

CP476A Group Project Requirements

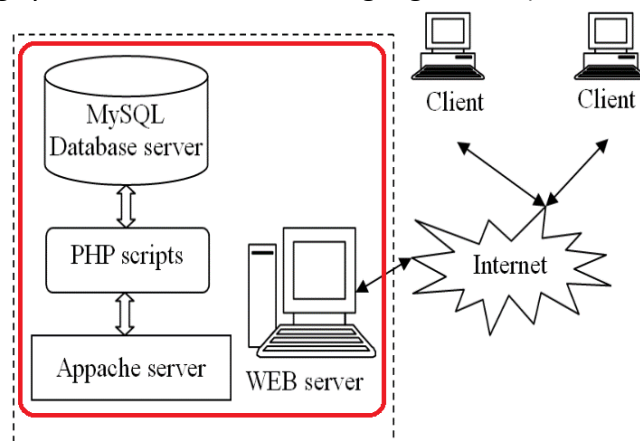
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Introduction

The purpose of the group (4 students) project is to provide an opportunity for students to apply topics covered in this course and gain better understanding of how internet computing works. The project also trains students verbal and writing communication skills. The requirements are as follows.

Requirement

1. Design and develop a web server that interacts between web users and a database server.
(Note: the web server is Apache and database server is MySQL. The web server is using Windows operating system. The server site language is PHP).



2. There are two approaches for programming queries from PHP. One is called direct run SQL statements and the other is called prepared SQL statements. It will be better to use the prepared approach.
3. The project requires to execute at least two (SELECT and UPDATE) SQL statements that are initiated from web users.
4. Your MySQL database will have at least two tables. One is called "Name Table" and the other is called "Course Table". The two table formats are described in Appendix A. The data for the two tables will be provided around week 7
5. You need to output student final grade based on the data in the two input tables. The output format is described in Appendix B.
6. **Third-party packages such as XAMPP, phpMyAdmin, and WAMP are prohibited. If you use any third-party packages, the penalty (10-20%) will apply.**
7. If your project has implemented for SQL injection attack, you will get bonus (5-10%).

Evaluation

This group project will be evaluated with two sections.

1. Present your design in the group presentation section.

(Note: the presentation time will be limited in 6 minutes (3 minutes theory and 3 minutes demonstration))

2. Write a project report by end of this semester to describe how your software product works. **The report could be either a software design documentation or a technical report.**

(Note: there is no number of words requirement. The evaluation of the report will be based on the rubrics in the course syllabus of CP476B in MyLearningSpace).

Appendix A

The three SQL database tables are as follows.

Name Table

Student ID	Student Name
123456789	John Hay
223456789	Mary Smith
....

Course Table

Student ID	Course Code	Test 1	Test 2	Test 3	Final exam
423456789	CP317	75.3	80.4	60.3	70.5
223456789	CP414	80.2	90.5	50.4	75.6
123456789	CP460	60.5	70.6	80.6	80.6
....				

Note 1: The student table and the course table will be uploaded in myls around week 7.

Note 2: the student ID and students' name are unique. However, one student may take multiple courses.

Appendix B

Final grade output

Student ID	Student Name	Course Code	Final grade (test 1,2,3-3x20%, final exam 40%)
123456789	John Hay	CP460	66.7
223456789	Mary Smith	CP414	74.8
....	

Note 1: each test weighs 20% and the final exam weighs 40%. The final grade is calculated with the following: (test,1,2,3) 3x20% + (final exam) 40% = 100%.

Note 2: all the grades should be decimal number with one digital after the dot.