

Camera Rental Application Write-Up

Algorithm

1. Start the program.
2. Display the welcome screen.
3. Prompt the user to login.
4. Read the entered username and password.
5. Check if the entered username and password match the predefined values.
6. If the login is successful, display a success message and proceed to the main menu.
7. If the login fails, display an error message and exit the application.
8. In the main menu, display the available options and prompt the user for their choice.
9. Based on the user's choice, perform the corresponding action:
 - a. If the choice is 1, handle the "My Cameras" menu:
 - Display the available options for managing user's cameras.
 - Prompt the user for their choice.
 - Based on the user's choice, perform the corresponding action:
 - If the choice is 1, prompt the user to enter camera details (brand, model, rental amount).
Create a new Camera object with the entered details and add it to the cameraList.
 - If the choice is 2, display the list of user's cameras and prompt the user to enter the camera ID of the camera to be removed. Remove the camera with the corresponding ID from the cameraList.
 - If the choice is 3, display the list of user's cameras.
 - If the choice is 4, return to the previous menu.
 - If the choice is invalid, display an error message.
 - Repeat the "My Cameras" menu until the user chooses to return to the previous menu.
 - b. If the choice is 2, prompt the user to rent a camera:
 - Check if there are cameras available for rent.
 - If no cameras are available, display a message and return to the main menu.
 - If cameras are available, display the list of available cameras and prompt the user to enter the camera ID they want to rent.
 - Check if the entered camera ID exists and the camera is not already rented.

- If the camera is available, check if the user has sufficient balance in their wallet.
 - If the user has sufficient balance, deduct the rental amount from their wallet, set the camera's rented status to true, and display a success message.
 - If the user has insufficient balance, display an error message.
 - If the camera ID is invalid or the camera is already rented, display an error message.
- c. If the choice is 3, display the list of all cameras.
- d. If the choice is 4, handle the "My Wallet" menu:
- Display the user's current wallet balance.
 - Prompt the user to choose whether they want to deposit more money or not.
 - If the user chooses to deposit money, prompt for the deposit amount, update the wallet balance, and display a success message.
 - If the user chooses not to deposit money, return to the main menu.
 - If the choice is invalid, display an error message.
- e. If the choice is 5, display a goodbye message and exit the application.
- f. If the choice is invalid, display an error message.
10. Repeat the main menu until the user chooses to exit the application.
11. End the program.