

## Stress Test 6

**Duration: 20 minutes**

**Objective:** Enhance a Spring Boot application to allow users to be deleted through the frontend interface.

We will use the in-memory H2 database, do not need to connect to a Postgres or MySQL database.

Use the attached Spring Boot template in the zip file to complete the following task. You are free to modify any code in the template, as long as you understand it.

### Tasks:

#### 1. Backend - Controller:

- Create a DELETE endpoint at `/customer/{user_id}` in the **CustomerController** to handle user deletion requests.

#### 2. Backend - Service:

- Modify the **CustomerService** to include a method for deleting a user by **user\_id**. Ensure that the method uses Optional for handling the user lookup.

#### 3. Frontend - UI:

- Update the existing user table template to include a "Delete" button in a new column for each user as shown below.

| # | First Name | Last Name |        |
|---|------------|-----------|--------|
| 1 | Jack       | Bauer     | Delete |
| 2 | Chloe      | O'Brian   | Delete |

#### 4. Frontend - Functionality:

- Implement functionality to send a DELETE request to the `/customer/{user_id}` endpoint when the "Delete" button is clicked, and update the user table accordingly. The below image shows an example UI of deleting the second user above

| # | First Name | Last Name |        |
|---|------------|-----------|--------|
| 1 | Jack       | Bauer     | Delete |

**Advanced Feature:**

- Ensure that **Optional** is used for all results returned by the repository, **except for getAllUsers()**. This feature providing robust handling for cases where the user might not be found.
- The Controller shall always return a **ResponseEntity** with HttpStatus, NOT a Customer Object, void, or a List of Customer

**You pass this test if you can handle all features in Section 1.**

**You are strongly recommended to try the Update and Create a New User at home**