



Work package - REST database & testing

requirements

Installation requirements: JDK 18, NodeJS, Angular

If you haven't already done so, you should take a look at the backend slide set before you start working, where the basics of Springboot will be explained to you.

It may be that before editing the frontend you first have to "install" the folder so that it can run.

To do this, go to the folder client and enter "npm install" in your console/terminal.

The Node Package Manager should then install all the necessary libraries so that Angular can start.

Task 1 In

this work package you will be provided with a Springboot server with H2 database and an Angular frontend.

Start by editing the Person.java and Address.java classes in the backend so that they are saved in the database and have the following properties:

Person:

1. ID, which is generated automatically.
2. First names
3. Last names
4. Year of birth 5.

Address, which is stored via a foreign key.

Address:

1. ID, which is saved automatically 2. City 3. Street

You should have the option to filter people by year of birth.

You should be able to search for people by city.

To do this, edit the Person, Address, PersonController and PersonRepository classes in the backend.

Edits the files in the client: Person.service.ts, Person-Table.component.ts, Person-Form.component.ts.

Help

<https://spring.io/guides/gs/accessing-data-jpa/>

Task 2 In

the following you would like to expand your server so that it can now process the following additional query.

The average age of the people found should be calculated based on the previously implemented birth year filter method.

First implement this method.

However, before you expand the server directly using this method, you should do so accordingly testing.

For this you should write a test class that tests the corresponding method.

It is important to resolve the dependencies, as we will be testing based on temporarily created, hard-coded data.

Help

<https://site.mockito.org/>

<https://junit.org/junit5/docs/current/user-guide/#writing-tests/>