

Java Examination

This examination is focused on manner in which a person develops a piece of software.

Introduction

Welcome!

Welcome to our Java examination. :-)

Timing

1. ~15min - Introduction
2. ~2.5h - Tasks (Main and optional tasks)
3. ~30min - Presentation of your work

Topic

You have to implement an abstracted and simple book management system.

Hints

In this examination focus on the following points - in the mentioned priority.

1. Code quality
2. Usage of object oriented methods
3. Functionality

Requirements

1. Develop your code based on Java language level 8.
2. You are allowed to consult the Internet, use every library you want, call a friend ...
3. If questions come up or you cannot proceed with your task you can ask me/us and anybody else in the room you can find. ;-)
4. There are no restrictions on how to use the provided time. If you want to code the entire time, take a break or a cigaret - it's up to you.

Given resources

1. `authors.csv`: Contains authors with its `email`, `firstName` and `lastName`.
2. `books.csv`: Contains books with its `title`, `description`, **one or more authors** and an `isbnNumber`.
3. `magazines.csv`: Contains magazines with its `title`, **one or more authors**, a `publishedAt` and an `isbnNumber`.

Tasks

Main tasks

1. Your software should read all data from the given CSV files in a meaningful structure.
2. Print out all books and magazines (could be a GUI, console, ...) with all their details (with a meaningful output format).

Hint: Do not call `printBooks` first and then `printMagazines` ;-)

3. Find a book or magazine by its `isbnNumber`.
4. Find all books and magazines by their authors' `email`.
5. Print out all books and magazines with all their details sorted by title. This sort should be done for books and magazines together.

Optional tasks

1. Write Unit tests for one or more methods.
2. Implement an interactive user interface for one or more of the main tasks mentioned above. This could be done by a website, on the console, etc.
3. Add a book and a magazine to the data structure of your software and export it to a new CSV files.

Good luck!

And again: If you have questions: Ask! You are not alone.