**GITHUB LINK :-** [**https://github.com/UmeraNilofer/FSD-Java.git**](https://github.com/UmeraNilofer/FSD-Java.git)

ALGORITHM:-

1. Start the Camera Rental App.

a. Create an empty list to store cameras.

b. Set the currentUser variable as null.

c. Populate the initial camera data.

d. Set the running variable to true.

2. While running is true, do the following:

a. Display the login menu.

b. Read the user's choice.

1. If the currentUser is null:

a. If the choice is 1, register a new user:

i. Read the username and password from the user.

ii. Create a new User object with the provided username and password.

iii. Set the currentUser as the newly created user.

iv. Display a registration successful message.

b. If the choice is 2, log in a user:

i. Read the username and password from the user.

ii. If the currentUser is not null and the entered username and password match the currentUser's username and password:

- Display a login successful message.

iii. Else:

- Display an invalid username or password message.

- Set the currentUser as null.

c. If the choice is 3, set running as false to exit the application.

2. Else (currentUser is not null):

a. Display the user menu.

b. Read the user's choice.

i. If the choice is 1, display the available cameras.

ii. If the choice is 2, rent a camera:

- Read the camera ID from the user.

- Find the selected camera in the camera list.

- If the camera is found:

- If the camera is already rented, display a message indicating that the camera is already rented.

- Else:

- If the currentUser's wallet balance is sufficient to rent the camera:

- Subtract the rental price from the currentUser's wallet balance.

- Set the camera's rented status as true.

- Display a message indicating that the camera was rented successfully.

- Else:

- Display a message indicating that the user has insufficient balance to rent the camera.

- Else:

- Display a message indicating that the camera was not found.

iii. If the choice is 3, display a list of all available cameras.

iv. If the choice is 4, display the currentUser's wallet balance.

v. If the choice is 5, log out the user:

- Set the currentUser as null.

- Display a logout successful message.

- Display a thank you message.

3. End the Camera Rental App.