Coding Challenge

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Contents

Document History

- Initial version.

Requirements

- Spring Boot
- Java 17
- MySQL Server (this is preferred but h2 can be used if required)

Brief

For this task you will create a registration form for customers. The form should be accessible at the following URL:

http://localhost:8080/registration

Viewing this page in the browser should display the form. A success page should be displayed when the form is submitted.

Part 1 - Database

Using MySQL Server (or h2) create a database instance and schema called "aeroparker". Then create a customers table with the following specifications.

Column Name	Data Type	Mandatory
id	Auto incremented INT PK	Y
registered	DATETIME/TIMESTAMP	Y
email_address	VARCHAR(255) - Unique	Y
title	VARCHAR(5)	Y
first_name	VARCHAR(50)	Y
last_name	VARCHAR(50)	Y
address_line_1	VARCHAR(255)	Y
address_line_2	VARCHAR(255)	N
city	VARCHAR(255)	N
postcode	VARCHAR(10)	Y
phone_number	VARCHAR(20)	N

Part 2 – Form Creation

A Spring Boot web application should be created which serves the registration form. The form should present the fields present in the customers table (except ID and registered date), using relevant (e.g. is a valid email address, maximum length etc.) validation based on the field, including whether the field can be blank.

When submitted the fields should be validated server side before insertion in the database.

Optional ideas for extras kudos:

- Remove case sensitivity on emails when inserting to ensure uniqueness.
- Don't allow duplicate emails to be submitted in the form.
- Use in-line validation using client-side (such as JS).

Part 3 – Success Page

Upon successful insertion in the database the user should be presented with a success page. The content on this page is entirely at your discretion.

Notes

This exercise is used to show off your competency in MVC (Model-View-Controller). Please do not be afraid to add your own features to this task. You may use any additional libraries to accomplish this task but bear in mind that the main point of it is to show off your coding and problem solving abilities.

Styling does not matter in this exercise, but keeping the form neat, tidy, and usable does. An easy, versatile library suggestion for form building is Bootstrap https://getbootstrap.com/.

When complete please send your project and source files as well as the export of your database. We will expect to be able to compile and deploy your project without having to do much configuration (or fix anything!).

Good luck!