Camera Rental App

Algorithm –

Step 1: Start.

Step 2: Print “WELCOME TO CAMERA RENTAL APP”.

Step 3: Print “PLEASE LOGIN TO CONTINUE - ”.

Step 4: Take inputs for username and password from the user.

Step 5: Validate the username and password combination. If it’s correct, go to Step 7, or else go to Step 6.

Step 6: Print “INCORRECT CREDENTIALS”, and go to Step 3.

Step 7: Print “1. MY CAMERA

2. RENT A CAMERA

3. VIEW ALL CAMERAS

4. MY WALLET

5. EXIT”.

Step 8: Take input for choice from the user.

Step 9: If choice = 1, then go to Step 14.

Step 10: If choice = 2, then go to Step 33.

Step 11: If choice = 3, then go to Step 32.

Step 12: If choice = 4, then go to Step 42.

Step 13: If choice = 5, then go to Step 48.

Step 14: Print “1. ADD

2. REMOVE

3. VIEW MY CAMERAS

4. GO TO PREVIOUS MENU”.

Step 15: Take input for subChoice from the user.

Step 16: If subChoice = 1, then go to Step 20.

Step 17: If subChoice = 2, then go to Step 25.

Step 18: If subChoice = 3, then go to Step 32.

Step 19: If subChoice = 4, then go to Step 7.

Step 20: Take inputs for brand, model, rent from the user.

Step 21: Create a new Camera and set its properties(brand, model, rent) to the values received via user inputs, and set its status as “Available”.

Step 22: Add the camera to the cameraList.

Step 23: Print “YOUR CAMERA HAS BEEN SUCCESSFULLY ADDED TO THE LIST” , and then go to Step 24.

Step 24: Sort the cameraList with respect to the cameraId, then go to Step 7.

Step 25: Display all the camera details which have the status as “Available”, if the cameraList is empty, go to Step 26, or else go to Step 27.

Step 26: Print “No data present at this moment.”, and then go to Step 7.

Step 27: Take input for id from the user.

Step 28: Check if a camera exists with the cameraId = id, if it do not exist, then go to Step 29, or else if the status is “Rented”, go to Step 30, or else go to Step 31.

Step 29: Print “INVALID CAMERA ID.”, and then go to Step 7.

Step 30: Print “CAMERA CANNOT BE REMOVED AS IT IS RENTED.”, and then go to Step 7.

Step 31: Remove the camera from the cameraList, and go to Step 24.

Step 32: Display all the camera details, if the cameraList is empty then go to Step 26, or else go to Step 7.

Step 33: Display all the camera details which have the status as “Available”, if the cameraList is empty, go to Step 26, or else go to Step 34.

Step 34: Take input for cameraId from the user.

Step 35: Check if a camera exists with the cameraId, if it do not exist, then go to Step 29, or else if the status is “Rented”, go to Step 36, or else go to Step 37.

Step 36: Print “CAMERA IS ALREADY RENTED”, and then go to Step 7.

Step 37: If walletBalance >= camera.rent, then go to Step 38, or else go to Step 41.

Step 38: Set walletBalance = walletBalance - rent.

Step 39: Set the status of the camera as “Rented”.

Step 40: Print “YOUR TRANSACTION FOR CAMERA BRAND MODEL WITH RENT INR.RENT HAS SUCCESSFULLY COMPLETED”, and then go to Step 7.

Step 41: Print “ERROR: TRANSACTION FAILED DUE TO INSUFFICIENT WALLET BALANCE. PLEASE DEPOSIT THE AMOUNT TO YOUR WALLET.”, and then go to Step 7.

Step 42: Print the user’s current wallet balance.

Step 43: Print “DO YOU WANT TO DEPOSIT MORE AMOUNT TO YOUR WALLET?(1. YES 2. NO) - ”.

Step 44: Take input for option from the user.

Step 45: If option = 1, then go to Step 45, or else if option = 2, then go to Step 7.

Step 46: Take input for amount from the user.

Step 47: Set walletBalance = walletBalance + amount.

Step 48: Stop.