
ASSIGNMENT 8 : WORKING WITH SPRING AND SPRING DATA.

Due Date:
Saturday, Nov 04,
12:00 noon

Aim: Create an Web Application which interacts with database via Spring Data.

Create an web application ,which a user can login. After successful login user can see a list of places (configurable) after selection of location the user can view the details of the location. Web application should also able to support Registration and Logout.

After the applications stops and starts, perviously registered users should be able to login into the application. All information should persist beyond the life of the application.

NOTE: Application will **integrated** with **Spring** and **database** interaction need to be via **DAO(Spring Data)** using Service/Business Class

Workflow:

A) Registration:

- (i) User should have a ability to register.
- (ii) Registration should contain basic information (First Name , Last Name, Email , Username, Password , Date of Birth (Text Field)
- (iii) After the user is registered successfully , use should be able to log into application. **via Service—>DAO(Spring Data)**
- (iv) Use Details should be stored in the **database** so it can be accessed at any time.

B) Logout:

- (i) User should be able to logout .
- (ii) Logout can be either hyperlink or button.

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- (iii) After clicking on logout (session should be invalidated) and redirect to login page.

C) Login:

- (i) User go to login page of the application when application loads.
[Hint: Change change <welcome-file> in web.xml.
- (ii) User should be forwarded to login page if user tries to access **any** page directly is not an authenticated user. [invalid session or session identifier missing]
- (iii) ProcessLogin , will authenticate user from the database who have present in the **database** only. *via Service—>DAO(Spring Data)*
- (iv) ProcessLogin should handle authentication and session. On success will display home page.

D) Home Page:

- (i) HomePage display a drop-down(min:2) of locations
- (ii) Locations are configured in the database
- (iii) The locations displayed should be based on the information in the **database**. *via Service—>DAO(Spring Data)*

E) Details Page:

- (i) Details page need to be a single JSP page , in which only the content changes . Layout would be same.
- (ii) Process servlet will perform the following responsibility
 - a. Validate Session
 - b. Validate selection option with application data.
 - c. Fetch Data based on the location selection from the **database** and pass to JSP to display using an **POJO**. *via Service—>DAO(Spring Data)*

(iii) Details would display the

- a. Image(s) of the place you are describing (image tag)
- b. Description of the location (using paragraph and div tag) - Multiline description
- c. Location of the place (using google maps API - <https://developers.google.com/maps/documentation/javascript/>)
- d. Things to do around (order list/unordered list) tag.
- e. Website link (using anchor tag) of the location.
- f. Social media links (https://www.w3schools.com/howto/howto_css_social_media_buttons.asp)
- g. Rating of location (https://www.w3schools.com/TAGs/tag_meter.asp OR ratings)
- h. Contact Details of the location (Phone , Hours of Operation , Directions - https://developers.google.com/maps/documentation/embed/guide#directions_mode)
- i. Add 2 more details of your choice.

Note: You need to manage data from database using Service method which interacts with DAO layer(Spring Data).

(iv) *If the user enter an unknown/invalid value in the URL which is not known to the server(servlet) the user will be displayed a an error message on the browser. (e.g.: Invalid location ..)*

Workflow Note:

- 1) Both location should display all information as per value **from database.**
- 2) JPS should be used for display.
- 3) Servlet should be use for logic.
- 4) It would be helpful to include javascript and css via files into your JSP.
e.g.: `<script src=<file-name type="..." /><!-- include javascript ->`

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- 5) There should be a minimum of 2 locations.

Submission

Zip your project and upload to blackboard.

Zip your sql scripts.

Note

- a) No Late Submission.
- b) TA will only assist in Tomcat/Eclipse and Servlet issues.
- c) Any Student found copying or assisting other students by sharing will receive an F grade.