Programming 1

Main Assignment

Weight: 25%

Description

A cinema has contacted you as a developer and asked for a cinema ticket program to be developed. The company would like an interactive system that allows a user to select the number of tickets they wish to purchase. The company is focused upon giving discounts to people depending on their age, and they wish for this feature to be included as a feature during the calculation of the cost of tickets.

During the conversation the cinema owner has asked for the following features to be included:

- A welcome message is presented to the user when the program starts.
- A menu is presented to the user with the following options:
    - a) Create a new order
    - b) List the films that are currently being shown at the cinema
    - c) View previous orders
    - d) Quit the program.

- When the user clicks the first option, the will then be asked what film they wish to see, and the number of tickets they would like to buy and what age they are.
- Depending on their age a discount should be applied:
    - Ages 0 - 12 -- 40% discount on the ticket
    - Ages 14-64 -- Normal price
    - Ages 65 and older, 20% discount.

- When the user attempts to close the program, they will be asked "are you sure you wish to close this program?" If the user types "y" then, it will close, or N and the program will return back to the main menu.

- When a user has finished with the current option, they will then be returned back to the main menu allowing them to make a selection.

- All of the purchases should be saved into a text file.
- When the program loads, all of the information should be put into memory.
- An option should exist to allow the user to view previous bookings.

Additional notes

- The program code should be well formatted
- The code should include full comments
- Methods should be used for each of the options, e.g. show the menu, create a new order, view previous orders.
- The list of films should be read in from a text file, allowing the cinema manager to make changes to the films that are being shown.
- All input from the user should be validated to ensure that no blank values have been entered. If they do enter a blank value, the program should ask them to enter in the value again.

Note

- All code must be your own
- Don't copy and paste from the internet
- This is an individual assignment, no two assignments should be the same.