

COMP3311 Database Management Systems

Assignment 3 (8% of The Final Grade)

Due Date: Wednesday 4 May 2022 @ 11.59 PM

Assignment Rules:

1) We will compile and test your submitted code by using Visual Studio 2019 on **HKUST Virtual Barn**. Please configure your project according to the lab slides (in the Lab8 folder).

****If there are any compiling errors due to your submitted work when we run our testing, you will receive 0 mark for this assignment. You are strongly advised to test your code before submission.**

2) If you are not at the campus, you could also use the **HKUST Virtual Barn** to test your assignment.

(Following Virtual Barn the user Guide: <https://itsc.ust.hk/services/academic-teachingsupport/facilities/virtual-barn/user-guide/>)

If you think **HKUST Virtual Barn** is slow, we recommended you write code on your own PC. But you must make sure that it executes well on **HKUST Virtual Barn**.

3) No partial marks will be given for each TODO and no negotiation on partial marks will be handled.

4) About the project configuration, you may refer to lab8, all the details are provided in lab8.

1. Assignment Brief

You are required to build a simple information system for the Video database according to the A3 database schema. The system is to allow users to retrieve useful information. You are required to complete a program using the C# language and the provided sample codes (the UniversityWebsite.zip in the Lab8 folder).

- You are asked to achieve the following tasks:
 1. Find all movies with the input tag. (e.g., input 'Comedy', and the website would show all movies with the tag 'Comedy')
 2. Find all accounts registered between input time intervals. (e.g., input '2011-01-01' and '2015-01-01')
 3. Find the movie with selected cast member that has been watch the most times. (e.g., input 'Chris Evans')
 4. Find all accounts where the owner is older than an input age (Assume the current date is '2022-05-01').
 5. Find all playlists that do not contain a product that aired after an input year. (e.g., input '2014')

6. The function of creating new users. (e.g., input username, name, birthdate, and whether it is a premium account on the website, then an account would be created)
 7. The function of deleting users. (e.g., input username and then a user deleted)
 8. A button that show all users after click.
- Clarifications:
 1. You could choose any reasonable and suitable data type for the attributes and data provided. However, we recommend you use the table provided in assignment 3 solution. You may use the create_table.sql to create table, together with data in the Insertdata.sql file uploaded to insert data. (Remember to change COMP3311TA1 to your own oracle database account, using ctrl/command+F in Oracle sql developer and replace)
 2. You may use any kind of input format (e.g., input chart or check box or something else, but make sure the user (us TAs) would understand how to use it.)
 3. For date, year and time input, you could define your input structure. (e.g., yyyy—mm—dd or mm—dd—yyyy or any other formats is okay)

2. Assessment

This assignment is allocated 100 points which will be converted into 6 course marks.

3. Submission

You are required to submit the .zip file of the project (e.g. Please refer to the universityWebsite.zip) to the Canvas. Do not submit any other file(s) or you risk losing all the scores.

4. Collaboration and Plagiarism

This is an individual assignment. The assignment solution you submit must be solely your own work; copying or letting others to copy are both considered cheating.

If you have any questions regarding acceptable level of collaboration with your peers, please see either the lecturer or your tutor for guidance. Remember that ignorance is not a defence!

The University has strict policies with regard to collusion and plagiarism. Penalties for engaging in unacceptable behaviour will apply. You are required to read and understand the policies on academic integrity and plagiarism. Note: Any posts on in online venues containing assignment specific solutions/hints will be reported to the department.

5. Late Submissions

Late submissions will incur a penalty of 25%, 50% and 100% reduction a delay of 6, 12 and 18 hours respectively. If you believe a delay is caused by reasons outside your control, you should contact our TA, Ms Yehong XU, in advance via email.

