

## (420-JD5-AB) Programming III FALL 2022

### Test #1 [Worth 30%]

Due: 26 October 2022 at noon on Lea

### Question: USER REGISTRATION

Design a Spring Boot MVC web application for user registration as in the figure below.

**REGISTRATION FORM**

Full name:	<input type="text"/>	<i>size must be between 3 and 50</i>
E-mail:	<input type="text"/>	<i>must not be blank</i>
Password:	<input type="password"/>	<i>must not be blank</i> <i>size must be between 8 and 15</i>
Birthday:	<input type="text" value="mm/dd/yyyy"/>	
Cellphone:	<input type="text"/>	
Profession:	<input type="text"/>	
Income:	<input type="text" value="0"/>	

The following validation rules (constraints) must be applied on the form:

- **name:** must have 3 to 50 characters.
- **email:** must not be blank and well-formed (email structure).
- **password:** must not be blank, must contain 8 to 15 characters, must be hashed in database.
- **cellphone:** must be exactly 8 characters long.
- **birthday:** must be in the date format yyyy-mm-dd. (**@DateTimeFormat**(pattern = "yyyy-mm-dd"))
- **profession:** must be not blank. options: developer, teacher, engineer, scientist or programmer
- **income:** must be within the range from 20K to 200K.

- Once the program starts, a page named **home.xxx** is shown, which contains the name of the program (**USER REGISTRATION FORM**) with a button called **Add User** that will redirect the user to the registration page named **register.xxx**
- Once the user has successfully registered from page **register.xxx** by clicking the button **Register**, the details are saved in an appropriate table from a database called **userDatabase**
- then the program should redirect the user into a page named **welcome.xxx** where a welcome message is displayed which includes the full name, such as “Welcome Elie Mambou”.
- JSP, html or Thymeleaf can be used to design the front-end part.
- The welcome page should also include a button **logout** which will redirect the user back to the registration form.

### **IMPORTANT: Submission guidelines**

1. The project name should be called after your surname followed by your student ID.
2. Submit a single zip of your spring boot project as well as 5 screenshots corresponding to the following running test scenarios:
  - a. picture of a database table with at least 3 registered users.
  - b. picture to the home page
  - c. picture of whole blank registration page with all constraints displayed.
  - d. picture of a welcome page based on a user
  - e. picture of the hierarchy of all files from spring boot
3. **All screenshots must show a background with your project name in Spring Boot. The browser can be resized in the screenshot to make room for a background.**
4. Only the last submission will be evaluated.
5. **Failure to follow these guidelines will result in losing points**
6. **Plagiarism and cheating will be strongly penalized as per college policies.**
7. Do not submit any work via MIO or TEAMS.