

COMP 3311: Database Management Systems

Task 1: Entity-Relationship Schema Design

Assigned: June 30, 2020

Value: 10% of course grade

Due: 11:00 p.m., July 11, 2020

The course project problem description describes the requirements for a software system to manage conference submission reviews. In this task you are to analyse the data requirements for the conference submission reviews management system and express those requirements as an entity-relationship schema using the entity-relationship model notation presented in class.

IMPORTANT REMINDER

This is an individual task. The E-R schema that you submit should be *your own work*. While you may discuss general design issues with other students, you are not allowed to collaborate with others, to come up with a common design, to share designs or to copy someone else's design. Copying, sharing and collaborating will be severely penalized. All those involved in a copying/sharing/collaborating case will automatically receive a grade of 0 and may be reported for further disciplinary action.

ENTITY-RELATIONSHIP SCHEMA DESIGN FORMAT

Design an E-R schema based on the conference submission reviews management system course project problem description. Your design should include an E-R diagram using as many of the E-R model constructs as necessary to fully express the data requirements of the application. In particular, entities, relationships, attributes (of entities and relationships), generalizations and constraints on attributes, relationships and generalizations should be included in your design as required by the application.

A NOTE ABOUT DESIGN

In any design problem there are usually design choices that the designer can make leading to several possible solutions. Thus, for this task it is important not only to produce an appropriate design for the problem, but also, where there is a design choice, to explain and justify your design choice. While you will be graded mainly on the quality and adequacy of your design, explanation and justification of any design choice you make may aid the teaching team in determining whether to accept your design choice as reasonable.

WHAT TO SUBMIT

Submit a JPG, JPEG or PDF document named task1 containing your name, student number and an E-R diagram for the conference submission reviews management system that shows entities, attributes, attribute constraints (i.e., only keys and discriminators are required), relationships, relationship attributes, relationship constraints (i.e., cardinality, participation and exclusion), generalizations and generalization constraints (i.e., coverage).

Notes

1. You must use Oracle Data Modeler to construct your E-R diagram. ***Any other form of E-R diagram is not acceptable and will not be graded.***
2. Your name and student number should be contained in a note positioned in the upper right corner of your E-R diagram.

If necessary, you may also submit a PDF document containing a listing of any assumptions on which your E-R schema design depends and your reasons for making each assumption (i.e., why do you believe that the assumption is valid and reasonable).

HOW TO SUBMIT

By 23:00 (11:00 p.m.) on Saturday, July 11, upload your task1 document and your assumptions document, if any, to Canvas by selecting *Task 1* in the Assignments section of Canvas and then selecting the **Submit**

Assignment button. To check your submission, select the Submission Details button. For help, select the Help button.

GRADING

<u>Item</u>	<u>Value</u>
E-R diagram	95%
Presentation (e.g., readability, layout of diagram)	5%

CLARIFICATION AND AMENDMENT OF PROJECT/TASK REQUIREMENTS

You can ask clarification questions regarding the requirements stated in the course project problem description. *All questions should be submitted to the teaching team by email at 3311rep@cse.ust.hk.* In addition to being answered individually, the submitted questions and their replies will be posted on the *Project Q&A* course web page for Task 1, which can be accessed from the *Task Q&A* section of the *Project Information* course web page. *You should check this web page on a regular basis for further clarification and amendment of project requirements.* Any requirements added or amended in a *Project Q&A* web page will become part of the course project requirements.