

### **Web Application Revision Practice 1 [ACJC/2023/Prelim/P2/Task 4]**

A karate club stores information about its members. This includes both personal information, as well as information about competitions they have participated in and their results.

The following is an example of information stored in the table.

Mem_ID	Mem_Name	Mem_DOB	Comp_Name	Comp_ID	Comp_Score
M01	John Tan	19961224	World Karate Meet	C01	250
M01	John Tan	19961224	Asean Karate Meet	C03	170
M01	John Tan	19961224	Cola Karate Championship	C09	300
F03	Susan Lim	20110924	Cola Karate Championship	C09	190
F03	Susan Lim	20110924	World Karate Meet	C01	260

#### **Task 4.1**

Create an SQL file called `task4_1.sql` to show the SQL code to create a database `club.db` with three tables: Members, Competitions, and Scores. The primary and foreign keys for each table should be defined.

Save your SQL file as

`Task4_1_<your name>_<centre number>_<index number>.sql` [6]

#### **Task 4.2**

The file `DATA.txt` contains the comma-separated values to be stored in the database.

Write a Python program to read the data from the file and then store it in the database.

Save your Python program as

`Task4_2_<your name>_<centre number>_<index number>.py` [6]

#### **Task 4.3**

Write a Python program and the necessary files to create a web application that allows a competition organiser to record the scores of the competition's participants.

The organiser should be able to enter the following input, and the form would store it in the correct place in the database.

- Competition ID
- Member ID
- Score

You may assume the user would only enter valid Competition IDs and participant IDs

Save your program code as

`Task4_3_<your name>_<centre number>_<index number>.py`

with any additional files/subfolders as needed in a folder named

`Task4_3_<your name>_<centre number>_<index number>.py` [6]

#### Task 4.4

Write a Python program and the necessary files to create a web application that, given a Competition ID, displays the following for each competitor in that competition:

- Name
- Member ID
- Scores

The data should be presented in a table sorted by descending order of Scores.

Save your program code as

`Task4_3_<your name>_<centre number>_<index number>.py`

with any additional files/subfolders as needed in a folder named

`Task4_3_<your name>_<centre number>_<index number>.py`

[5]

Run the web application with the following input:

- Competition ID: C02

and save the output of the program as

`Task4_4_<your name>_<centre number>_<index number>.html`

[1]