About CME America:

CME America (CMEA) is a family owned and operated medical device company located in Golden Colorado. CME America sells pain infusion devices that are used in hospitals, ambulances, helicopters, or a patient's home. CME America strives to be the most customer intimate and customer driven medical device company on the market.

Project description:

The project is to develop a web-based application to replace an existing training documentation system. The current system uses Excel to track and document all required training for CMEA's employees. The software will integrate with CMEA's MS-SQL database, Active Directory, and email servers.

CMEA has developed additional design inputs for the team to follow with the following parameters being the most important to CMEA:

1. The application will be built with an IIS web-based user interface.
2. The application needs to provide for role-based access controls. It is desired that Active Directory integration be leveraged for both user credentials and group/role management.
3. The application should generate reports based on parameters such as the following:
   a. The current status of training for employees.
   b. Training plans that are current or out-of-date.
4. The application should be able to send email notifications and reminders.

If the students finish the coding portion of the project CMEA will assist and teach students about software validation techniques and black box testing procedures.

Suggested Team Size:

3-5 students

Work Location:

The work location for this project is flexible. Meetings can occur either at CMEA or at Mines depending on student preference.

Skills:

- Web programming skills
- Database skills, including T-SQL. MS-SQL Server experience is helpful
- Basic understanding of Microsoft Active Directory domains, IIS authentication, and SMTP servers
- Experience in a government regulated industry