Homework Assignment #2:
Web Account Management Subsystem

Important Dates/Notes

 5:00PM November 7 (Monday), 2011   Design Document
 9:10AM November 10 (Thursday), 2011   Oral Presentation and Demo

This assignment constitutes 10% of your final grade.

Task Description

Your task is to design and implement a Web account management system that may be used as a subsystem of a larger Web application. The account management system allows the user to create a new account, enter data for his account profile, and login subsequently to maintain the profile data. This assignment is essentially the first sprint (in the terminology of Agile Software Development) of the term project, the goal of which is to develop a conference hosting service. It is expected that, after completion of this assignment, you will become sufficiently familiar with the development methods and tools that you most likely will use for the entire term project.

Below are the basic requirements for the system:

- A user's account profile must contain the following data items:

    - Full name (given/first name and family/last name)

    - Affiliation

    - Email address

    - Areas of expertise or research interest (which should be realized by directing the user to select from predefined areas)

- Email notification to the user of any change in his account profile

- A mechanism for the recovery of an existing account in the case when the user forgot his account name or password

Anticipating future integration into the conference hosting system, we also require the following architectural and functional features:

- An MVC design pattern or framework for the overall architecture

- Multi-lingual support in displaying the Web pages

- Support of different roles of the user in each conference he is participating or participated in and provision of options to switch to a particular role in a particular conference while logged in

General Instructions

- This assignment is to be carried out by teams with two members (except one team with three members when the number of students taking the course is odd).

- You must use the Git version control system, set up for this course, to manage your development work.

- Drop a printed copy of your design document by the due time in Yih-Kuen Tsay's mail box on the first floor of Management Building II. Late submission will be penalized by 20% for each working day overdue.

- Neither the presentation nor the demonstration may be postponed.

- The design document, the oral presentation, and the demonstration will all be taken into account for the grading.

- DO NOT plagiarize (i.e., do not use material without crediting the source).

Design Document

The design document should include at least the following items:

- An overview of the system

- Design of the components, including the various UML diagrams and their accompanying specifications

- Clear description of how the system may be used as a subsystem of a larger Web application

- Any other verbal or diagrammatic descriptions that would help clarify the design

- Discussion on how software development concepts and tools have been applied.

The design document, including the cover and references, is limited to 15 pages. So, please use the space wisely.

Oral Presentation and Demo

Each team should give a 10-minute oral presentation with an appropriate set of slides. The slides should be designed in such a way that they can be made publicly available on our course

website. The presentation will be a good opportunity for you to share special experiences or ideas with other teams. A demonstration of the subsystem during the presentation is required and the subsystem must be deployed on a remote server. The demo should show sufficient evidence that the current implementation meets the goals of its design.