COA123 Server Side Programming

Individual Coursework (100% of the module)

Issued: March (Week 6) 2018

Submission: 14th May 2018 (Monday, week 11), 3pm

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The following tasks are built around the concept of booking (part of) a wedding via an online service. You will be working with a given read-only database containing three tables, which will be used for most tasks (excluding Task 1).

There are 5 tasks in all, the first 4 being tightly specified and the 5th one allows you some room to design your own solution. You will only be concerned with finding possible solutions to client's queries (not actually making the booking) because you will be working with a read-only database. Please read the individual task details and also the "further details" section that follows before starting your programming.

For tasks 1-4 you are provided with htm pages (catering.htm, details.htm, capacity.htm costs.htm) containing forms which will provide the input to your php pages. You are to ensure that your solutions work with these test pages. You should not modify these htm files, all your coding should go into your php files.

Task 1 - (10%)

Write a php script (**catering.php**) to produce an html page as result which contains a table of catering costs based on the input of 7 values as follows:

min, max (party size, you can assume they are multiples of 5)
c1, c2, c3, c4, c5 (the cost per person of 5 grades of catering)

The finished table will have rows headed by min to max (incremented in steps of 5) and columns headed by c1 to c5.

For example, if min=30, max=45, c1=5, c2=10, c3=15, c4=20, c5=25, the table might look something like:

cost per person → ↓ party size	5	10	15	20	25
30	150	300	etc...		
35	175	350	...		
40	...				
45					

Task 2 - (10%)

Write a php script (**details.php**) to list all the details (in an html table) from the venue table for a given venue_id.

Task 3 - (10%)

Write a php script (**capacity.php**) to list (in an html table) the names and venue prices of licensed venues within a minimum and maximum capacity (inclusive).

Task 4 - (10%)

Write a php script (**costs.php**) to list (in an html table) the names and venue prices of available venues given a date and party size (inclusive). ["Available" means not booked and able to accommodate the party. The cost will be different depending on whether the date is a weekend. In this task you are to ignore catering costs.]

Task 5 – (60% total)

Design your own webpage (must start from **wedding.php**) to find a suitable wedding venue based on date, party size and catering grade.

A basic solution to this task would potentially obtain up to 35%. For extra marks, you could consider using AJAX and JSON to make your webpage more interactive (15% available for using AJAX/JSON). To make your solution more flexible, you could allow the user to enter a range of dates, rather than just a single date and present them with a number of possibilities. You may assume that the range of dates cover no more than a one-week period (10% available for implementing this functionality).

Further Details

Database:

You are provided with a (read only) mySQL database on sci-project server. It contains three tables as follows. You can inspect the database content using phpMyAdmin https://sci-project.lboro.ac.uk:8080/phpMyAdmin/:

- Username: coa123wuser
- Password: grt64dkh
- Database name: coa123wdb

venue
- venue_id
- name
- capacity (maximum number of people)
- weekend_price (£ per day at weekends)
- weekday_price (£ per day at weekdays)
- licensed (1=licensed, 0=not licensed)

venue_booking
- venue_id
- date_booked (yyyy-mm-dd, a venue has been booked for this day)

catering
- venue_id
- grade (1, 2, 3, 4, 5)
- cost (£ per person)

Coding: You are permitted to use jQuery and jQuery UI and the code that was part of the COA123 lectures and labs. All other coding **must** be your own. You must **NOT use any absolute directory** in the code.

Submission:

All coursework files must be uploaded to sci-project.lboro.ac.uk within the coursework folder "**wedding**" (all lowercase letters). The "wedding" folder must be directly under in your "web" directory. You will receive email alert if you do not have this CW folder when the deadline of CW is close.

For the CW submission, all php files of your script and start htm files for each task must be uploaded to the root level of your "wedding" folder, although you may use sub-folders to manage other files under the "wedding" folder. (Refer to coursework lecture slides if you are not sure).

No coursework folder "wedding" or incorrect folder/file naming = Zero marks

Immediately after the deadline, a script will be run which will lock you out of your coursework directory.

If you have any problem with your account on the sci-project server, please contact Mr. James Skevington science.it@lboro.ac.uk.

Marking criteria and feedback:

For all tasks you can obtain marks for:

- obtaining the correct results for queries
- attention to detail (e.g. validation of user input, use of include)
- design of interface (e.g. clarity, informative, easy to use, especially for task4)
- quality/standard of code (e.g. indenting, commenting, choice of identifiers, format consistence, use of CSS/jQuery etc. when applicable.)

For task 5 you are encouraged to be creative in designing your own user interface. You might consider using jQuery and/or jQuery UI and (copyright free) graphic images. Your webpage does not need any design consistency with the htm pages provided for previous tasks.

Coursework will be marked using Firefox on Windows. Provisional mark and feedback will be provided within 3-4 weeks and a link of feedback will be sent to you by email from Learn noticeboard.

Plagiarism:

The coursework is individual and therefore should of course be your own work. Failure to do so would leave you open to prosecution for Academic Misconduct.

If you have any questions, please ask during your lab practical sessions, or email Dr. Baihua Li (b.li@lboro.ac.uk).

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