**CST-339 Programming in Java III**

**CLC Project Assignment – Milestone 2**

Requirements:

1. Review requirements in Project Overview.
2. Main Application Module:
   * This will be the main application page that is visible when the root URI of the application is accessed.
   * The main application should provide initial navigation concepts, such as a menu bar, to access the application's core functionality such as Login and Register.
   * The main application, at this point, should have well-defined styles, fonts, colors, and an overall application theme implemented that will be used for the remaining milestone deliverables.
   * The application should leverage Spring MVC for all dynamic page generation.
   * The application should have a title (and possible a logo).
3. Registration Module:
   * A user should be able to register to access the application.
   * Registration details, at a minimum, should include First Name, Last Name, Email Address, Phone Number, and Login Credentials (Username and Password).
   * The Registration page should leverage Spring MVC for all dynamic page generation.
   * A user object model should be designed and implemented.
   * A database model should be designed, but an implementation is not required until Milestone Assignment 4.
   * All data entered by the user must be validated and provide proper error messages enabling the user to easily correct the data.
4. Login Module:
   * Initial login module that will emulate authenticating the user (i.e., no database).
   * The log page should leverage Spring MVC for all dynamic page generation.
   * A login/principle object model should be designed and implemented.
   * A database model should be designed, but an implementation is not required until Milestone Assignment 4.
   * All data entered by the user must be validated and provide proper error messages enabling the user to easily correct the data.
   * Security will be implemented as part of Milestone 6 using the Spring Security framework. For now, it is not required to securely protect any pages in the application.
   * Once the user is logged in the main “product” page should be displayed and the menu system be dynamically updated to reflect the logged in state of the application.
5. All pages must be design using one or more common Thymeleaf layouts.
6. Responsive Design:
   * Configure the application to use the Bootstrap Framework.
   * Ensure application can be rendered properly on at least one mobile device, one tablet, and two desktop browsers.
7. Updated Design Report.
8. It is expected that the Team will perform peer code reviews on all code.
9. It is expected that the Team will fully document all code modules, classes, methods, and use inline comments for all code.
10. It is expected that the Team will meet with the instructor if there are project management issues.

Deliverables and Submission:

1. Updated Design Report with the following sections completed:
   * Cover page with list of tasks completed.
   * Planning documentation: task list/schedule or Scrum artifacts.
   * Design documentation:
     + General Technical Approach
     + Key Technical Decisions
     + Install or Configuration Instructions
     + Known Issues
     + Risks
     + Sitemap Diagram
     + User Interface Diagrams
     + ER Diagram
     + DDL Scripts
     + Class Diagrams (for all controllers and object models)
2. Upload and manage all code in GIT.
3. Zip up code.
4. URL to a screencast technical and functional demonstration running from local development environment is included in the Design Report.
5. Upload all code and design as directed by your instructor.