

Web Application Development Project

4th iteration due to 0:00 Jun. 19th, 2017

In this term, every student has developed two versions of an online Book Store website respectively with PHP and Java EE(JSP and Servlet). The aim of 3rd iteration is to refactor your Book Store with **frameworks of ORM(such as Hibernate), MVC(such as Struts) and IoC(such as Spring).**

Functionality of Book Store:

- For users:
 - registration, login/logout
 - listing, details browsing and searching of books
 - adding books to shopping cart
 - order placement of specific books
 - CRUD of profiles
- For administrator of Book Store:
 - CRUD of books and users
 - sales statistics, the criteria of statistics are provided by the administrator via GUI, including specific users, start and end dates, books and book categories.

Requirements on techniques of development:

- To apply ORM framework, such as but not limited to Hibernate, to implement the independence between services and data schema in RDBMS.
- To apply MongoDB to store user profiles.
- To apply MVC framework, such as but not limited to Struts, to implement independence among business model, workflow and representation.
- To apply IoC framework, such as but not limited to Spring, to implement the independence between source code and runtime environment.
- To implement book browsing page with Ajax and JSON
 - This page lists the abstract information of all books.
 - When user clicks on a book, the details of this book will be retrieved from server with Ajax and displayed on this page.
 - JSON processing in Browser and Server. In the ajax-based book list page, the book details should be transferred as JSONs.
- To use MongoDB store the user profiles.
 - The details of user profile could consist of photos, videos and rich text.

Submission:

- source code
- a doc to give the necessary description of your project.
- all the jar files should NOT be included in the submission.

Grading Criteria:

- 1st iteration: 10%
- 2nd iteration: 15%
- 3rd iteration: 15%
- 4th iteration: 20%
- Functionality: 10%
 - ◆ registration, login/logout, listing and searching of books: 2%
 - ◆ CRUD of profiles, books and users: 2%
 - ◆ adding books to shopping cart and order placement of specific books: 2%
 - ◆ sales statistics, the criteria of statistics are provided by the administrator via GUI, including specific users, start and end dates, books and book categories: 2%
 - ◆ to implement book browsing page with Ajax and JSON: 2%
- Application of Framework(such as SSH): 8%
 - ◆ integration of Framework: 4%
 - ◆ structure of project: 4%
- Application of MongoDB: 2%
- Final examination: 40%