

“Burger House Ordering System”

Programming Exercises WS 21/22

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Introduction

- > Developing of application that organize the ordering service of a burger restaurant.
- > The project is designed and implemented for our client.
- >Our software is constructed for internal/local use

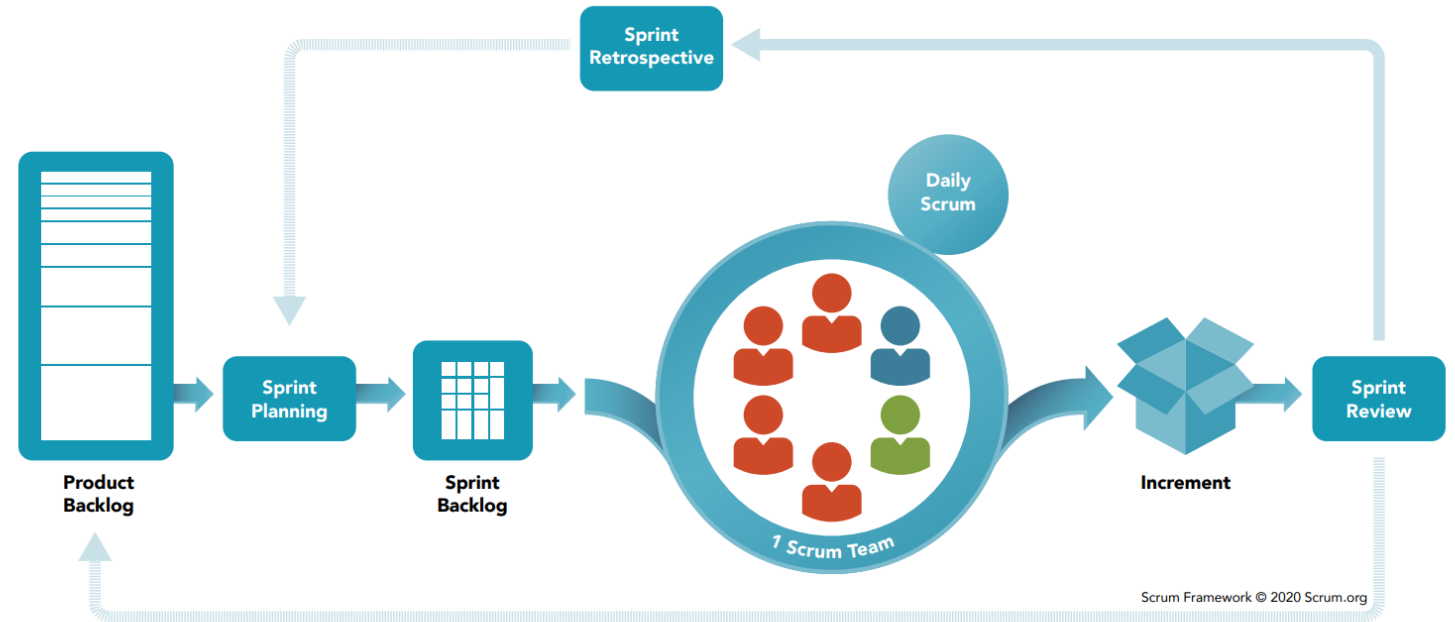


Process Model

Why SCRUM ?

- High adaptivity for different schedule
- Scrum model of Agile methodology is great for rather smaller team

SCRUM FRAMEWORK



Technologies

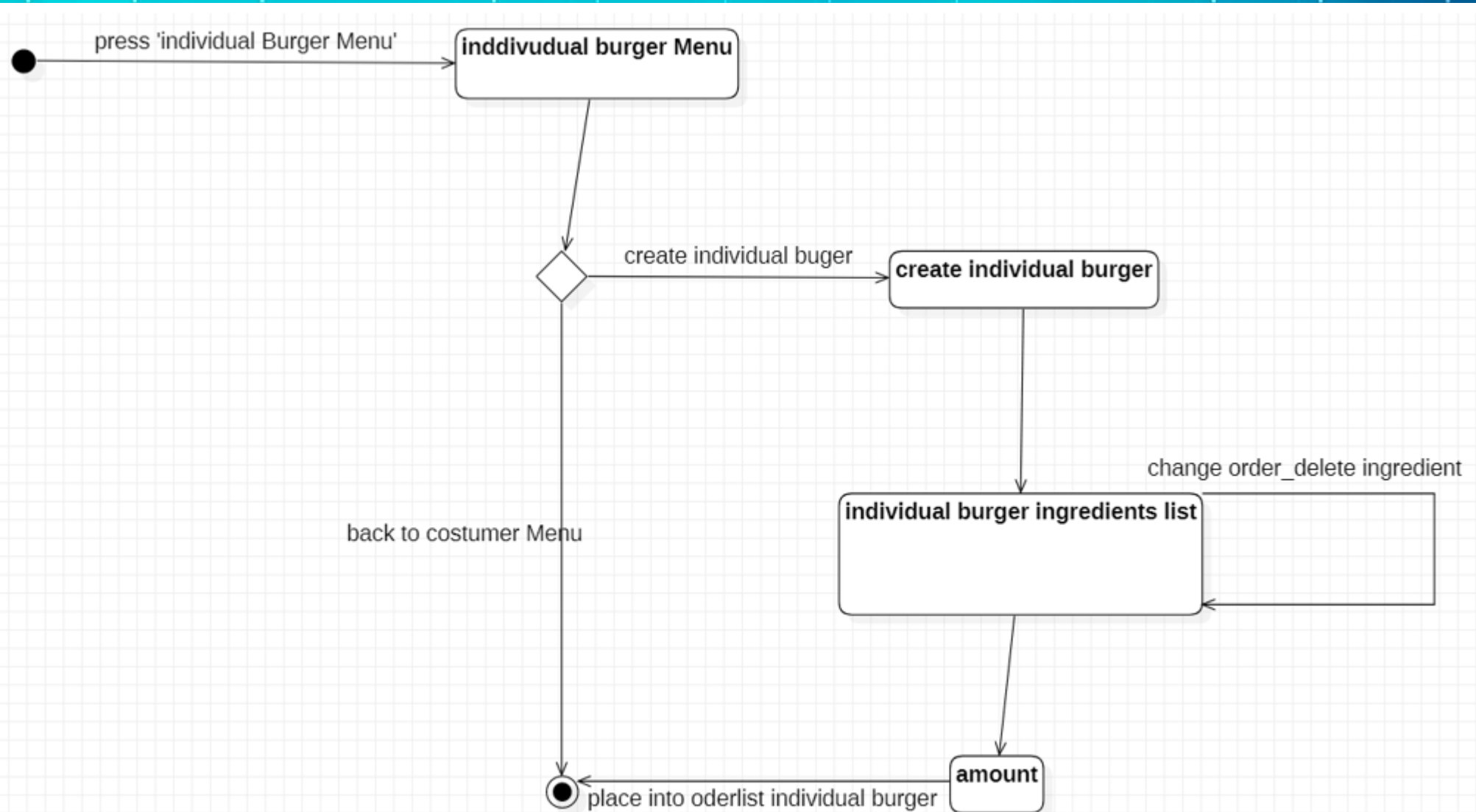


Diagrams

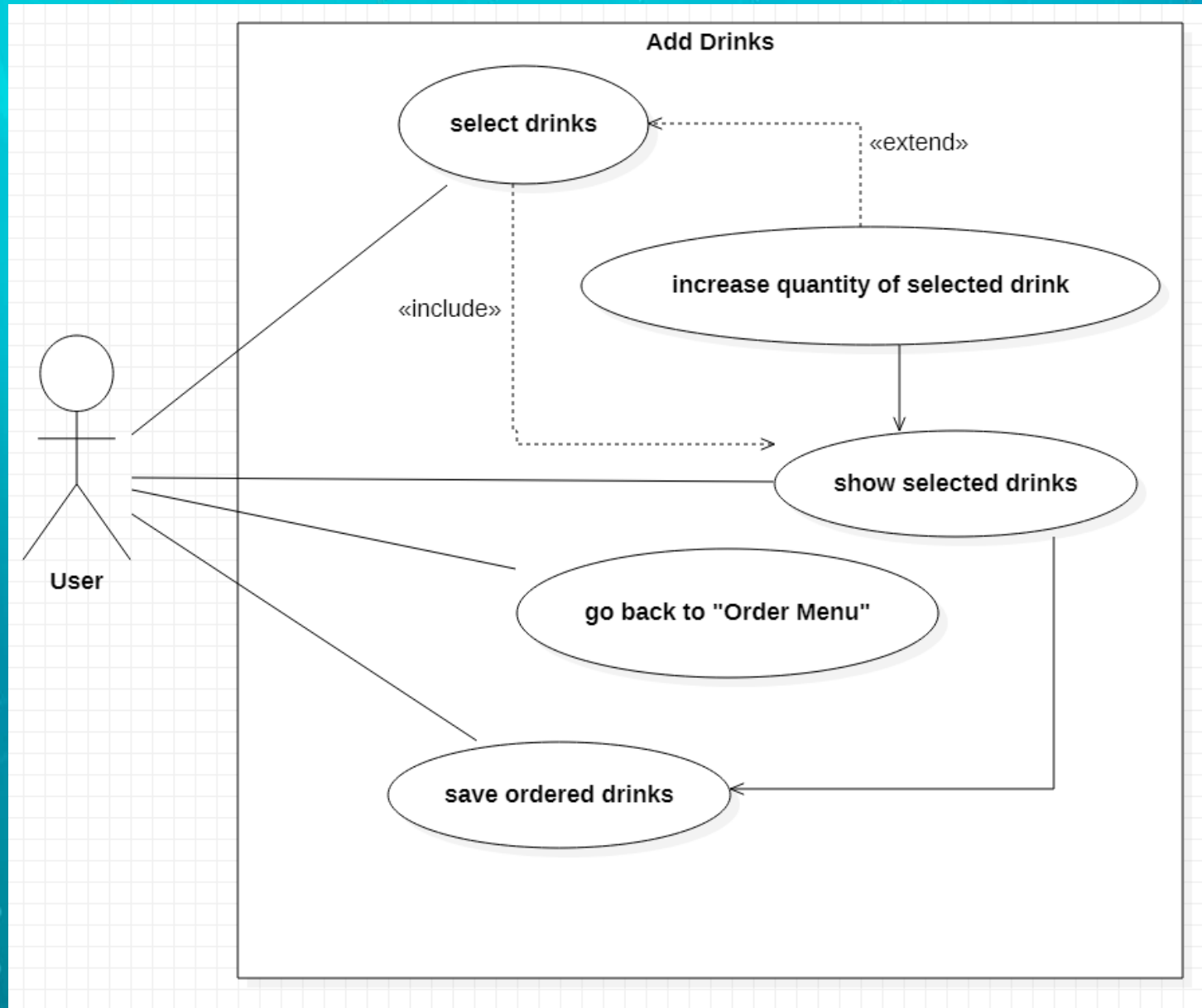
Use Case Form

Use Case Name:	Order Individual Burger
Primary Actor:	Customer
Further Actors:	Employee
Stakeholders and their Interests	Burger House: wants to give the opportunity to the customer that he can create an individual burger of his choice. Also, it is an opportunity for people with allergies or intolerances to create something of their choice.
Preconditions:	- Table number is set - customer selected "Individual Burger" in main menu
Postconditions:	- customer is adding other components of his menu - placing order
Basic Course (Main Success Scenario)	1. Select "Individual Burger" in "Customer Main Menu" 2. Select ingredients and add them to burger 3. Add list of individual burger to order list in "Customer Main Menu"
Alternative Course:	4. System determines when quantity of items is to high
Frequency of Use:	High Usage: creating an individual burger is a special feature which should be popular in customer orders.
Priority:	High Priority

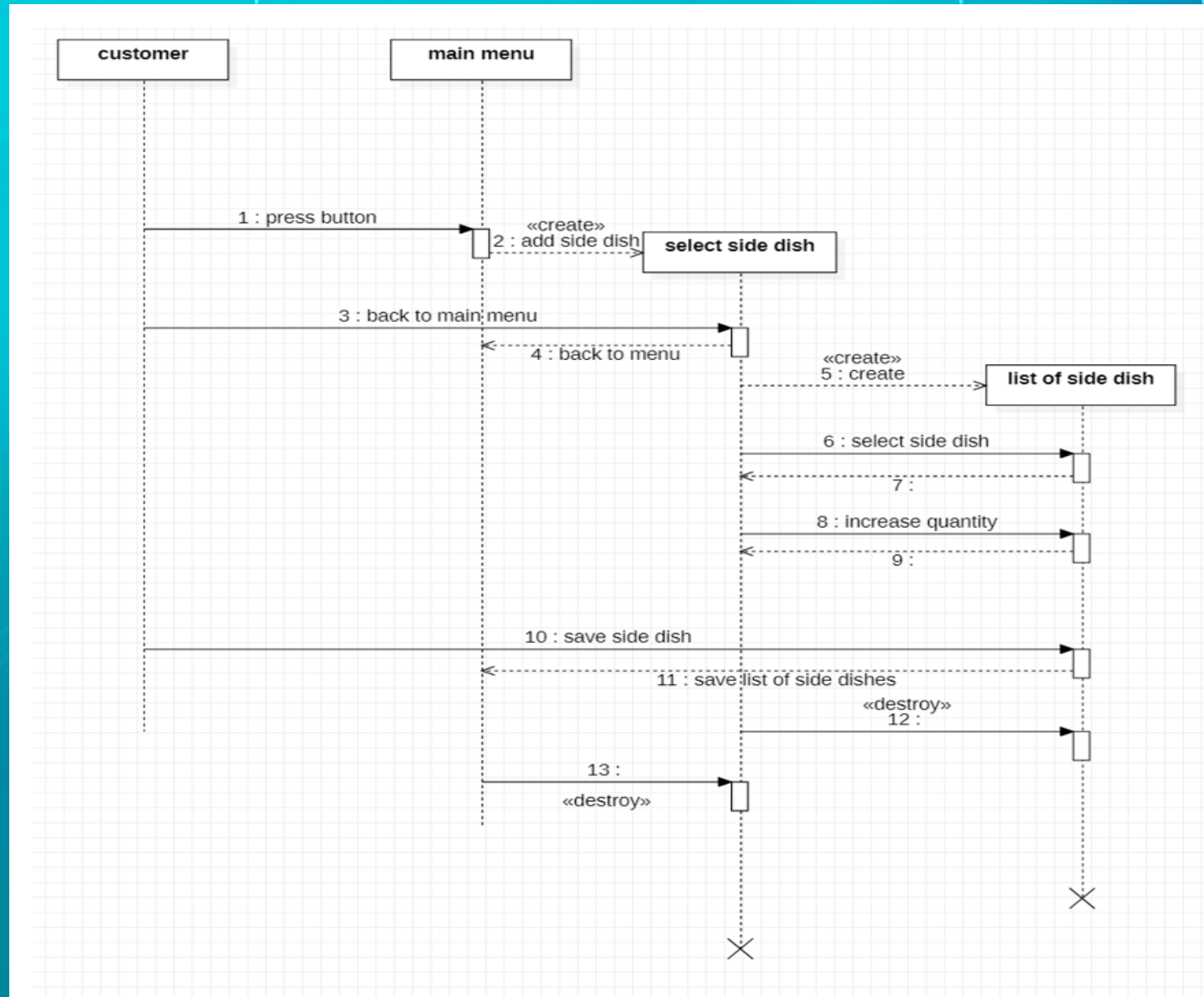
Activity Diagram "Individual Burger"



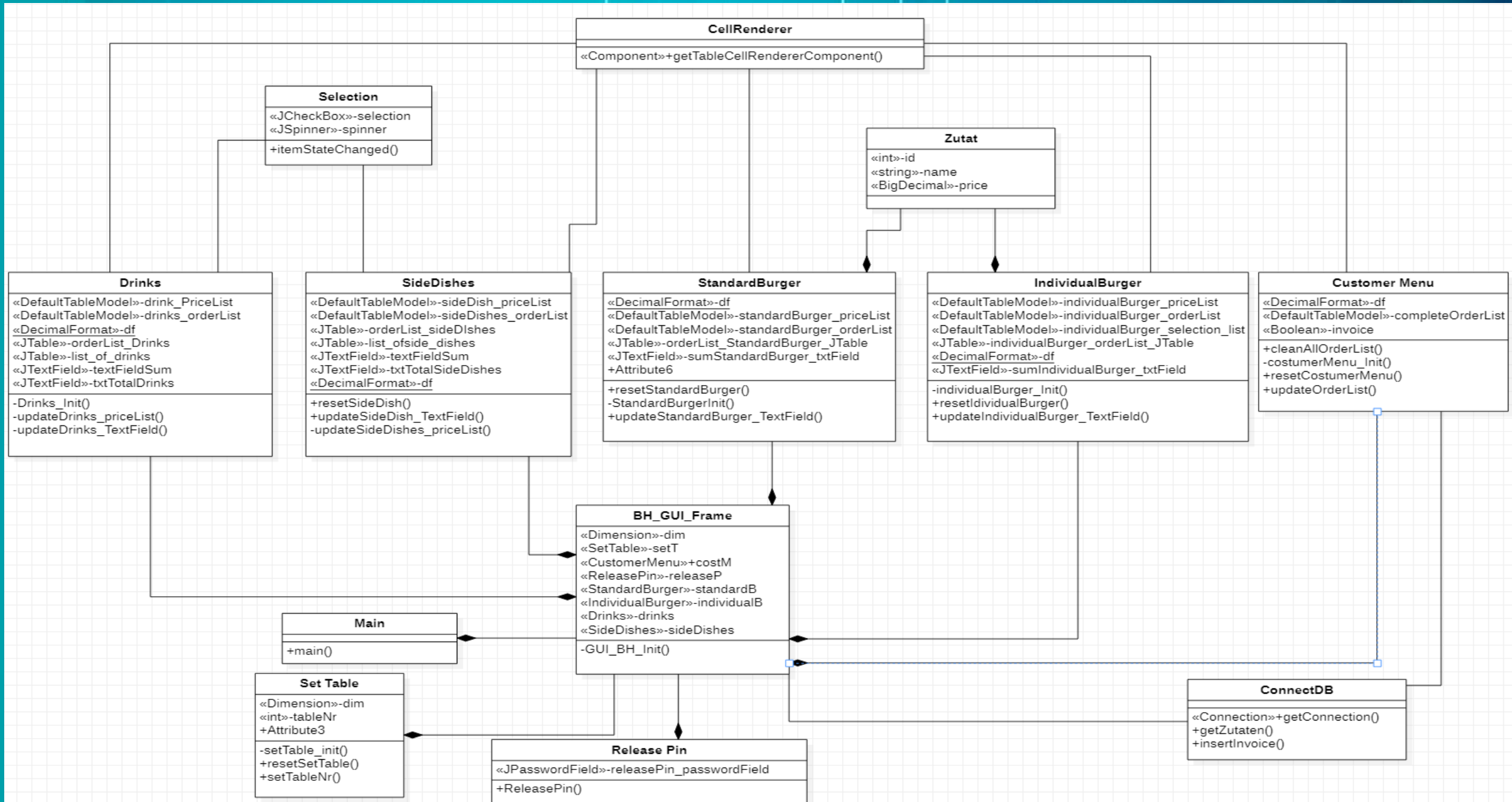
Use Case (Order Drinks)



Sequence Diagrams “Side Dishes”



UML Class Diagram



CODE Snippets

“Customer Menu” calculation of price with Big Decimal

```
public void updateOrderList(BH_GUI_Frame bh_GUI_Frame) {
    completeOrderList.setRowCount(0);
    int standardBurgerCount = bh_GUI_Frame.getStandardBurger().getStandardBurger_OrderList().getRowCount();
    BigDecimal standardBurgerTotalPrice = new BigDecimal(0);
    for(int i = 0; i < standardBurgerCount ; i++) {
        completeOrderList.addRow(new Object[] {
            i+1, bh_GUI_Frame.getStandardBurger().getStandardBurger_OrderList().getValueAt(i, 0),
            bh_GUI_Frame.getStandardBurger().getStandardBurger_OrderList().getValueAt(i, 1),
            bh_GUI_Frame.getStandardBurger().getStandardBurger_OrderList().getValueAt(i, 2)});
        standardBurgerTotalPrice = standardBurgerTotalPrice.add((BigDecimal)bh_GUI_Frame.getStandardBurger().getStandardBurger_OrderList().getValueAt(i, 2));
    }
    if(standardBurgerCount > 0) {
        bh_GUI_Frame.getStandardBurger().updateStandardBurger_TextField(standardBurgerTotalPrice);
    }
}
```

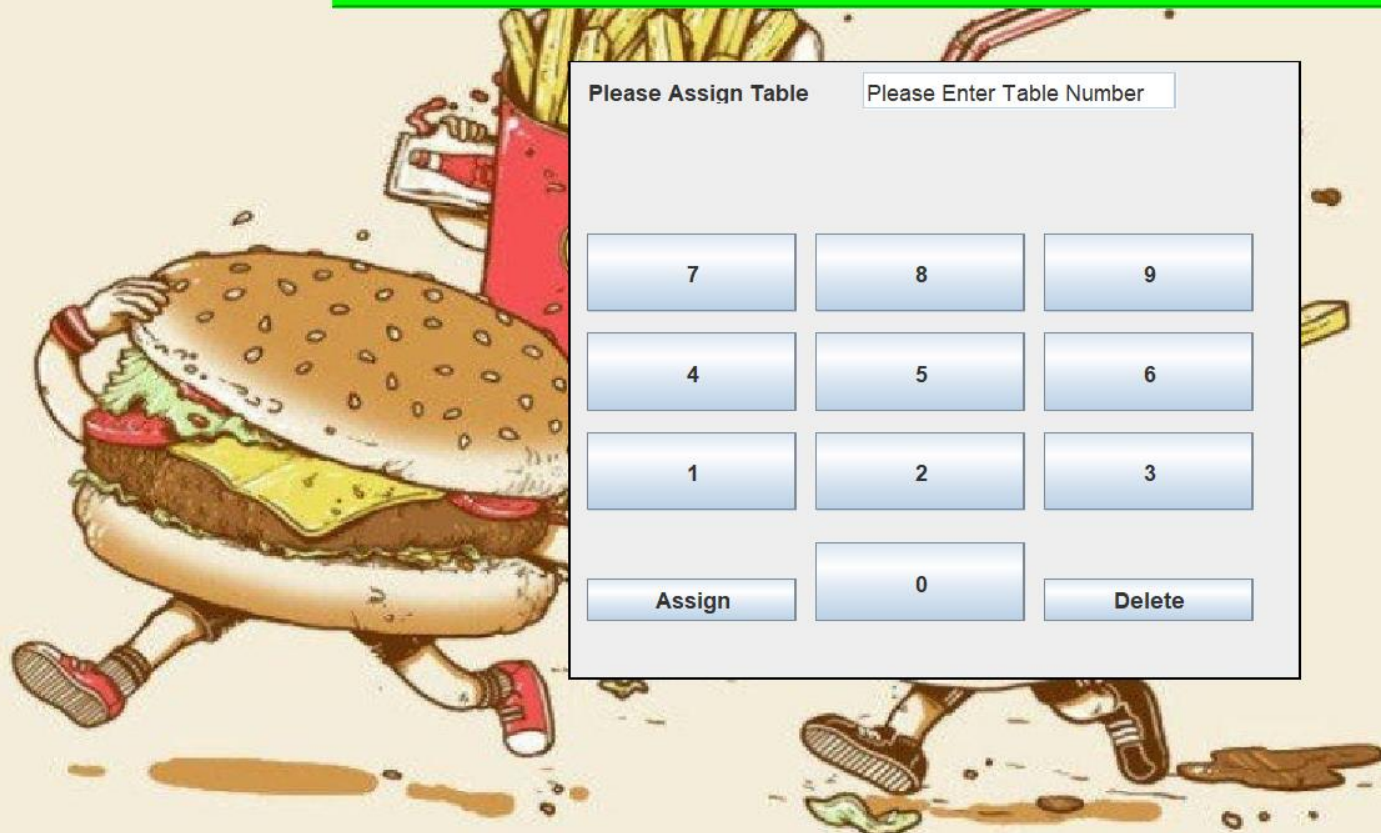
“Order Drinks” adding to DrinksList

```
if( selectionCocaCola.getSelection().isSelected() && !(selectionCocaCola.getSpinner().getValue().equals(0)) && (int) selectionCocaCola.getSpinner().getValue() > 0){  
    BigDecimal colaPrice = new BigDecimal(0)  
        .add((BigDecimal)drink_PriceList.getValueAt(0, 2))  
        .multiply(BigDecimal.valueOf((int)selectionCocaCola.getSpinner().getValue()));  
    drinks_orderList.addRow(new Object[] {"CocaCola", (int)selectionCocaCola.getSpinner().getValue(), colaPrice});  
}
```


Graphical User Interface

Set Table Interface

Please Assign a Table Nr



The Customer Menu Interface




Release Table


Welcome to the Burger House

Table Nr: 12


Select a Menu




Standard Burger




Individual Burger



Drinks



Side Dish



Nr	Item Name	Quantity	Price
1	Cheese Burger	1	6,50
2	Chicken Burger	1	6,90
3	Fish Burger	1	6,30
4	individual Burger 1	2	17,00
5	Fanta	1	1,50
6	CocaCola	1	2,70
7	Radler	2	5,00
8	Cheese Fries	1	3,00
9	Vinegar	1	2,50
10	Mayonaise	1	2,00

Delete from Ord...

Place Order

53.40

Order Individual Burger



Back

Individual Burger

Ingredient Price List

id	Ingredient	Price
1	Bread	0.40
2	Beef	1.50
3	Chicken	1.40
4	Fish	1.60
5	Veggie	1.90
6	Cheese	0.30
7	Onion	0.80
8	Letus	0.50
9	Tomato	0.40
10	Bacon	0.80
11	Pepper	0.70
12	Avocado	0.90

Add ingredient

Ingredient Price List

Item Name	Price

Add to Order

0

Up

Delete

Down

Item Name	Quantity	Price
individual Burger 1	2	17.00

Delete from O...

Place Order

17.00

Order Drinks

BH



back to menu

Drinks



Softdrinks

- ☐ CocaCola (1,50\$) 0
- ☐ Fanta (2,50\$) 0
- ☐ Sprite (1,50\$) 0
- ☐ CocaColaLight (1,50\$) 0
- ☐ Lemonade (1,70\$) 0
- ☐ Ice Tea (1,50\$) 0
- ☐ Apple Spritzer (1,70\$) 0
- ☐ Bionade (1,70\$) 0
- ☐ Soda (1,20\$) 0

+ add



Alcoholics

- ☐ Heiniken (2,50\$) 0
- ☐ Becks (2,50\$) 0
- ☐ Radler (2.50\$) 0
- ☐ Wine 0,75 (4,00\$) 0
- ☐ Wine 0,25 (2,40\$) 0

+ add



Smoothies

- ☐ Nutella Donut (6,50\$) 0
- ☐ Strawberry Banana (5,...) 0
- ☐ Snickers (5,00\$) 0
- ☐ Oreo (5,00\$) 0
- ☐ Coconut Kiss (5,00\$) 0
- ☐ Tropical Punch (5,00\$) 0

+ add

List of Drinks

Item Name	Quantity	Price
Fanta	1	1,50
CocaCola	1	2,70
Radler	2	5,00



delete

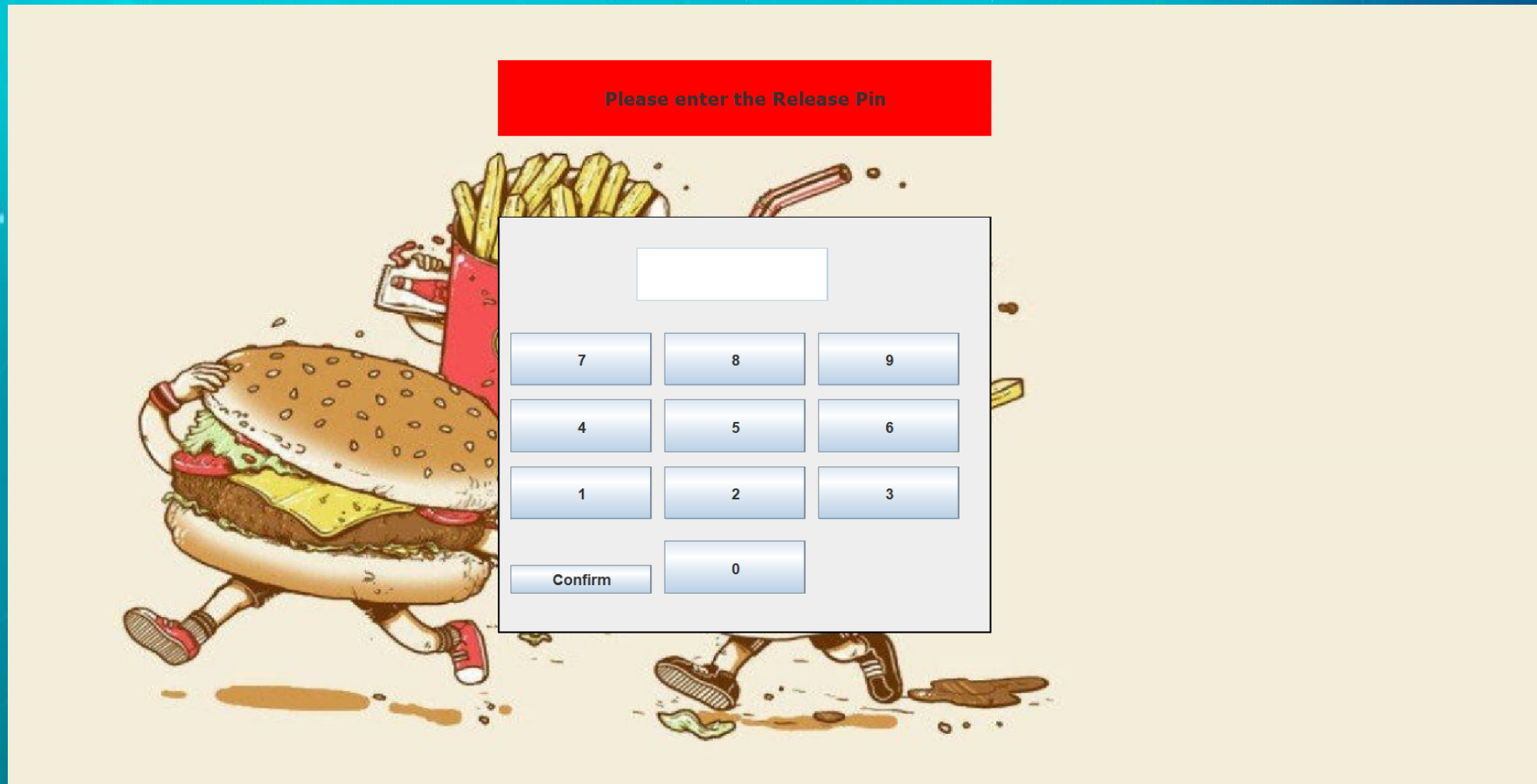
Total Drinks = 9.20



Add to Order

ID	Name	Price
1	Coca Cola	1.5
2	Fanta	1.5
3	Sprite	1.5
4	Coca Cola Light	1.5
5	Homemade Lemonade	2.7

Release Table



References

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Conclusion