

## **Algorithm :**

1. Start the Program.
2. Create the Camera class with the following attributes: id, brand, model, price, and status.
3. Create the User class with the following attributes: username, password, myCameras , and wallet.
4. Create the CameraRentalApp class. Initialize the cameraList users and wallet.
5. Enter the Username and password and Validate the user's credentials by comparing them with the existing users in the users list.If the credentials are valid, set the loggedInUser variable to the username.
6. Display the main menu options: MY CAMERA, RENT A CAMERA, VIEW ALL CAMERAS, MY WALLET, and EXIT.
7. Based on the user's choice, perform the corresponding action.

### a. MY CAMERA:

- Display options to ADD, REMOVE, VIEW MY CAMERAS, or go back to the previous menu.
- Based on the user's choice, perform the corresponding action:
  - ADD: Ask the user to enter the camera brand, model, and price. Generate a unique camera ID and create a new Camera object. Add the camera to the cameraList.
  - REMOVE: Display the list of cameras and Ask the user to enter the camera ID to remove. Remove the camera from the cameraList.
  - VIEW MY CAMERAS: Display the list of cameras rented by the logged-in user.
  - GO TO PREVIOUS MENU: Go back to the main menu.

### b. RENT A CAMERA:

- Display the list of available cameras.
- Ask the user to enter the camera ID they want to rent and the rental period in days.
- Check if the camera is available and if the user has sufficient balance in their wallet.
- If both conditions are met, update the camera status to "RENTED", deduct the rent amount from the user's wallet, and add the camera to the user's myCameras list

c. VIEW ALL CAMERAS:

- Display the list of available cameras.

d. MY WALLET:

- Display the current wallet balance of the logged-in user.
- Ask the user if they want to deposit more money into their wallet.
- If yes, Ask the user to enter the amount and update the user's wallet balance accordingly.

e. EXIT:

- Terminate the program.

**8.** Repeat steps 6-7 until the user chooses to exit the program.