List of Project Topics for CEN4010 – Software Engineering I

1. Help Desk Computer Support

This is a help desk for servicing computer parts (CD-Rom, Hard-drive, Floppy, etc.). This system will provide a way for customers to request the repair of computer parts and allow them to view the status of all items being serviced. There are 3 types of users that are allowed to logon to the system. The first type of users is a regular customer, who is allowed to view the status of all computer parts that are being serviced. A regular customer can add more computer parts that need servicing. The second type of users is a technician, who is allowed to update the status of a certain computer part (fixed, not fixed, etc.). The third type of users is the system Administrator, who has the ability to add and remove technician and user accounts.

2. A Car Rental System

This system will allow for three types of users: guests, members, and administrators. Guests will be able to browse location, availability, price, and model. Members will have their personal information stored (i.e. name, address, and credit card info.) and will have access to any specials. Finally, the administrator can change or update car models, prices, etc.

3. A Flight Reservation System

Users will be able to look for, book and cancel flights, as well as, organizing trips. There are 3 different types of users. The administrator will be able to add/delete destinations, change prices and so on. The registered users will be able to book/cancel flights. Finally, the guests will be able to search for flights, but they won't be able to reserve them unless they register.

4. A Grade Report System

This system allows a professor logs on to create, access, and updates class grades for students in his or her class. The students in the class are then able to log on and check their scores for all exams taken in that class. A system administrator is responsible for logging in and adding/deleting students, teachers, and courses from the main database.

5. A Movie Store System

This is a system for selling and buying DVDs and videos of movies. There will be three types of users. First the regular customers, they can access the database of DVDs and videos with different types of search. Second there is a group of users that can post DVDs or/and videos to be sold. These users have access to add movies to the database, so that regular customers can search for these movies. When the customer has finished searching for a DVD and/or a video he/she can communicate a message to the seller in order to buy the product from him. The third class of user is the administrator; this user will be in charge of administrating the database and users. The administrator will be in charge of giving and revoking selling privileges to regular customers so that they are able to add videos and DVDs in the database.

6. A Health Insurance System

This system allows agents and customers to view and update important information. Policy owners would be able to view and update their personal information, heck their agent's information, family members, etc. Agents will be able to view and update their personal information and view the information about new businesses, renewals and commissions. This way, they will be able to help any policyholder or agent requesting assistance. Managers would have access to all modules so they will be able to help any policyholder or agent requesting assistance and would be able to update database with new prices. In addition, guest will be able to get free quotes.

7. A Medical Clinic Tracking System

This system will provide the doctors and their staff with an electronic copy of the patient file. The system will track information for billing purposes and for general management of the clinic such as reporting and document creation. The three levels of access are as follows: (1) Administrator: creates users, assigns roles, and maintain certain questionnaires in the application; (2) Support Staff including nurses, secretaries, and nurses aid: update, delete, and insert records, updating the system to reflect the actual hard copy of the patients file, also will run certain reports and letters generated by the system; and (3) Doctors: will have the same rights as the support staff plus the ability to access certain information via the web.

8. A University Registration System

The University registration system will allow (1) registered students to view their current term schedules, (2) registrars to process students' requests for adding and dropping classes. The system administrator will be able to add and delete students and also will be able to open new classes. The system administrator will be also able to determine the number of students in any given class.

9. A Library System

This system will allow the users to search for library material (book, magazines, videos, etc.) according to the criteria specified. This system will also keep track of all the material circulation and their availability. There are three types of users. A patron can borrow and return library material. A librarian can update library material. The system administrator can manage the user accounts including both patrons and librarians.