Exam Coversheet

To be completed by the student:

Student number:

_____

Name:

_____

Group/Class:

_____

2412mm132A

To be completed by the lecturer

Exam Name	Java Fundamentals
Exam Code	1913IN232A

Exam Date	10-01-2022
Time	13:00
Classroom	Proctored online
Length (in minutes)	120

Academic Year	2021-2022
Education Period	2.2
Opportunity/Chance	2

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 (Retake)

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.

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

Before the end of the exam, submit your code as a zip-file with sources. The file should be named java-studentname-studentnr.zip. Upload your zip file to Moodle on the page where you found this document.

Grading

The questions are graded according to the following specification:

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

Question 1. Filtering the list of showings

Add a ToggleButton to your ticket purchasing screen.

When the button is toggled 'on', only the showings that start on today's date should be shown.
When the button is toggled 'off', all showings should be shown.

Make sure the list of showings is always ordered by the starting date and time.

Partial screenshots are provided as an example. The new button is added on the top right of the window.

Date filter toggled off:

Date filter toggled on:

Question 2. Age check

As is written in Dutch law, some movies can only be seen by people older than 16. For these movies, cinemas should check the age of the visitor by looking at their ID card.

1. Add a variable with getter and setter to your Movie class to determine whether the age has to be checked (for 16+ movies). Set this variable to true for one of the movies.

2. In the purchase confirmation dialog, show a checkbox for the age check only for movies that have this variable set to true. The purchase can then only be completed when this checkbox is checked.

Screenshot of a movie that requires the age check:
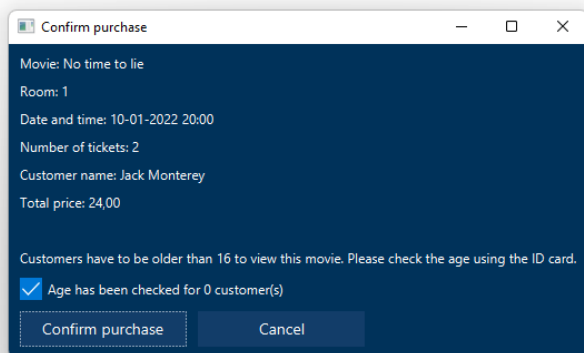
Screenshot of a movie that does not require the age check
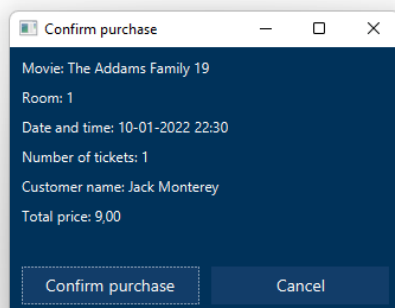
Question 3. Login screen

Write a custom exception named "AccountLockedException". The user can enter incorrect credentials 3 times. If the third attempt is not correct, the AccountLockedException should be thrown.

When the AccountLockedException is thrown, it should be handled by displaying an alert dialog to the user with an OK button:
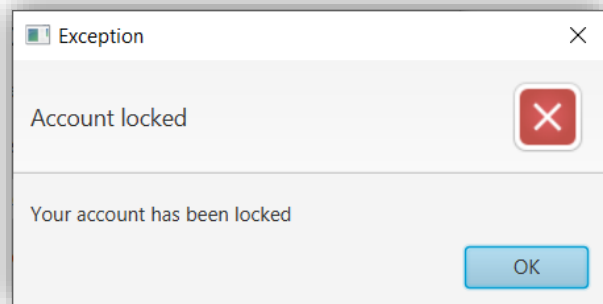
After clicking the button, the application should exit.

Note: It is not needed to actually lock the user account.