The system starts with getting user’s credentials and perform authentication of each user’s data.

If the user is authorized, then system moves to the idle state if user is not authorized

the system shall not let user leave loginAndAuthorization state unless they are authorized.

In idle state system do nothing unless a new request is made by user for a new order

hen a new order is made.

On the other hand, user can just check their previous orders in checkingPreviousOrders state.

If user want to make new order, they select their payment type in the selectPaymentType state after requesting new order.

Once payment is selected the system goes to orderCofinrmation state.

The order is either confirmed which led to final state dispatchOrder and system terminate successfully.

Or order is not confirmed which will lead system to go to idle state again.

Input Variables: authorized , checkingPrevOrders, request, isCash, confirmed.

Initial State: loginAndAuthenication

Output: Order

LTL & CTL

1. user must be authorized

2. state always idle unless request is made

3. user can either request new order or check previous orders

4. payment can be either cash or credit

5. all orders are not dispatched unless its confirmed