

CS 275: Web Programming Programming Project

March 21, 2014

DB Schema and SQL code: April 2nd,

Intermediate Project: April 16th 2014

Complete Project: April 25th, 2014 before the beginning of the class period

For this assignment, we will create a simple discussion board. Your project's web site will allow users to browse and create discussions and comments on the discussion board.

The *discussion board* is comprised of different *groups*. Each group has a title that is clearly displayed on the board. Each group contains *discussions*, which have a title that is displayed, as well as info about who started the discussion and when, who last contributed to the discussion and when, discussion rating based on user votes, and the number of comments within a discussion. Each discussion is comprised of individual users' *comments*, which will be displayed once the user selects a particular discussion. There are no empty discussions, so each existing discussion must have at least one comment. All of the above specified entities also have the date/time indicator, both for the time when entities were first created and for the time the entities have been last edited. All of your project web pages must have a clearly displayed navigation mechanism, where users can easily navigate to different parts of your discussion board.

We will also work in teams of two. Each team will choose a team member that will be providing a progress report to the instructor on a weekly basis. Each database must contain the real-world data for at least 3 different groups, each of which must contain at least 2 different discussions, where each discussion must contain at least 3 user comments.

The end user will interact with the system by choosing the appropriate web links and elements, and your database will then be queried to provide the answers and display them in the web browser. Please make sure that the end-user has all information necessary to run their queries in the web user interface (i.e., end-user does not need to know about *userid* or *groupid* or other column properties such as auto-increment...)

The following are project implementation requirements:

- There is an authenticated administrator user, who has the ability to edit and delete any groups and their contents, any discussions and their contents, and any individual comments. However, the administrator user does not have the ability to delete tables or the database. The administrator is also allowed to create new groups, and to edit/delete system users.
- There is an authenticated web user, who has the ability to create discussions, add comments on the board, and edit *only their own* comments or discussions that are already saved in the database.
- There is an un-authenticated user, who only has the ability to browse the boards, without being able to enter any comments.
- Per above, two levels of users have to be authenticated, and your scripts have to implement session control mechanism for knowing about the users across project pages.
- Per above, there must exist a registration mechanism, so anyone who wishes to become authenticated user may register and do so after registration. All users must be unique.
- There must be a message displayed on all project pages that indicates the authentication status of the user browsing your discussion board.
- The users must have the ability to *interactively* insert and retrieve various information regarding data from your database. Please make sure that the information retrieved and entered is appropriate given the task at hand (i.e., make sure that your queries and their web interfaces provide all of the necessary functionality).
- All of your project web pages must have a clearly displayed navigation mechanism, where users can easily navigate to different parts of your discussion board.
- All discussions will display their rating and will have the ability for the user to rate the discussion. up/down voting system is sufficient for this project, but feel free to implement your own voting mechanism.
- The end user must be able to sort discussions and comments, based either on their 1) dates of creation, 2) dates of last edit, and 3) popularity based on users' votes.

For connecting ordinary web users to mySQL database, create a web user for your scripts called 'webBU' with the password 'acm1234', following the principle of least privilege. For connecting administrators to mySQL database, create a web user for your scripts called 'webBUadmin' with the password 'acm1234', following the principle of least privilege. The database for this assignment is called 'DBoard' and it will need to be created for this project.

A small portion of your grade (up to 20%) for this assignment will be based on the interactivity and the design of your pages. Your design must be clear and precise and navigation must be clear and easy. Your grade will also be determined based on the evaluation by other team members (up to 25%).

Please make sure that the end-user can navigate your pages in a meaningful way and that all of the functionality for this project can be reached from the main project page that represents the main discussion board web page.

Turn In Procedures:

In addition to an electronic copy of your assignment, please turn in a printout of your source code. Source code must clearly indicate which team member worked on specific sections of the code.

- Please turn in a *.sql file containing all of the necessary SQL code to create and populate your database and all tables in the database. This file, along with the database schema, is due by Wednesday, April 2nd 2014.
- Due date for turning in your intermediate project is April 16th, 2014. This intermediate project will account for at least 50% of the overall project grade, depending on the level of completion of the intermediate project turned in. The project at this stage must contain the ability to:
 - o authenticate users properly
 - o browse the boards for existing information
 - o insert and browse user discussions and comments.
- Final project is due on April 25th 2014. Depending on the schedule, we may have presentations of team projects during the last week of classes and team presentations, if necessary, will account for 15% of the overall project grade.

You may turn in your assignment via email (bkerkez@yahoo.com) or in person on a flash drive, or other computer media. Please follow the turn in procedures outlined below.

In case you would like to turn in your assignment via email, please place the following in the subject line of your email:

CS275 Project

Please make sure that I receive your assignments before the due date and time. Late programming assignments will be accepted for 24 hours after they are due and will be penalized by a 50% deduction. No assignments will be accepted after the 24 hour period expires.