

MP3

- Lei Zhang

1. Project Summary

The purpose of this mini project is to integrate my domain model of MP2 and introduce the business interfaces/methods in EJB and EJB security feature.

The main functionality of this application is to authenticate the users, which are "INSTRUCTOR" and "STUDENT", when different users logged in, the user name and password will be validated, if successful, a welcome page with details will be displayed, if it fails, an error page will be displayed, and user will be redirected to log in page.

2. Design & Development Insights

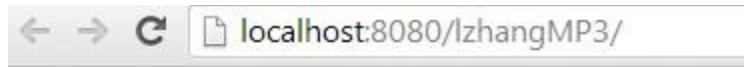
Through this development experience, I learned how to implement Java EE security, I previously thought we could just add "username" and "password" fields in "Student" table, then when user logs, we just check the password for the entered username, as a matter fact, we should create two separate entities, use "USERS-GROUPS" pattern to implement the security part, and do additional configurations in "glassfish-web.xml" and "web.xml", I haven't had this experience before. Although I haven't used EJB before, I am familiar with the concepts of stateless, stateful, singleton EJBs, so the uses of these types of beans are not out of expectations. I would like explore other easier ways of implementing the security, because I completely followed the MP3 demo of security part, and I think there are several steps involved, it is easier to overlook.

3. Requirements

- JDK 7, Netbeans, commons-codec-1.8.jar
- Click on "Open Project", import "lzhangMP3" project, create a database in MySQL called "lzhang_itmd4515".
- After importing, right click on "lzhangMP3" -> "Run".

4. Screen Captures

- Login page, type "student1" and "s1", click on "Submit"

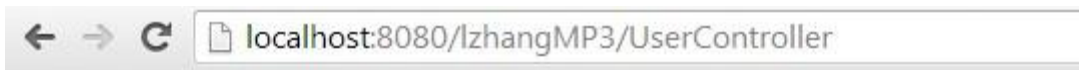


Login page

Username:

Password:

- When logged in, you will be able to view student1 details



You are logged in, you are student1

You selected below courses

- Advanced Software Programning

Assignments

- MP2 for Adv. Software Programming
- Introduction to Open Source Operating System

Assignments

- Home assignment for Intro. Open Source Operating System
- Polymer Synthesis

[Logout](#)

[Read Me Link >>](#)

[JavaDoc Link >>](#)

- Then clicked on “Log out”, user will be logged out and user can click on “Login Again”



- When going back to log in page, type “instructor1”, and type a non-valid password, click on “Submit”, user will be directed to error page.



Invalid user name or password!

[Click here to log in again!](#)

5. Expected Results

To successfully test my application, please follow below instructions

1. I have 6 users, the usernames are “student1”, “student2”, “student3”, “student4”, “instructor1”, “instructor2”, corresponding passwords are “s1”, “s2”, “s3”, “s4”, “i1”, “i2”.
2. If you type “student1” and “s1”, then click on “Submit”, the application will log you in successfully. And you will be logged in as “student1” user, the corresponding user details will be displayed.
3. If you type “student1” and non-valid password, such as “abc”, you will be directed to error page, you can navigate back to log in page by clicking the link on the error page.
4. The same rule applies to other student users and instructor users.