

Database Design Assignment

Weight: 18% of the Module's Total

Report Due Date: **Thursday, 28th November 2019**

Failure To Meet Deadline: Zero Marks

Assignment: Imagine yourself and your lab partner (you will be working in **Groups**) are about to start a small business. Choose a business and design and implement a relational database for that business. Next, you are required to create an appropriate web site for your business. Via the use of PHP, **at least one page** in your web site should allow the user to connect to the database and retrieve and display user-selected data from the database. You are also required to attempt adding at least one page to your web site via which a user would be able to add or modify specific data to/in the database. Once you've done that, then:

1. **Submit your work in a properly structured technical report** (*one hard-copy report is required from each group to be handed in during the lab on above date*) **providing descriptions of:**
 - Introduction & brief rationale, including why you choose that business?
 - The **modelling** and standard **design** steps of your database, using appropriate E-R diagrams.
 - Implementation of the database using MySQL DBMS.
 - Design and development of an appropriate web site for the business, with screen shot(s) of the created web page(s).
 - Creation of appropriate **.php** files for connecting and communicating with the database: you need to create **at least one file** that facilitates the display of user-selected data from the database and **one file that facilitates** user's data entry into the database - provide the code for the **.php** file you created.
 - Discussion of results (including whether the produced system is fully operational, problems encountered and aspects of the system that were not achieved and why).
 - Conclusions and discussion of why would your database and web site be useful for chosen business.
2. **Prepare an 8-minute Group presentation of your work using PowerPoint. Presentations Schedule & Venue: the usual lab slot scheduled for Wednesday, 28th November 2019.**

Summary of Assignment – important points to take care of to enhance your grade:

- Apply web design, HTML, CSS, database design/implementation and database/web interfacing skills learnt from lectures, tutorials and laboratory exercises. **For your web site, remember to apply the principles behind effective and quality web design, planning and implementation**, including choice of colours and visual effect.
- Prepare and submit a **report** and prepare a short **oral presentation** of your work, as per Sections 1 & 2 above.
- Database should have **a minimum of 4 tables**.
- Late work will not be accepted !!

Assignment Marking Scheme: the assignment will be marked out of 100 points distributed as follows

- **Presentation:** 16 points + **Report:** 20 points

(Note that this covers presentation and report style, layout, content structure, organization, description of work and use of illustrations)

- **Design Work:** 64 points divided into
 - **Web site:** 20 points
 - **Database:** 20 points
 - **Web-database php connection** 24 points

(Note that your presentation and report will be the main source for marking the design part of the assignment)