

Assignment 4 (Preliminary)

Summary

This assignment is a group project to develop a web site. It should bring together most of the topics we have covered in this class. In the real world, web development is usually a team effort, and this last project attempts to model this situation.

Description

Create a web site for which the main pages are public and offers the list of all who have graduated from UTEP CS department. Your site should also allow visitors to purchase items related to the department, using the paypal sandbox interface. In addition, registered users should be able to post and view a message board.

Your web site should integrate concepts from the course in a meaningful form. This includes server side scripting, client side scripting, SQL database access, AJAX, authentication, forms, sessions. It should implement security features we covered in class. In particular, you should properly sanitize user input before using it. This should prevent SQL injection when the input is used in queries, and prevent cross-site scripting when this input is used on the message board and for displaying profiles. For the forms accessible when users are logged in, have the session ID provided as a hidden field to prevent cross-site request forgery.

The web site should have the following characteristics:

1. Consistent look and feel, where all pages share a similar design and navigation scheme.
2. Easy to navigate.
3. Appealing look and feel. We are not using packages, we are not trained as graphic artists, and time is limited, so we don't expect something

elaborate. But the pages should have a good layout, with some graphics and readable content.

4. Works on different browsers (test on at least 3 different browsers.)
5. It should be the group's own work. Do not include packages or themes downloaded from the internet. You may use JQuery, as it is part of our textbook.

The web site should have the following functionality. When we refer to visitors, we mean someone who is not logged in.

1. Allow visitors to view the list of graduates in different formats (by year, alphabetic, etc.)
2. Allow visitors to filter the list with different criteria (just one year, specific degrees, etc.)
3. Clicking on a graduate from the list displays the profile of that graduate.
4. Visitors can view the items that are available for purchase, add items to a cart, and purchase items using a simulated purchasing environment like the paypal sandbox. Although I would prefer you implement your own cart, if you have trouble with this, you may use the paypal cart.
5. Allow graduates to log in and manage their profile. The graduates should be allowed (but not required) to upload a photo.
6. Require login to access the bulletin board.
7. Users who are logged in can maintain a list of other users as friends.
8. Users who are logged in should be allowed to change privacy setting on individual profile items, to control which item is shown to who. Settings include: public, registered user, friends, nobody else.
9. Users should be linked to an entry in the list of graduates. We are not specifying the method to add a user account. Some possible choices: have every graduate with a default username and password, or let anyone register (like assignment 2,) or let an administrator create new accounts.

Due date

The team will present the website to the class on Wednesday, December 2. The team report and the individual reports are due December 4, 11pm. More details about what is expected in the presentation and the reports will be communicated later.