# Assignment:

Spring Boot, Spring Data, Hibernate, H2, Spring Aspects, Thymeleaf

# Develop:

User Registration & Login with CAPTCHA (Completely Automated Public Turing test to tell Computers and Human Apart) and one super admin

# Technologies Used:

1. Spring Boot
2. Spring Security
3. Spring Data
4. Spring Tool Suite
5. JDK
6. Maven
7. H2 In-Memory Database
8. Thymeleaf Template Engine

# Description:

1. Create User Registration page with captcha.
2. Registered user details must be save to H2 in-memory database
3. Create login page with captcha
4. Captcha should have a reload button to re-send request to regenerate the captcha
5. Write server side code for generating captcha image and sending it back with response.
6. Code to verify whether the captcha string entered by user and stored in the session matches or not.
7. Implement views for the page using thymeleaf.
8. Use Spring Security for managing user roles (guest user, logged-in user, super-admin user)

# UI Guidelines:

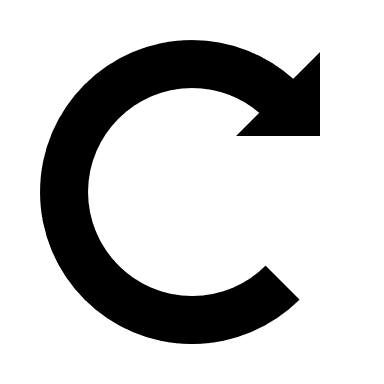
1. Registration Screen

Name:

Email:

Username:

Password:



Enter Captcha

Captcha  
Image

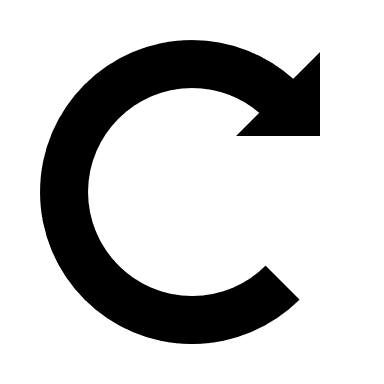
Reset

Register

1. Login Screen

Username:

Password:



Enter Captcha

Captcha  
Image

Reset

Submit

1. Account Update Screen (must be visible only if user is logged-in)

Pradhi

Name:

pradhi@gmail.com

Email:

Pradhilogin

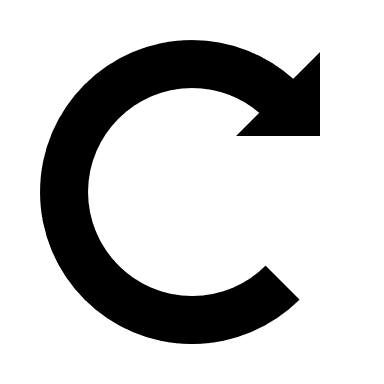
Username:

\*\*\*\*\*\*\*

Password:

\*\*\*\*\*\*\*

Re-Enter Password:



Enter Captcha

Captcha  
Image

Update

1. Menu Items for guest user:
   1. Register
   2. Login
2. Menu Items for logged-in user:
   1. Logout
   2. Account Update
   3. Tutorials (Page with dummy data)
      1. This page is visible and accessible only to logged-in users
   4. Admin (Page with dummy message about admin)
      1. This page is visible and accessible only to the logged-in user who is super-admin
3. After you are done with assignment, complete the “evaluation check” sheet in the attached document.
   1. Status of each activity can be “Done” OR “Not Done”
   2. Feel free to add comments/remark in case you want to in “evaluation check” sheet:
      1. E.g.
         1. Assignment was good
         2. Found difficult to implement this feature
         3. Feature was difficult than expected
   3. Specify if you have implemented new feature other than documented.
   4. Evaluation check document:
      1. 

# Code Challenge – for super charged coders:

1. Challenge is optional
2. Implement “Remember Me” feature for the login screen.
   1. Scenario: User selects the checkbox “Remember Me” and then logs in with username and password
   2. Expected Result: On re-visit, user should be automatically logged-in to the application. Here, the assumption is made that, user exited the browser without logging out of the app.