

CODE LAB CHALLENGE

March 2021

Client Management

Remember to read the general Assessment Criteria for Code Lab challenges before you start working! (There's a copy on the last page.)



Your client is a coach (and psychotherapist) with his own business. He is looking for a system to manage his clients, appointments, and records (notes after each session).

A client should have name, age, industry, phone number, email address and presenting issue (reason for seeking out a coach).

The coach has an increasing number of clients so it must be easy and intuitive to create, read, update and delete clients and appointments.

A console-based application is fine if it is easy to navigate.

The excellent solution

If your program fulfills the requirements above, extra credits are given for:

- Search feature that makes advanced search criteria possible (search for clients of a certain age group and in a certain industry, etc.).
- You can use text files for storage but if your solution can create its own database with tables, etc., you get extra credits. The client has MySQL running but your program must set everything up automatically.
- Ability to assign coaching programs (not just single sessions). A program can be one fixed type (with a fixed number of sessions and a special price), or your program may even allow programs to be created in the system by the coach.
- A Spring application is not allowed but a Swing GUI will earn you extra credits. (Note: Don't use Swing unless you have experience with it and know what you're doing - just a friendly piece of advice.)
- Something fancy like a daily quote from some coaching guru that pops up now and then 😊

General Challenge Assessment Criteria

Code Lab launches a monthly challenge during the first three months of each semester. The purpose of these challenges is to give advanced students additional exercises for skill development.

Who can participate?

The primary target group is 2. to 4. semester but all KEA Computer Science (Datamatiker) students can participate.

Which technologies are allowed?

The primary purpose is to challenge your skills in Java and UML so all code must be written in Java and diagrams in UML. You can create a command-line application or a graphical interface that can be run from the command-line in Java SE (like Swing). No additional plug-ins to Java or IntelliJ should be necessary. It must be possible to run your .class files on another computer running Java SE.

You can save data in memory, text files or a MySQL database. Again, the solution should run on a standard environment so if you choose MySQL, you must include code that automatically installs the database on a new system and creates the tables, etc. Thus, MySQL is not recommended but it is a valid option.

How is the monthly winner determined?

Since all semesters can participate, we look for different qualities depending on your semester.

Generally:

- Your program runs out-of-the-box. Nothing other than a standard computer with a standard Java SDK 11 is required, and your program runs from the command line.
- You can choose to use a standard MySQL as well, but we do not recommend spending your energy here. If you choose to do so, your program must ask the user for credentials and create the database automatically - no manual work must be necessary.
- Your program does not crash easily.
- Your solution is delivered in one zip file.

1st semester:

- Relevant and updated UML diagrams.
- Code that is readable, maintainable and lives up to good OOP conventions.
- Adherence with the Java coding and naming conventions.

2nd to 4th semester

- Same as 1 semester, plus:
- Adherence with GRASP.
- The higher your semester, the higher level of quality in your code and diagrams we expect.

The monthly winner will be announced and honored in Code Lab's Fronter room and Lygten 37, room B220.