Problem: Ordering food in a restaurant

Identify Objects and Behaviors:

Thing (Object) / Entity:

Information (Data) / (State) Services (Behaviors) / Actions

Things:

Consumer:

Data: name

Behaviors: goToAnotherRestaurant, goToTheRestaurant, orderFood, sitDown, checkMenu, findNoFood, findDesirableFood, waitForFood

Restaurant:

Data: address, menu

Behaviors: isOpened, isClosed, isFilled

Menu:

Data: name, price, picture

Behavior:

Food:

Data: dishes Behavior:

Waiter:

Data: name

Behaviors: findTable, placeOrder

Table:

Data: number Behavior:

Sequence of invoking behaviors in Objects:

OrderFood:

Consumer luqing,
Restaurant restaurant,
Menu menu,
Food dishes,
Waiter waiter,
Table table,

```
if restaurant.isOpened
     luqing.goToTheRestaurant -> restaurant
     waiter.findTable -> table
     luqing.sitDown -> table
     luqing.checkMenu -> menu
     dishIndex = 0;
     Loop
         if luqing.findNoFood
              luqing.goToAnotherRestaurant
              break
         else
              luqing.findDesirableFood -> dishes
              dishIndex++
         end
     End
     if dishIndex != 0
         waiter.placeOrder -> dishes : Collection of Desirable Dishes
     luqing.waitForFood
else
    if restaurant.isClosed || restaurant.isFilled
         luqing.goToAnotherRestaurant
     end
end
```