CS 545 - Web Application Architecture

Project Requirements

This is an engineering proof of concept. The goal is to exercise the Spring MVC/Boots technology according to “company” guidelines to validate its use in future projects.

## A group consists of maximum 4 members.

Here is the list of the techniques you must include in your project as a group.

|  |  |
| --- | --- |
| Technique | Group |
| XML config/Java Config | x |
| PRG |  |
| JSP, Thymeleaf | x |
| Bean Validation or Spring Validator | x |
| Custom Validation Annotation |  |
| Custom Formatter |  |
| Uploading files | x |
| Exception Handling (Individual, Globally) | x |
| REST/Ajax – Error Handling | optional |
| Spring Security (Database, Logout, Remember Me, csrf, etc) | x |
| Security authorization – interceptor, AOP | x |
| Persistence – Hibernate + Spring Data | x |
| **ONLY allow** In memory database (H2, HSQL, etc) | x |
| CSS Library |  |
| GitHub | x |

***x*** *: means your project must include the checked techniques.*

What kind of project should I develop? Here is the variety of options you can choose:

* + Spring MVC monolith
  + Spring MVC monolith Thymeleaf
  + Spring REST: Client (JSP) + Server
  + Spring REST: Client (Thymeleaf) + Server
  + Spring boot monolith JSP
  + Spring Boot: Client(JSP) + Server
  + Spring Boot monolith Thymeleaf
  + Spring Boot: Client(Thymeleaf) + Server

## If you need to use a new technique which isn’t covered in this course, you must get permission first. Otherwise, you’re going to lose points in your group project grade.

**Project Topic – Some online Market**

|  |  |  |
| --- | --- | --- |
| **Feature** | **Score** | **Assigned To** |
| **Admin** | |  |
| 1. If seller register in this web site, need to get approval from Admin in order to post products. | **1** |  |
| 1. Approve Review made by Buyer | **1** |  |
| **Seller** | |  |
| 1. Register as Seller | **1** |  |
| 1. Product (CRUD). If a product is already been purchased, cannot deleted. | **2** |  |
| 1. Seller cannot buy products from the website | **0.5** |  |
| 1. Maintain orders    1. Cancel Order, the status of order on buyer’s part should also changed    2. Change Order status (Shipped-On the way-Delivered) | **3** |  |
| **Buyer** | |  |
| 1. Register as Buyer | **1** |  |
| 1. Follow and Unfollow Seller | **2** |  |
| 1. Cannot sell items on this website | **0.5** |  |
| 1. Can place an order 2. Maintain Shopping Cart (CRUD) 3. Maintain Shipping and Billing Address 4. Maintain Payment 5. Place order 6. Every successful purchase (not returned), gain points from the website. You can use points to buy products (something like coupons) | **5** |  |
| 1. Maintain Orders 2. Check Order History 3. Can cancel order before shipping, after shipping cannot 4. Download/Print receipt as PDF or Excel 5. Write Product Review. Review must be approved by Admin before live. | **4** |  |
| **General** |  |  |
| Login/Logout | **1** |  |
| Basic common security etc. (Users should not be able to access other pages links) | **1** |  |
| Process verifications etc. (user get email of purchase, gets a message) | **1** |  |
| Validation is required for all form submission. Otherwise, you’ll not get full credit on different feature part. | **1** |  |
| **Technical aspects** |  |  |
| Neat code and organization | **1** |  |
| Managed packages, folders, and files | **1** |  |
| **Project Submission** | **3** |  |
| 1. List all Team Members with Student ID 2. List all features implemented in your project. Use this table, if you implemented, check on that feature. 3. Document includes task distribution stating WHO did WHAT. 4. Document how to configure /Install Application 5. Application should have pre-populated data. 6. Source code or Github links include documents or links for check-in history 7. Create a video to show functionalities about your project 8. One group submit only one 9. **Due Date: July 14th, 2020 (Tuesday) 03:00PM.**  * ***NOTE:*** *Submissions after due date will not be accepted* | |  |