Name:

Date:

Spring 2024

CSCI 1300: Recitation 9

2 Spot The Error

Problem 2.1. The program checks if an order is duplicate or not. Identify the error(s) in the code below, and write the correct line(s).

```
#include <iostream>
using namespace std;

struct Order
{
    int orderid;
    double price;
};

int main()
{
    Order order1;

    order1.orderID = 142;
    order1.price = 45.99;

    Order order2 = order1;

    if (order1 == order2)
    {
        cout << "This is a duplicate order!" << endl;
    }
    else
    {
        cout << "This is not a duplicate order!" << endl;
    }

    return 0;
}
```

Not capitalized

can't compare structs. Add a .Va

Problem 2.2. The program below updates the items in an Order at the specified index and calculates the updated totalPrice. Identify the error(s) in the code below, and write the correct line(s).

```
#include <iostream>
using namespace std;

struct Order
{
    int orderID;
    double totalPrice;
    string items[5];
    double price[5];
};

//Replaces the item at index 'item_index' by a new item 'new_item' in the 'order'
↪ and updates the 'totalPrice' accordingly
void replaceItem(Order order, int item_index, string new_item, double
↪ new_item_price)
{
    double removed_item_price = order.price[item_index];
    order.items[item_index] = new_item;
    order.price[item_index] = new_item_price;
    order.totalPrice -= removed_item_price + new_item_price;
```

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```
}

int main()
{
    Order order1;

    //Assign values to order1's attributes
    order1.orderID = 153;

    string items[5] = {"cabbage", "carrot", "eggs", "milk", "yogurt"};
    double price[5] = {1.49, 2.99, 5.99, 4.00, 5.00};

    double total = 0;
    for(int i = 0; i < 5; i++)
    {
        order1.items[i] = items[i];
        order1.price[i] = price[i];
        total+=price[i];

    }
    order1.totalPrice = total;

    replaceItem(order1, 2, "bread", 3.49);
    replaceItem(order1, 2, "bread", 3.49);

    cout << "Updated item list for orderID:" << orderID << endl;
    for(int i = 0; i < 5; i++)
    {
        cout << order1.items[i] << " ";
    }
    cout << endl;
    cout << "Updated price for orderID:" << orderID << " is " << order1.price <<
    ↪ endl;

    return 0;
}
```

add Object Specifier

Problem 2.3. The program below updates the address of the Customer at the specified index. Identify the error(s) in the code below, and write the correct line(s).

```
#include <iostream>
using namespace std;

struct Order
{
    int orderID;
    double totalPrice;
    string items[5];
    double price[5];
};

struct Customer
{
    string name;
    string address;
    Order order;
};

//Updates the address of the customer at index 'customer_index' in the
↪ 'customer_array' as 'new_address'
```

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```
Customer updateCustomerAddress(Customer customer_array[], int customer_index, string
↪ new_address)
{
    customer_array[customer_index].address = new_address;
    return customer_array;
}

int main()
{
    Order order1;
    //Assign values to order1's attributes
    order1.orderID = 153;

    string items[5] = {"cabbage", "carrot", "eggs", "milk", "yogurt"};
    double price[5] = {1.49, 2.99, 5.99, 4.00, 5.00};
    double total = 0;
    for(int i = 0; i < 5; i++)
    {
        order1.items[i] = items[i];
        order1.price[i] = price[i];
        total+=price[i];

    }
    order1.totalPrice = total;

    //Declare and initialize order2 with order1's attributes
    Order order2 == order1;
    //Update the orderID for order2
    order2.orderID = 154;

    //Create an array of Customer objects
    Customer customer1 {"Jake", "1855 Athens St", order1};
    Customer customer2{"John", "2156 Grove St", order2};
    Customer customers[2] = {customer, customer};

    updateCustomerAddress(customers, 1, "1475 Folsom St");

    cout << "Updated customer details: " << endl;
    cout << "Name | Address | Order ID | Total Price" << endl;
    for(int i = 0; i < 2; i++)
    {
        cout << customers[i].name << " | " << customers[i].address << " | "
            << customers[i].orderID << " | " << customers[i].totalPrice << endl;
    }

    return 0;
}
```

Void

can't return an array

Erase

add names

.order

Submission Instructions: Create a zip file that contains your solution .cpp file for question 1 and photos of this handout and submit on Canvas.