

MODULE: CMP-3006B: 2018/19: FOUNDATIONS OF COMPUTING 2

ASSIGNMENT TITLE: Website and database design

DATE SET	:	06/02/2019	
DATE OF SUBMISSION	:	06/03/2019	before 15:00
RETURN DATE	:	04/04/2019	
ASSIGNMENT VALUE	:	50%	
SET BY	:	G. Richards	SIGNED:

Aim:

Subject specific

Gain experience of developing a database using MySQL, PHP, HTML and CSS.

Transferable skills

Database implementation skills using standard SQL. Therefore applicable to any standard database.

Learning outcomes:

Subject specific

To gain experience and become familiar with writing SQL statements and incorporate these into a web based system.

Assessment criteria

Assessment will be by demonstration.

See detailed mark breakdown below.

Description of Assignment

Having been impressed with your website development skills, Canary Canoes are keen for you to develop a database system to manage their data. The database should be accessed via a web interface created with PHP.

If you do not implement the web interface marks can be gained by running the SQL queries in phpMyAdmin. You should state in your report whether you have implemented php.

Examples of basic web pages are given at the end of this document.

The database comprises 6 tables.

Members. Records members' details.

Race. Records race details. Each race belongs to a series of races. The relevant series is recorded in the race table.

Series. Records details of the series.

Competitor. Links races to members.

Course. Records details of training courses. Members may enrol on any number of courses over time.

Enrolment. Links courses to members.

It is assumed that in each series each race occurs only once a year and that members names are unique.

The basic tables are given in the file cc_base_ddl.sql on Blackboard. Do not add any fields or tables or change any field or table names as these will be referenced when marking.

For each of the tasks below suitable confirmation or error messages should be shown and where there is output this should be in tabular format. If you cannot complete the tasks using PHP the SQL queries should execute within phpMyAdmin, however, marks will not be awarded for tabular output in this case.

The marks in brackets are for SQL and PHP respectively. Thus there are 66 marks available for correct SQL and 34 marks available for PHP.

- | | |
|--|-------------------------|
| 1. Add relevant foreign keys to the tables. | 10 marks (10, 0) |
| 2. Using phpMyAdmin populate the database with data. | 2 marks (2 ,0) |
| Construct the following queries, inserts and updates. | |
| 3. Insert a member. | 4 marks (2, 2) |
| 4. Select all details of each member. | 6 marks (4, 2) |
| 5. Delete a race with a specified race ID. | 6 marks (4, 2) |
| 6. Assign a member to a race using member ID and race ID. | 6 marks (4, 2) |

7. Add a race result for an existing competitor, use member ID and race ID to specify the member and race. **6 marks (4, 2)**

8. List the results of all races in which a given member has participated, use member first name and last name to specify the member. The result should include member first name, last name and grade, series name and year, race name, date and position. The results should be ordered by their position, best position first. If the member has been entered in a race but not yet participated the race should not be included in the list. IDs should not be shown. **10 marks (7, 3)**

9. Show the results of all races participated in by members enrolled on a course, specified by name. The results should include course name, member first name, last name and grade, series name and year, race name, date and position. Order the result by member last name. If the member has been entered in a race but not yet participated the race should not be included in the list. IDs should not be shown. **10 marks (7, 3)**

10. Enrol a member on a course by giving first name, last name and course name. **10 marks (6, 4)**

11. Add a new race by specifying race name, date, series name and year. **10 marks (8, 2)**

12. Assign a member to a race using member first name, last name, race name, series name and year to specify the member and race. **10 marks (8, 2)**

In addition marks will be awarded as follows.

1. **A.** Randomly selected web page validates. **5 marks (0, 5)**

- B.** General look and feel of the website, additional marks will be given for going beyond a basic site. **5 marks (0, 5)**

You should write a short description of the site listing any special features that you have included or problems encountered. This is not marked but does help the marker to understand your work.

Handing in procedure:

Please submit your piece of coursework in the following way:

1) A zip archive containing all files (DDL, SQL, PHP, HTML, CSS and PDF) must be submitted. Archive formats other than zip will not be accepted. Submissions must be made as one zip archive. The zip archive must be submitted via Blackboard and have the file name 10012345.zip (where 10012345 is your student number).

If you have medical or other problems you can seek extensions to coursework deadlines. However, it is essential you obtain proper documentation in such cases (i.e. a medical certificate), to be handed in to the School General Office at the time of the difficulty.

Please be reminded that students should retain all returned coursework and have it available for External Examiners, if required. All marks are provisional until confirmed by the Board of Examiners.

Plagiarism: Plagiarism is the copying or close paraphrasing of published or unpublished work, including the work of another student; without due acknowledgement. Plagiarism is regarded a serious offence by the University, and all cases will be investigated. Possible consequences of plagiarism include deduction of marks and disciplinary action, as detailed by UEA's Policy on Plagiarism and Collusion.

Example of basic index page

Members Database

3. Add Member

First Name

Last Name

Grade

4. List Members

5. Delete a Race

Race ID

6. Add a member to a Race

Member ID

RaceID

Examples of basic output pages

5 Delete a Race

Cannot delete race with ID 5

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8. List Member results

First Name	Last Name	Grade	Series Name	Series Year	Race Name	Race Date	Position
Howard	Smith	s	Norfolk Seniors	2017	Bungay 5k	2017-04-14	1
Howard	Smith	s	Norfolk Seniors	2017	Bungay 10k	2017-04-14	2
Howard	Smith	s	Norfolk Seniors	2017	Norwich 5k	2017-11-20	3
Howard	Smith	s	Norfolk Seniors	2017	Norwich 10k	2017-11-20	4

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