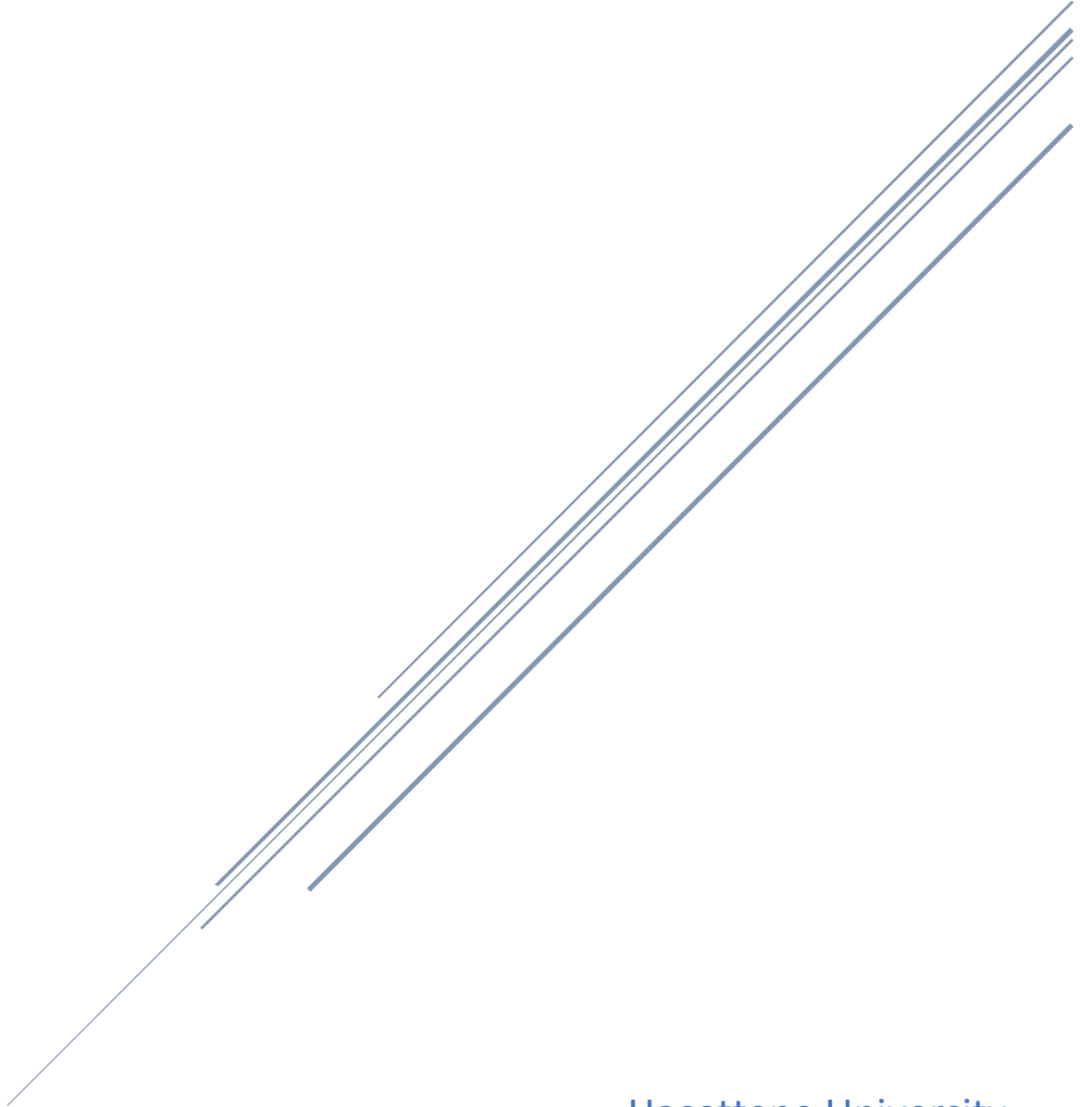


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PROGRAMMING ASSIGNMENT 4

HUCS Cinema Reservation System



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PROGRAMMING ASSIGNMENT 4 REPORT

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2.Problem

In this assignment ,we are asked to design a Graphical User Interface (GUI) application using Java programming language, and this GUI application is called HUCS Cinema Reservation System. This system is programmed to store information to backup.dat file ,so it can save operations that made by user. This system can make some cinema reservation operations such as login, signup, buy seats ,play trailers etc.

2.Solution Approach

Firstly Java version 8 is used for this project. Since any external libraries or scene builders, FXML cannot be used for this project, all buttons, labels, etc. are aligned with codes. Three classes and their methods are used for Scenes because in this assignment there are a lot of different scenes for different situations (login screen, remove film screen, etc.), and classes and methods that returns scene are made for this purpose. In this project also "Start" and "Stop" methods are overridden," Start" method should be overridden because it starts our app, and the "Stop" method is also overridden because when I close the app operations and changes are saved to backup.dat file automatically. readfile class is used to initialize system data, users, halls, movies, and seats. For the operations in this project, Movie, Seat, Hall, and User classes are made and used. Also to count the ban time a class whose name is the time counter is used. This is my general solution approach.

3. The problems that I faced

The general problem is that I do not have any experience with Java FX, it can be said that java FX is almost the same as Java. That is true but new concepts like Scenes and Panes are used by Java FX. Due to these reasons sometimes I got annoying problems and finding solutions was also hard. If we focus on more specific problems the first problem that can be said is that after an operation refreshing data and with these data refreshing Scenes is one of the problems. The other problem was that while gridpanes are used, aligning the buttons or labels was problematic. Some of the buttons cannot stay in locations that I wanted.

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3. Benefits of this system

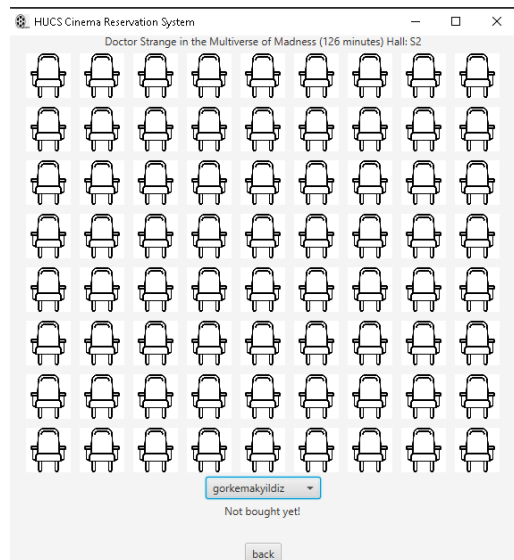
This system can be used by owners of cinema systems, by using this system they can sell tickets for movies easily also by using an admin account they can make edit the system can add movies, halls, etc. Also with a club member system, they can have new customers for their cinemas. Customers can choose their movies and select the seats depending on what seats are empty. Also thanks to Java Fx, the interface is easy to understand the system.

4. Benefits of GUI

Thanks to the GUI, the system can be understandable and easy to use. Because while the system is used by someone, this person does not know which method or classes is used. He/she just sees scenes, labels, and buttons, so it can be learned and used easily. A movie can be removed by using a button, or a seat can be taken easily, or when we make a login with the wrong password we see the error label and see the information. Thanks to the GUI system we do not need to what methods are used for these operations. we just focused on the operations and their results.

5. The bug of system

There is a bug in the system that should be explained to you. After login with an admin account such as admin and while buying seats, sometimes there is a bug and users cannot be selected OR seats cannot be bought or refunded at this time if it happens just press the back button and then come back and the problem is solved. I think this is a bug because it does not happen always, I faced this problem 3 times while I am testing the app.



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5. Important about demo video

While demo was recorded ,in my code there was a problem ,seats were indexed from 0 ,not 1.So it is updated and code start index from 1.