

Project: 1 Course: CSCC43

Deadline: Nov 9th, 11:30pm Submission: via blackboard

This project, which accounts for 10% of your total mark, must be done individually. You are not allowed to discuss your solution with your peers, or show it to them. No question should be asked in Blackboard that may lead others to the solution. If observed, it will be seen as cheating and you will face the consequence that is clearly stated in University of Toronto Code of Behavior on Academic Integrity.

For this project your job is to read the description below, identify the entities and their attributes and draw ER diagram using MySQL Workbench.

Description:

Great Convention (GC) is a company that sets up many conferences, seminars, and workshops all around the world and manages the registration. It means when a company or university needs to hold a conference they communicate with GC, and provide information about the type of the conference that they are going to hold. This information includes the title of the conference, start and end date, where the conference will be held (country and city). GC, then, books the right place for the conference and sets the initial registration fee.

Registration fee is not the same for everybody. For example, if you are an employee you pay the fee in full, while if you are a student, you pay 60% of the initial fee for one conference and probably 70% for another conference depending on the conference. If you are an employee and have attended for a conference that was held by GC previously, you get a discount for the current conference. The more that you attend for GC's conferences the more discount you get. So managing the fees can be quite complex if no proper data structure is introduced.

There are two types of participants. The first is the people who not only attend for different sessions but also present a paper in that conference. The second type is the people who just attend the sessions. If you are a presenter, you get extra discount on your registration fee. When you register, GC needs to know your name, DOB and the type of your attendance. Of course they will ask you about your employment status, but they do not keep this information in their database, instead they only use it to estimate what would be the fee that you should pay.

When GC books a place, they need to know how many rooms do they need. The number of rooms that they need depends on the maximum number of sessions that are held in parallel. To help participants to find the right room to go, GC prints out a label for each session that contains the title of the session, date and start and end time of the session and put it up on the entrance of the room.

As setting up a conference can be quite expensive, it is possible that the money that is earned from participants' registration fee is not enough. So GC talks to large companies and universities to be the sponsor of conferences. If a conference is a high rank conference, it is possible that they find more than one sponsor. If not, the only sponsor is the company or university who asked for setting up the conference. How much money each sponsor provides, totally depends on their internal policies. For example, University of Toronto might be a

sponsor for both Computer Science Education and Biological Science Education conferences but they prefer to invest more on Computer Science, so the budget that they provide for this conference is more.

At the end of the conference, GC prints out a pre-designed certificate for each participant per session that they have attended. So if you have attended for n sessions, you will receive n certificates.

Requirements:

- Any entity that you define should have an ID as a primary key. For example, it is obvious that participant should be an entity so you define an ID, e.g. ParticipantID, for this entity.
- You upload your solution as a pdf file whose name is your utorID.
- Your drawing should be neat. So rearrange the entities until the diagram is readable.
- For project 1, we are not interested in attributes' type therefore you should hide it. For that, you need to change the setting of the diagram via Model Options (Model Menu).
- As you know, no M:M and Supertype/Subtype relation can be implemented by relational data model. So you need to convert it to proper relations and relationships.
- All relations should be in 3rd normal form.
- No handwritten solution will be marked.

Marking Scheme:

- Only correct entities, with right keys (Primary and Foreign) receive marks.
- Only correct cardinalities are important for this project. The constraint is not an issue here. In fact it is better to assume that all relationships are mandatory (no optional).