**Searching for a Specific User and Updating the User Information**

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**Project Structure:**

1. Main Application Class (UserManagerApplication.java):

* This class serves as the entry point of the Spring Boot application.
* It uses the @SpringBootApplication annotation to enable various configurations.

1. Error Handling (AppErrorController.java):

* Implements ErrorController to handle errors.
* Redirects to an "error" page if an error occurs.

1. Main Controller (MainController.java):

* Maps the root URL ("/") to the index.jsp page.
* Takes an optional name parameter (default value is "World").
* Uses Thymeleaf expressions to display the greeting.

1. User Controller (UserController.java):

* Handles user-related operations.
* Retrieves all users, searches for a specific user by ID, and updates user information.
* Uses UserService for business logic.
* Implements exception handling with UserExceptionController.

1. User Entity (User.java):

* Represents the User entity with fields like id, name, email, and password.
* Annotated with JPA annotations for entity mapping.

1. User Exception (UserNotFoundException.java):

* Custom exception class for handling user not found scenarios.

1. User Repository (UserRepository.java):

* Extends CrudRepository for basic CRUD operations.
* Provides a method to find a user by name.

1. User Service (UserService.java):

* Implements business logic related to user operations.
* Utilizes UserRepository for database interactions.

1. Database Configuration:

* Uses MySQL as the database.
* Database configuration details are specified in the application.properties file.

**View Templates:**

1. index.jsp:

* Displays a welcome message and provides a link to the list of users.

1. users.jsp:

* Displays a table of all users.

1. search.jsp:

* Displays details of a searched user.
* Provides an option to update the user.

1. update.jsp:

* Shows a message confirming a successful update.

1. error.jsp:

* Displays an error message.

**MySQL Database Setup:**

* A MySQL database named mywork is created.
* A table named user is created with columns id, name, email, and password.
* Sample user data is inserted into the user table.