unique number and an address. For each person, we need to store the name, the address, one home phone number, and a unique ID number. If the person is an ATA employee we also need to store his/her SIN and business phone number, as well as the office he/she works for. Some ATA employees are managers. For each manager it is required to know their qualifications, their annual salary, and the set of offices under their management. Note that, for agents (=ATA employees who are not managers), we store their hourly pay rate. A person can book a flight via an agent (who is not a manager). For each flight we need the following information: flight number, airport code, date of departure, and destination. Flight numbers are unique only within the same airline. When a flight is booked we need to know the date of booking and the price. Each airline company offers a set of flights, and has a unique code, a name, and a list of phone numbers with a description for each phone number. Design an (Enhanced) Entity Relationship diagram according to the above requirements. Make sure to indicate constraints.

You can use any tool to draw this. You can also draw this using pen and paper (Don't forget to scan and add in the pdf).

PROBLEM 3 [13 marks]

Create 3 pages using PHP, HTML and MySQL.

1) **signup.php** – User should be able to signup using name, email, mobile number and password. You don't require to check validation (it is optional – no points for the validation). When user clicks on submit button all the values should be stored in the MySQL database.

2) **login.php** – User should be able to login using email and password.

3) **view.php** – This page should display list of all users/accounts.

Do not spend much time on designing and the look and feel. You will not loose point for that. The main aim is to learn connection between PHP and MySQL. Don't forget to host these files. Also, include URLs for these pages into the pdf file.

IMPORTANT COMMENTS

1. <u>Late</u> submissions will not be accepted.
2. <u>Submission procedure</u>: Make a zip file Axx.zip, where Axx is your A-number, containing the **pdf** file (Answer for Question 1 and 2, screenshots and link for question3), signup.php, login.php, and view.php. Submit it on Brightspace. Email submission will not be considered.

3. This is an <u>individual</u> assignment. While you are permitted to discuss the problems, you are not supposed to take notes during such discussions. The submitted solutions must consist entirely of your individual work.