Exam Coversheet

To be completed by the student:

Student number:

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Name:

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Group/Class:

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2412mm132A

To be completed by the lecturer

Exam Name	Java Fundamentals
Exam Code	1913IN232A
Exam Date	25-10-2020
Time	12:00
Classroom	Proctored online
Length (in minutes)	120
Academic Year	2020-2021
Education Period	2.1
Opportunity/Chance	1
Examiners	Wim Wiltenburg
	Mark de Haan
Faculty	Engineering, Design and Computing
Cluster	ICT
Programme + full time/part time	Information Technology fulltime
Location	Haarlem
Number of pages (incl. coversheet)	5
Number of questions	3
Passmark	55
Allowed tools/aids	Computer, Eclipse/IntelliJ/Internet, Pen and Paper
Answer sheet	
Additional comments/details	Online communication means not allowed

(* delete if not applicable)

In te vullen door de toetsorganisatie:

Surveillanten:

Bijzondere voorzieningen:

Voorziening:	Aantal:	Opmerking:
Dyslexie		
A3		
Overig		

Exam Java Fundamentals

Monday, 25-10-2021, 12:00 - 14:00

Introduction

You have been asked to submit an end assignment for this course on Moodle as a prerequisite for this exam. This exam will ask you three questions that will be extensions to your end assignment. If the question refers to functionality already (partly) implemented in your end assignment, you can refactor/rewrite it to suit the exam question. Each question is derived from the end assignment.

Requirements

The code you submit needs to meet the same requirements as the end assignment. In the end assignment document you can find the instructions.

Submitting your code

Every question is submitted as its own zip-file with sources named java-studentname-studentnr-question- .zip. Upload your zip file to Moodle. Each zip file contains the code of the previous question. That is: question 2 includes the code for question 1, and question 3 includes the code for questions 1 and 2.

Grading

The questions are graded according to the following specification:

Question	**Maximum number of points**
End assignment	45
Question 1	20
Question 2	15
Question 3	10
Total	90

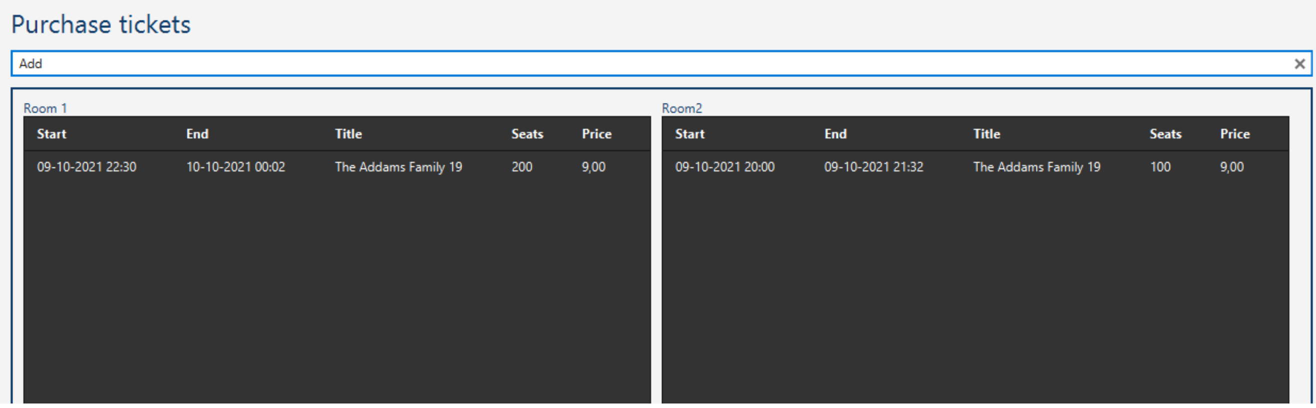
Question 1. Filtering the list of showings

Add a text field to your ticket purchasing screen.

When 2 or more characters are entered in that text field, the lists of both rooms should be filtered. They should only list the showings where the name of the movie contains the entered characters.

If the textbox contains only 1 or 0 characters, the list views should simply show the unfiltered lists with all of the showings.

A partial screenshot is provided as an example. The new text field is added above the two list views:



Purchase tickets

Add

Room 1

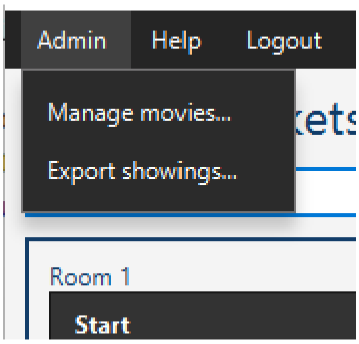
Start	End	Title	Seats	Price
09-10-2021 22:30	10-10-2021 00:02	The Addams Family 19	200	9,00

Room2

Start	End	Title	Seats	Price
09-10-2021 20:00	09-10-2021 21:32	The Addams Family 19	100	9,00

Question 2. Export showings

Add a menu option to export all showings in CSV (comma separated file) format.

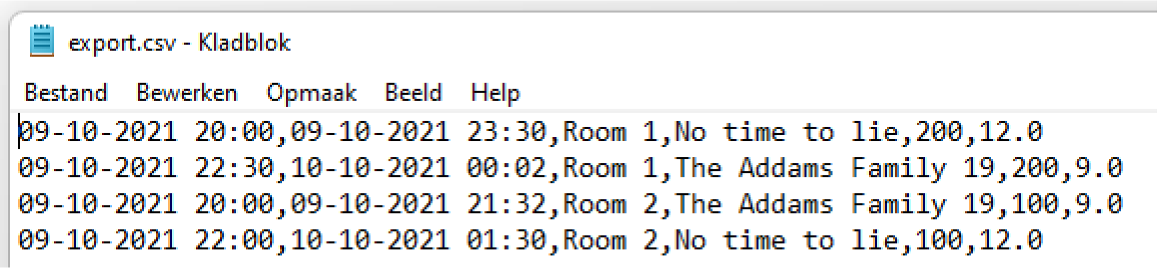


When the user clicks this option, a file should be exported that contains the following:

```
start datetime,end datetime,room name,movie title,seats left,price
```

Make use of the FileChooser class to allow the user to select where the .csv file should be stored. Also add an extension filter to the dialog so that it stores the file with the .csv extension by default.

Exported file example:



```
09-10-2021 20:00,09-10-2021 23:30,Room 1,No time to lie,200,12.0
09-10-2021 22:30,10-10-2021 00:02,Room 1,The Addams Family 19,200,9.0
09-10-2021 20:00,09-10-2021 21:32,Room 2,The Addams Family 19,100,9.0
09-10-2021 22:00,10-10-2021 01:30,Room 2,No time to lie,100,12.0
```

Question 3. Exit confirmation

Create a class for a new modal window. It is important that your code does **not** make use of the existing javafx.controls.Alert class, or any javax.swing.* components.

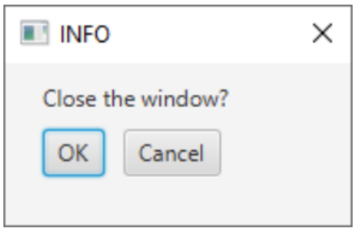
When the user wants to close the application by clicking the X on the right top side this window should appear with the options “OK” and “Cancel” and a title and message that are configurable in code.

- The title of the message window can be either INFO, ALERT or ERROR.
- The message text should be a string

When “Cancel” is pressed, the modal window disappears and the application will still be running. When “OK” is pressed, both the modal window and the main application window will close, and the application will exit.

Hint: instead of showing the modal window with the show() method, use showAndWait().

Example:



Close the window?