Handling User Authentication

WRITE UP:

- pom.xml: The Maven configuration file where you define project dependencies.
- com.project.Authentication.AuthenticationApplication: The main class of the Spring
 Boot application that launches the application.
- com.project.Authentication.controllers.AuthenticationController: The controller class that handles HTTP requests and contains methods for showing greeting, login page, and authenticating user credentials.
- com.project.Authentication.entities.User: An entity class representing a user. It includes fields such as id, name, email, and password.
- com.project.Authentication.exceptions.UserNotFoundException: A custom exception class for handling user not found scenarios.
- com.project.Authentication.repositories.AuthenticationRepository: A repository interface that extends the CrudRepository interface for performing CRUD operations on the User entity.
- com.project.Authentication.services.AuthenticationService: A service class that provides methods for retrieving user data from the repository and validating user passwords.
- src/main/resources/application.properties: The application configuration file where you define properties such as the database connection details and view configurations.
- > src/main/webapp/jsp: A directory where JSP files for different views are stored. The flow of the authentication process is as follows:
- ➤ The user accesses the landing page ("/").
- From the landing page, the user can navigate to the login page ("/Auth").
- On the login page, the user enters their username and password and submits the form.
- The authenticateUser method in the AuthenticationController class is invoked, which calls the GetUserByName method from the AuthenticationService to retrieve the user details based on the provided username.

- ➤ If the user is found, the entered password is compared with the stored password using the isValidPassword method.
- > Depending on the password validation, the controller returns either the "success" or "failure" view, which is then rendered to the user