CO2123 HW2: Spring Data

This homework is worth 100 marks and it counts 35% towards your final module marks. This assignment can be attempted individually or in pairs.

Any form of collusion or plagiarism will be handled following senate regulations:

https://le.ac.uk/policies/regulations/senate-regulations/senate-regulation-11/academic

Detailed marking information will be shown on the generated task description (see below).

Marking will be done anonymously with the help of automated scripts. If you have any questions, please contact your module convenors Daniel Hao (d.hao@leicester.ac.uk) and Victoria Wright by email (vrw4@leicester.ac.uk).

Preparation

Import the project contained in file `hw2.zip` (available on Blackboard) into your workspace. Please use this template for HW2, do not make your own project:

- Unzip the project and select `Open` from the home page
- Select the project and import it.

<mark>Important</mark>: Enter your university username in file `src/main/resources/application.properties` as in the example below (replace `vrw4` with your actual username):

`username=vrw4`

Make sure that this is the only line in the file and that there is no trailing space after your username.

Run the gradle task `generateTasks` or manually execute the Java class `co2123.hw2.GenerateTasks`, which generates your individual task description:

- Right click on `GenerateTasks.java` and select `Run 'GenerateTasks.main()'`
- The file `tasks.html` should automatically appear in the project's root
- Open `tasks.html` and click on the icons representing the web browsers (Chrome, Firefox, Edge) to open the worksheet

Check that `tasks.html` states your username and lists Tasks 1-5 that in total add up to 100 marks.

Tasks

Work through Task 1-5 of your personalised assignment worksheet.

Some JUnit tests are included in the project to give you guidance on whether you are on the right track in completing these tasks. In order to execute these tests at any point while working on the worksheet, you can either right-click on the text classes and choose **Run** or execute the Gradle task **test** (find it in the verification category of the list of Gradle tasks):

Note: these tests only cover parts of tasks 1-3 (not for tasks 4 and 5)!

Pair Programming

You are encouraged to work in pairs for this assignment. Please resubmit your group by submitting another form response. You only need to submit the form once (e.g. don't submit abc1 and def2 then def2 and abc1).

You may use either of your usernames when generating your tasks, but the student generating the tasks must also be the student submitting the solution on Blackboard.

If you do not wish to work in pairs, you are also welcome to work and submit individually. You don't need to submit a form if working by yourself.
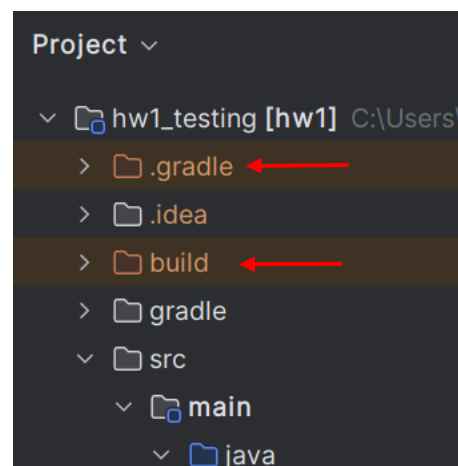
AI usage for HW2

You are may use IntelliJ IDEA Ultimate's free "full line code completion" to help with coding. You **shouldn't** use any other AI to create code including IntelliJ's paid version. You may use AI to help explain concepts taught in the module and to help with debugging code. See Lab 1's AI policy for more details.

Submission

Before submitting your project, please delete the **.gradle** and **build** folders from your project to reduce the file size. They are the folders with the arrows pointing to them in the screenshot to the right.

DO NOT DELETE: The build.gradle file, the folder called gradle, the files gradlew & gradlew.bat, your username from application.properties, any dependencies in the **hw2.zip** template you downloaded, or any of the JUnit tests.

Then, in the file explorer, export your entire project to a zip file (not just your Java and JSP files). If you want more details on what files to zip, please read the section below. Choose the name of the archive file to be **hw2.zip**
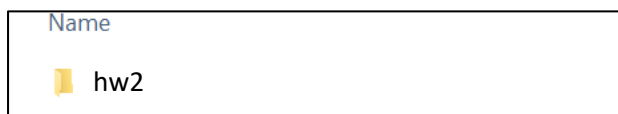
Upload your exported zip file to Blackboard **Assessment and Feedback > HW2: Spring Data**. You may try it as many times as you like before the deadline.

Finally, download your submission from Blackboard, go to IntelliJ IDEA Ultimate with a fresh workspace, import your project, and check that everything works.
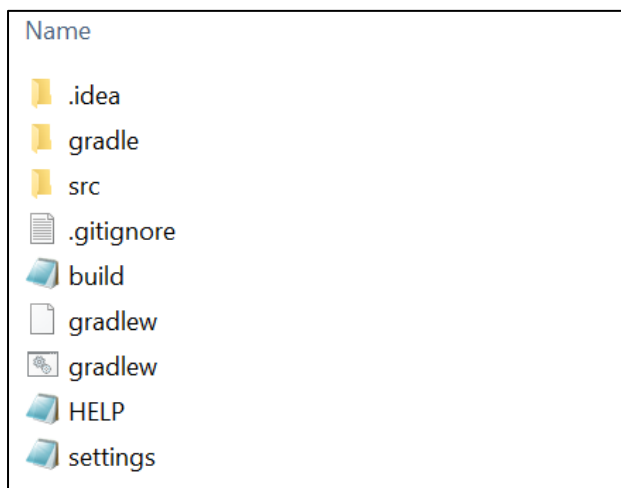
- If your project is not exported as required, you receive 0 marks.
- If your code does not compile, you receive 0 marks.
- If you do not follow the required names of classes, fields, JSPs, etc. as they are stated in the list of tasks, you will receive 0 marks.
- You are allowed to add new methods if you need to, but do not change any required behaviour and do not add any unrequired validation that could make some test cases fail by rejecting some inputs.

What files do I zip?

You should have a folder called **hw2** which contains directly inside it the **.idea**, **gradle**, and **src** folders as well as other files including build.gradle. The screenshots below are from Windows but it will be the same file structure on Mac and Linux.

Name

📁 hw2

Directly inside the hw2 folder:

Name

📁 .idea
📁 gradle
📁 src
📄 .gitignore
📰 build
📄 gradlew
🔧 gradlew
📰 HELP
📰 settings

You may have one hw2 folder inside another hw2 folder depending on how you downloaded the template. You should zip the inside folder, not the outer one.

To zip/archive the folder, click on it and, in Windows, choose **Send to -> Compressed (zipped) folder** as in the screenshot below. Other operating systems may call this compressing or archiving but they will still result in a **.zip** file.